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Uncovering Narcissism: Developing Reliable Rorschach Indicators and Understanding the
Construct in Depth Through Multimethod Investigation from Childhood to Adulthood in
Clinical and Experimental Settings

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Abstract

The construct of narcissism is at the same time surrounded by wide interest in clinical and research settings and important controversies about its conceptual definition and phenomenological description.

Theoretical issues involve diverging ideas about the essence of narcissism itself, arising from different branches of psychology and psychiatry and lacking a unanimously accepted definition. Whereas the most accepted diagnostic manuals emphasize a high self-esteem dimension in their description of narcissism, influential clinical theories and studies from personality psychology depict individuals with a narcissistic functioning as characterized not only by a grandiose sense of self but rather by a continuous and painful oscillation between high and low self-esteem states. In this view, grandiose behaviors could be interpreted as a defensive reaction towards inadequacy feelings.

The scenario is complicated even further by the fact that empirical research on narcissism is characterized by specific methodological and assessment issues. Narcissism is in fact particularly sensitive to the diagnostic method used, with evident limitations connected to an assessment relying on self-report measures only.

Therefore, there is a need for an implicit measure of narcissism that can complement the results of other methods. The present investigation represents the development of a set of 11 potential Rorschach variables for assessing narcissistic functioning and grandiosity along with related psychological constructs. Rorschach protocols from Italian and American clinical and nonclinical groups of different ages were scored for variables connected to narcissistic functioning, some of which we modified from previous literature: Omnipotence and Idealization; Reflection, Personal Knowledge Justification, Exhibitionism, Magic, and Elevated Mood States; and some of which we developed: Expanded Personal Reference,

Narcissistic Devaluation, Narcissistic Deflation, Narcissistic Denial. The presence of a grandiosity factor was then evaluated by principal components analysis and its validity tested by computing correlations with external criteria.

Also in an attempt to throw light on the status of narcissism in developmental age, clinical preadolescent and adolescent groups were involved as well, with the possibility to identify any peculiarities that may be connected to the assessment of these variables at specific ages.

Along with clinical studies, in the present investigation an experimental paradigm was used in order to systematically study the relationships between the narcissistic variables and nonclinical individuals' reactions to manipulations of self-esteem.

Overall, findings support the utility of a multimethod assessment for narcissism, focused not only on how individuals understand and describe themselves but also on how they perceive the world and interact with it. Results about narcissistic functioning in preadolescents and adolescents contribute to fill a gap in the field considering the general lack of consensus about the possibility to conceptualize narcissism in children as different from a normal feature of development.

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["è inutile" soggiunse, "non abbiamo più la saggezza degli antichi, è finita l'epoca dei giganti!". "Siamo nani," ammise Guglielmo, "ma nani che stanno sulle spalle di quei giganti, e nella nostra pochezza riusciamo talora a vedere più lontano di loro sull'orizzonte." Dialogo fra Abbone da Fossanova e Guglielmo da Baskerville]
U. Eco, 1980

Chapter I

Literature Review

Defining, studying and unanimously describing the concept of narcissism might be one of the hardest but at the same time valuable ventures for contemporary research in psychology and psychiatry. Ironically enough, as foreseen by the myth of *Narcissus*, the concept of narcissism has captured vivid interest and has been “in the spotlight” of clinical literature and research for over a century, being one of the key (and controversial) concepts of psychoanalysis itself. However, as will be discussed further, the history of the construct dates back even before the advent of psychoanalytic ideas as we know them today, and has been everything but linear.

Epistemological challenges and debates have in fact traditionally surrounded the construct of narcissism, which has been discussed in very heterogeneous scientific scenarios that go from psychodynamic approaches (e.g. Kernberg, 1978, 1984; Kohut, 1971, 1977; Ronningstam, 2009, 2011, 2012), to more recent social-psychological experimental studies (Rhodewalt & Morf, 1998; Morf & Rhodewalt, 2001), to trait models (Miller & Campbell, 2010; Miller et al., 2011; Samuel & Widiger, 2008) and to contemporary personality researchers and theorists (Baumeister, Bushman, & Campbell, 2000; Campbell, 1999; Dickinson & Pincus, 2003; Emmons, 1981, 1984, 1987, 1989; John & Robins, 1994; Raskin & Hall, 1979; Raskin & Novacek, 1989). In the multifaceted array of conceptualizations on narcissism, the term has been used with rather different meanings, at times conceived as a personality trait and in other contexts presented as a psychopathological personality configuration. Yet the construct has been employed by authors from outside psychology and psychiatry literature such as, just to cite a few, the sociologist Theodore Adorno (1968), the

cultural historian Christopher Lasch (1979) and the socio-economic journalist Tom Wolfe (1976).

Contrarily to what could be expected considering such an influence over the lay public and modern society, together with the longstanding history in psychology that characterized narcissism through the years, the construct is not associated to a commensurate solid scientific status. In fact, narcissism has often been studied from a theoretical rather than empirical point of view, and its clinical counterpart, Narcissistic Personality Disorder (NPD) is one of the less empirically studied personality disorders (Paris, 2003; Stinson, Dawson, Goldstein et al., 2008; Miller & Campbell, 2010). In fact, except for more recent studies that focused on the impact of NPD traits on the quality of life and functional impairment in clinical and community samples (Cramer, Torgersen, & Kringlen, 2006; Miller, Campbell, & Pilkonis, 2007), systematic works have generally involved more observable and externalizing PDs such as Antisocial and Borderline. Along with a relative scarcity of systematic studies about NPD in comparison to other personality disorders, discordant prevalence rates have been reported, going from the more recent 6% obtained in the general population by Stinson and colleagues (2008), to the more heterogeneous data reported by previous studies in mixed populations (see for instance Black, Noyes, Pfohl, et al., 1993; Lenzenweger, Lane, Loranger, & Kessler, 2007; Moldin, Rice, Erlenmeyer-Klimling et al., 1994). But the most macroscopic indicator of the precariousness of the construct in the scientific literature might be identified in the recent proposal – then withdrawn – to exclude NPD from the last and fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). As it is renown by now, this proposal generated strong reactions from the international community of mental health professionals, because of the implications that it might have had on the diagnosis and treatment of individuals with a narcissistic functioning. As will be detailed below, in fact, when conceived as a pathological dimension narcissism is

associated to relevant subjective suffering and existential distress (Campbell & Miller, 2011; Widiger, 2011).

But what could be the reasons for such a “weak” position in the scientific field for such a “strong” construct with an undoubted legacy? If the richness of conceptualizations of narcissism might be a confounding factor itself in the attempt of obtaining a systematic definition of the construct, there are more specific issues involved in the problem. Two critical points will be discussed in this regard, also for their affinity with the principal scopes of the present investigation. Such issues connected to the scientific definition of narcissism are represented by specific and pervasive opposing ideas about its essential definition and phenomenology, that led to a quite constant theoretical confusion, and secondly to problems in the procedures used to study and assess narcissism.

Although an extensive description and discussion about the evolution of the concept of narcissism is beyond the scopes of the present work, a number of central historical points will be presented because of their enlightening power and influence on the most recent approaches in research and clinical understanding of narcissism.

The First Missing Tile: Theoretical confusion. Is Narcissism Pathological Per Se or is it a Feature of Human Development?

Far from being a resolved issue, the antithesis between categorical and continuous visions of personality considerably involves the construct of narcissism as well. The contrast between categorical and dimensional conceptualizations of the construct, which often takes the form of investigations about narcissism as NPD and of narcissism as a trait, are also reflected in the imbalance between empirical studies yielded by the two currents of thought respectively. In fact, if systematic, empirical studies about categorical diagnosis of narcissism are quantitatively scant and generally outnumbered by more theoretical efforts and single-case presentations, a vivid corpus of research on trait narcissism is growing especially from the field of social-psychology (Miller & Campbell, 2010). But where this dichotomy

originated from? As will be shown in the following brief presentation of a few crucial historical points on the evolution of the construct of narcissism, such contraposition is all but novel.

Since the introduction, in 1898, of the term “*Narcissus-like*” in the psychological literature by the British sexologist and physician Havelock Ellis, terms semantically referring to “narcissus” were progressively adopted by clinical scholars, with a variety of meanings. Accordingly to the very first descriptions that Ellis gave of “Narcissus like” cases, identified as individuals with a massive, and sometimes total, absorption of the sexual emotions in self-admiration, the first use of the term to specifically denote a clinical condition by the addition of the suffix “-ism” appeared with P. Näcke’s work on autoeroticism and sexual perversion (1899). If such an excessive and libidinally connoted preoccupation with the self was considered by early 19th century psychiatry, already Ellis himself noted that this narcissistic “psychological attitude” could lie within the boundaries of normality.

Soon after the first uses of the concept of narcissism by Ellis and Näcke, the construct caught the attention of early psychoanalysts and once again was employed to define rather different psychological manifestations. As Levy, Ellison and Reynoso (2011) note, Isidor Sadger (1908, 1910), the first psychoanalyst to whom is attributed the use of the concept of narcissism, distinguished between different forms of egoism and self-love that, depending on the intensity and pervasiveness of the evaluation and investment on the self, can be found both in nonclinical children and adults as well as in pathological individuals. But it is with Otto Rank’s work (1911, 1914/1971) that the construct of narcissism was extended to psychological disorders different from sexual disorders and perversions, defining rather defensive dynamics connected to deep mirroring needs. In other words, narcissists would need to share other people’s grandiosity and power to satisfy their own inner needs. Thematizing this, Rank widely anticipated ideas that were later discussed by Heinz Kohut

and that can still be found in the most accepted psychiatric and up to date psychiatric diagnostic systems¹.

But the alternation of conceptions of narcissism as a pathological trait and a mechanism of human psychological functioning did not end with further elaboration of the construct by Sigmund Freud from 1910 and most extensively from 1914 with the publication of “On Narcissism: An Introduction” (1914/1957). As Levy et al. (2011) continue, Freud, starting from his observations on quite assorted clinical material such as young children and non-psychotic patients, made use of the construct of narcissism in a variety of ways. More specifically, in Freud’s writings the term narcissism not only represented a metapsychological dimension, but identified different concepts that go from a stage of normal infant development to healthy aspects of self-interest and self-esteem that can be found in nonclinical individuals, to specific patterns of interpersonal self-enhancing relationships characterized by a lack of actual interest towards the others and the environment more in general. Interestingly enough, Freud himself referred therefore to the “two faces” of narcissism (as a trait and as a character style or disorder) rather flexibly. In fact, especially in his early writings, he intended narcissism in a dimensional way and with a very similar approach to what can be found today in social psychologists conceptualizations and trait-psychology theories, with the exception of considering such a trait a sort of defensive reaction towards feelings of inferiority and worthlessness. On the other hand, later in 1931, Freud emphasized the existence of a more coherent and unitary narcissistic personality pattern that he called “narcissistic character type”. The latter would describe individuals primarily focused on the self and showing a constellation of psychological phenomena that include self-admiration and self-aggrandizement; fears of failure and loss of love, together with a defensive organization based on megalomania, idealization, denial, projection and splitting

¹ See for example criterion 3 of DSM-5 (APA, 2013) for NPD: “Believes that he or she is “special” and unique and can only be understood by, or should associate with, other special or high-status people (or institutions).

(Raskin & Terry, 1988). Importantly also in relation to the scopes of the present investigation, Freud and William Reich after him (1933/1949) postulated the connection between narcissism and aggression. In this context, aggression would serve a defensive function towards feeling of humiliation, inferiority and the like and would be ultimately finalized at protecting one's self view.

The psychoanalyst Karen Horney, in 1939, defined narcissism as a character trait and suggested distinct instances of narcissistic manifestations, depending on psychological inner dynamics and behavioral expressions. Viewing narcissism as an unrealistic self-inflated view of the self not sustained by actual high abilities or special endowments, Horney's conceptualization was also coherent with the defensive function of pathological narcissistic grandiosity (Levy, Allison, & Reynoso, 2013).

Such a rich corpus of intuitions and theoretical elaborations on narcissism, with their points of contacts and contrapositions, progressively flew into social and experimental psychology and clinical psychology and psychiatry.

The Clinical Portrait of Narcissism as a Personality Type

Stemming from the different positions that followed one another during the 20th century, especially those arguing in favor of the idea of narcissism not only as a trait but as an actual configuration of personality, various authors theorized more explicitly on the matter. The notion of narcissistic personality, starting especially from psychodynamic contributions, became so widespread to the point that it entered the official diagnostic taxonomy as a personality disorder through the DSM-III in 1980. But a step back on the most critical contributions that influenced and shaped the notion of NPD as it is intended today might help understanding the construct and the related enduring contradictions.

As discussed above, whereas more or less explicit references to the concept of narcissism as a cohesive personality structure can be found in the writings of several

twentieth-century authors, the idea of a narcissistic personality or character was first articulated by Walder (1925) as Levy et al. point out (2011). The Austrian psychoanalyst described narcissistic individuals with many attributes that are still identified as core features of NPD such as feelings of being superior to others, haughtiness, preoccupation with themselves and admiration, lack of empathy. In addition, Walder observed that such individuals would be often shallow in their sexuality and intimate relationships, which would be merely based on the attainment of physical pleasure.

Although all these premises were definitely fundamental and several authors from the psychoanalytic realm wrote on the topic (Jacobson, 1964; Pulver, 1970; Stolorow, 1975), it is thanks to the work of more recent influential theorizations such as those of Otto Kernberg (1978, 1984) and Heinz Kohut (1968, 1971, 1977) that the literature on narcissistic personality structure thrived worldwide and the scientific debate growth. In fact, Kernberg and Kohut’s conceptualizations, which are sophisticated and vast and which is not in the aims of the present work to present exhaustively, pointed out original key aspects for the clinical understanding of narcissism, its origins and therapeutic possibilities, while at the same time introducing further complexity and heterogeneous views on the topic. In fact, if the two authors’ rich clinical descriptions of narcissistic patients were fairly similar in regards to their phenomenology especially in the context of higher-level personality structures, they sharply diverged in the etiology of narcissistic disorders. For Kohut, in the one hand, narcissism would be the result of a “normal” aspect of human psychological growth that is arrested or undergoes an abnormal development. The author viewed in fact the mirroring and emphatic experiences in the context of the early relationships with the principal caregivers as the cornerstone of healthy identity formation. In case such experiences have been less than optimal and the parental figures not suitable for idealization, the unsatisfied needs to identify with powerful others would progressively deposit in the self, resulting in the grandiose

narcissistic structure always in search of praise and closeness to “high-status” others. The conflict model of Kernberg, on the other hand, looked upon narcissism as the result of a disordered process of integration between ideal and actual representations of the self and others, invested of libidinal and aggressive affects. Moreover, for Kernberg, the narcissistic child would have had parents who shown an incongruent attitude towards him or her. In this context, the child would be viewed as special and important in some instances but would be at the same time treated in a dismissive, neglectful and rejecting manner depending on the adults’ own egoistic needs. As a reaction to this painful experience of idealization alternated with neglecting and dismissive attitudes from the parental figures, the child would develop a “grandiose self” that merges a highly idealized view of oneself with the one of admiring and loving others. The negative self-representation of the denigrated and dismissed child would not be integrated in the developing personality and would rather be disavowed, ultimately contributing to the angry and admiration seeking narcissistic personality.

In part as a result of the florid debate that was vivid on narcissism during the middle decades of 1900, the introduction of Narcissistic Personality Disorder in the third edition of the DSM in 1980 represented the acceptance and acknowledgment by the official psychiatric system of a psychological condition which is rather complex and relatively less clearly identifiable from behavioral expressions than other disorders. However, the presence of NPD in the DSM also led the construct to be subjected to the constant revisions and adaptations that involved the PDs included in the system, supposedly for the sake of a better discriminant validity and decrease of redundancy and overlapping between diagnostic categories. As several authors noted (Cain, Pincus, & Ansell, 2008; Cooper, 2000; Levy et al., 2011; Levy, Reynoso, Wasserman, & Clarkin, 2007), this process implied specifically for the case of NPD a certain degree of simplification and elimination of a few characteristics that are central to thoroughly understand and define such personality functioning. In particular, progressive

changes to NPD through the various editions of the manual entailed a focus on more behaviorally evident and observable traits such as interpersonal haughtiness, sense of entitlement and grandiosity at the expense of “*vulnerable*” themes such as the underlying insecurity about the self and feelings of shame and humiliation.

The neglect of such *fragile* narcissistic themes – (re-)introduced as “Associated Features” of NPD in the latest edition of the DSM (APA, 2013) – not only means losing a great part of the dynamic aspects of the disorder in terms of oscillations between mental states and feelings towards the self, but appears also incoherent with much of the literature and research on clinical narcissism that stratified over the years (Russ Shedler, Bradly, & Westen, 2008; Ronningstam, 2011) as well as with empirical findings obtained by experimental psychology about narcissistic functioning (Rhodewalt, Madrian & Cheney, 1998; Rhodewalt & Morf, 1998). Also if from at times different premises and with diverse methodologies, what such contributions suggest as the core of pathological narcissism is not the inflated and dysfunctional high self-esteem per se but rather a constant and *painful oscillation* between grandiosity and deflated, low self-esteem states.

In the rich but yet disparate corpus of knowledge about narcissism, the notion of deflated, vulnerable components is actually so vivid that the issue was also elaborated in dichotomic terms. In fact, in what Pincus and Lukowitsky (2010) labeled the “Tower of Babel of Narcissism”, there has been over the years a proliferation of conceptualizations of narcissism stressing either the grandiose or the vulnerable component. Just to cite a few, such contrasting definitions included “overt” and “covert” (Cooper, 1981; Akhtar and Thomson, 1982); “thick skinned” and “thin skinned” (Rosenfeld; 1987); “oblivious” and “hypervigilant” (Gabbard, 1989), depending on different intrapsychic, interpersonal and behavioral manifestations of narcissistic individuals. The debate about the essence of narcissism has therefore enhanced the presence of different facets of the construct that cannot be described exclusively as high

self-esteem and entitlement, suggesting the presence of conflictual components and possible specific defenses activated by situations that might be critical for the individual, such as evaluative contexts or performance-oriented scenarios.

As anticipated, one of the consequences of the complexity surrounding the description and explicatory models of narcissistic functioning and NPD, is the recurrent presence of critical positions about the validity of the construct which in turn might be a factor in the relative lack of empirical systematic studies on clinical narcissism. However, several authors claim the importance and clinical relevance of the diagnosis of NPD (Miller, Widiger, & Campbell, 2010; Ronningstam, 2011). Although it is not associated with strong social urgency, danger and public or mental health costs, NPD meets in fact increasing recognition as an urgent and complicated mental disorder which determines a great extent of personal suffering and functional impairment (Stone, 2009; Ronningstam & Maltzberger, 1998). Narcissistic individuals often display pervasive and recurrent deficiencies or maladaptive functioning in work, social, and romantic domains, causing suffering not only to themselves but also to others (Miller, Campbell, & Pilkonis, 2007). The painful and disturbing core of dissatisfaction with the self undermines the psychological well-being of narcissistic patients, who often live a constant struggle with chronic unrealistic ambitious expectancies and excessively high ideals (Sperry, Lewis, & Carlson, 1993). Interpersonal functioning of narcissistic individuals tends to be impoverished as well, with a prevalence of superficial relationships in which others' actual emotional needs are not truly taken in consideration, with detrimental effects especially in the possibility to establish durable and satisfying romantic relationships. Ultimately, the narcissistic functioning tends to cause significant distress to the patients and to the individuals who closely relate with them (Campbell, Foster and Finkel, 2002; Miller, Campbell, & Pilkonis, 2007).

Along with such more subjective and interpersonal difficulties, NPD can be considered a

serious condition also from a more psychiatry-oriented perspective. In fact, the relatively exiguous research on comorbidity on NPD, shows the frequent involvement of both clinical symptoms and overlapping personality disturbances. In regards to clinical symptoms and syndromes, affective disorders and alcohol/substance abuse seem to be the most commonly observed in narcissistic individuals (Simonsen and Simonsen, 2011) whereas Antisocial and Histrionic turn out to be the preponderant comorbid PDs, assessed both with self-reports and semi-structured interviews (Widiger, 1991; Oldham et al., 1992). Using face-to-face interviews with 34,653 adults participating to the Wave 2 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC: Grant, Kaplan, & Stinson, 2005), Stinson and colleagues (2008) found an even more differentiated pattern of comorbidities based on gender, where associations between NPD and specific phobia, generalized anxiety disorder, and bipolar II disorder were observed among women; and alcohol abuse, alcohol dependence, drug dependence, and histrionic and obsessive-compulsive PDs among men. It may also be noted how the issue of comorbidities in NPD is characterized by controversies and discordant data, similarly to – and probably as a result of – what is observed about the difficulties in the definition of the construct of narcissism itself. In fact, reported prevalence rates often differ between studies (Stinson et al., 2008; Widiger, 2011; Simonsen and Simonsen, 2011; Widiger, 1991; Oldham et al., 1992; NESARC: Grant, Kaplan, & Stinson, 2005) and tend to be highly sample-specific (Simonsen & Simonsen, 2011). Simonsen and Simonsen' review shows (2011) how for more than one diagnostic category the prevalence of comorbidity for NPD can vary greatly. For example, also in the case of what are considered among the most established comorbidities in NPD i.e. alcohol use disorders, prevalence rates can vary from 0 to 18% (Simonsen & Simonsen, 2011). Once again, the lack of a coherent and thorough description of narcissistic functioning might play a role. In fact, if in some cases the presence of discordant comorbidity rates might be ascribed to specific methodological problems of the

studies involved, like in the case of reports about patients with schizophrenia (Simonsen & Simonsen, 2011), it is likely that a broader and more clinically coherent portrait of NPD encompassing also vulnerability features would yield more satisfying results from comorbidity studies (Simonsen & Simonsen, 2011).

But the clinical picture of narcissistic patients is complicated by some dynamics inherent in the narcissistic functioning itself. It is not hard to figure how admitting one's flaws and weaknesses, which is often involved in the decision of seeking psychotherapeutic treatment, might be particularly hard for narcissistic patients, constantly aimed at preserving a good view of themselves and potentially lacking of insight on their psychological functioning (Huprich & Ganellen, 2006). As a result, it is quite rare that individuals with narcissistic pathologies seek treatment spontaneously and genuinely commit to "work" on themselves with the therapist, tending rather to blame others for their own difficulties and failures (Behary & Dieckmann, 2011), and are often referred to clinical attention by significant others or in relation to the distress caused by external circumstances threatening their reputation and perceived self-esteem such as work or legal problems (Behary & Dieckmann). Finally, in case the treatment with a narcissistic patient starts, it is likely that the several interpersonal problems will hinder the therapeutic process, eliciting strong and disturbing emotional reactions in the clinician (Betan, Heim, Conklin, & Westen, 2005; Schwartz & Smith, 2002).

Along with its florid yet controversial history, the construct of narcissism entered the public consciousness always more evidently, with the term being used by the public and in not-specialized contexts.

The society of narcissism?

Traditionally started with the works from economists, sociologists and historians like Adorno (1967), Wolfe (1977) and Lasch (1979) discussed above, the focus of attention on narcissism expanded from an individual-centered level to a more social perspective. Works

using the myth of Narcissus and a psychoanalytic conception of narcissism to explain changes in society and economical dynamics macroscopically rose in the 20th century.

The recurrent idea, still very vivid today especially in regards to the USA and Western societies more in general, would be that narcissism is increasing with ages, and that a culture of self-centeredness would be spreading. Judgments in this regard become at times particularly harsh and critical, with authors such as Lasch describing current American society as *The Culture of Narcissism* (1979), i.e. permeated by extreme individualism and self-absorption. This view appears to be so established in modern and contemporary understanding of developed societies that terms such as the “*Me Decade*” (Wolfe, 1976) are now of common use, and cohorts in college from 1960s to early 1980s were labeled as the “Baby Boomers”, usually described as focused on wellness, physical appearance and consumerism. Along the same lines, more recent and research-oriented authors described contemporary times as “*The Age of Entitlement*” (Twenge & Campbell, 2009), in which individuals would be primarily focused on pursuing their own ambitions and self-enhancing goals and where values such as commonality and reciprocal cooperation with others would be in sharp decrease.

From an opposite viewpoint, others claim that the trend would be in favor of a *reduction* of narcissism in the society. In regards to college students populations, such a descending trend would ideally go from the Baby Boomers of 1960-1980s decades, to the “Generation X” (the cohort in college from mid-1980s to late 1990s) characterized by more diversity and openness to diversity in regards to aspects such as class, ethnicity, religion, gender identity and sexual orientation (Isaksen, 2002) but also connoted by “lack of ego strength” and “low self-esteem” (Howe & Strauss, 1993; Strauss & Howe, 1991, p. 323). Coherently with an hypothetical downward trend for the overall levels of narcissism, individuals in college from early 2000s to late 2010s defined as “Millennials” or

“Generation Y” are described as “civic-minded” and community-oriented (Howe & Strauss, 2000).

Although Howe and Strauss’ circular theory about the cyclic reiteration of generational archetypes across times is definitely interesting and worth of consideration, it does not derive from empirical data collection and research.

Probably because of the complexity of the matter, systematic reviews about the cultural and social influences on narcissism are relatively infrequent. The most solid results available to date on the chronological trends of narcissism can be identified in Twenge and colleagues’ meta-analysis (2008). The authors (Twenge, Konrath, Foster, Campbell, & Bushman, 2008) gathered and analyzed data from 85 American samples of college students collected between the early 1980s and 2006 for a total of 16475 participants. Studying the trend of Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979, 1981; Raskin & Terry, 1988) over time, they confirmed the hypothesis of “*egos inflating over time*”. Their examination shown in fact that NPI scores in the samples included in the study have increased 0.33 standard deviations in the time lapse considered, with almost two thirds of recent college students scoring above the mean of students from about 25 years ago. As the authors themselves acknowledge, this noteworthy study is not exempt from limitations, with the latter being primarily the exclusive reliance on a self-report measure of narcissism and the fact of providing data on American college students only. However, as Twenge et al. (2008) continue, potential social desirability biases can very unlikely account for their results since such biases have not been shown to change concomitantly to what observed for NPI-narcissism (Twenge & Im, 2007). Even if limited to college students, not only the study of Twenge and collaborators (2008) included the vastest sample to date, but also its findings converge with further social trends on other individualistic traits and correlates of narcissism observed during similar intervals of time. For instance, in three meta-analyses Gentile, Twenge, & Campbell (2010) compared self-

esteem scores as measured by the Coopersmith Self-Esteem Inventory (SEI) and Rosenberg Self-Esteem Scale (RSE) among American middle school (n = 10,119), high school (n = 16,669) and college students (n = 28,918) and found a significant increment in levels of self-esteem from the late 1980s to the mid-2000s. Moreover, the age-group in which the increment on self-esteem scores was the highest was middle school students. On a “darker” side in comparison to self-esteem, negative correlates of narcissism as materialism have increased as well (Astin, Oseguera, Sax, & Korn, 2004).

If the causal pathways of such potential generational shift towards a more narcissistic society are still unclear and worthy of further research and in-depth examination (Twenge, Konrath, Foster, Campbell, & Bushman, 2008) what Twenge and Campbell (2001) named “culture of self-worth” could be related to a number of social factors. Such theoretical position would see in American culture – and likely other Western developed countries’ societies – an emphasis in the idea that “an individual can singularly improve his or her situation” (Gentile, Twenge, & Campbell, 2010, p. 262) as well as a progressively stronger focus on self-realization and self-enhancement. Moreover, academic programs which positively reinforce success and high performance, would contribute to the diffusion of such values also among children and adolescents. An observable expression of such self-enhancement promoting culture would be the success and popularity of international TV shows enhancing fame and success over more collectivistic or familiarity values such as for example a sense of community and group-membership that were proposed during the 70s (Uhls & Greenfield, 2011a, 2011b).

In this regard, a key part of the supposed increase in narcissism and self-enhancement would be eased by the digital era and the concomitant advent of social networks. In fact, if digital media, internet and social network especially might have facilitated the diffusion of information and offered new settings to experiment and consolidate interpersonal

relationships, they would yet promote a way of interacting with others massively based on appearance and construction of one's public self-image (not necessarily based on physical appearance per se). Since websites such as Facebook, MySpace and Twitter became overly popular during the first decade of 2000, several studies attempted to answer questions of the so called "*Facebook psychology*" (Anderson, Fagan, Woodnutt, & Chamorro-Premuzic, 2012), and more in general psychological research dealt with topics such as self-expression in the virtual world, social interactions through digital media and so forth. The field is obviously still very new and no definite answers are available. Authors such as Tracy Alloway and colleagues (2014) suggest caution in demonizing the role of social networks in the diffusion of self-enhancing values, and found for example that the only significant relationship between aspects of Facebook use and narcissism was found with the profile picture ratings. However, other studies reported good levels of agreement between the objective and subjective content features of narcissism and the evaluations that a stranger could do about the narcissism of the target person (Buffardi & Campbell, 2008).

To date, although being aware of the different dynamics that might contribute to narcissism both in an individual and social perspective, the most appropriate conclusion might be that relationship between personality and culture is likely reciprocal, with societal changes driving increases in narcissism and vice versa (Twenge et al., 2008, p.892).

Analyses of societal changes and characteristics are reflected also in Psychology and Psychiatry literature through an interest for narcissism in developmental age.

Narcissism in developmental age

The topic of narcissism in developmental age is at least complex as the conceptualization of narcissism per se. Furthermore, although narcissism in youth has been thermalized since the dawning of psychoanalysis itself, empirical data about manifestations of narcissism in children and adolescents are quite exiguous and a solid theoretical

framework is lacking (Barry and Ansell, 2011). In fact, while several influential clinical theorists have illustrated the existence and phenomenology of narcissism in children (Kernberg, Weiner, & Bardenstein, 2000), the topic is still somewhat neglected in empirical research (Washburn et al., 2004).

The controversies and epistemological questions are similar to those observed for adult narcissism, and comprise questions about the existence of narcissism as a trait or as a personality configuration in developmental age as well as the idea of narcissism as a potentially adaptive psychological characteristic as opposed to an indicator of pathology. Especially in the psychoanalytical realm, the quest for a coherent description of narcissism in children seems to be further complicated by the recurrent multiple and articulated uses of the concept of narcissism made by Freud (1957/1914; 1961), which often led to the assumption that narcissism is a feature commonly present in all children.

Accordingly to the first influential references contained in Freud's writings about narcissism in youth, eminent clinical theorists have in the past theorized about narcissism and discussed variables such as parenting practices as possible causes or maintaining factors in narcissistic disturbances in children (Kernberg, 1975; Kohut, 1977; Millon, 1981; Bleiberg, 2001).

The reasons for the scantiness of systematic works on youth narcissism seem to be at least of two types. Firstly, specific methodological issues complicate the already challenging assessment of narcissism in children and secondly, aspects more tightly connected to evaluate and diagnose personality features in developmental age.

As Patrick L. Hill and Brent W. Roberts point out (2011), measurement of narcissism in young individuals is particularly problematic for the lack of insight and capacity to distinguish between actual and ideal self that characterizes personalities in development (Harter, 1999, 2006). As a consequence, although a rather large array of self-report measures to study narcissism in children and adolescents is available (Barry & Ansel, 2011), the most

viable strategy is normally considered the recourse to a multimethod assessment that encompasses different perspectives such as questionnaires rated by informants who know the child well like parents and teachers or clinicians in therapeutic contexts. Along with self-reports, children are often evaluated through interviews adapted to their level of cognitive development and through projective methods such as the Rorschach Test (Rorschach, 1921) and thematic testing like the Childrens' Apperception Test (C.A.T.: Bellak, I., & Bellak, S. S., 1961). An assessment that involve different points of observation of the individual is able to provide a more valid and thorough understanding of the psychological functioning (Meyer, 1997) and, especially in the case of young children, provide for their inability to acknowledge and correctly report their own psychological issues.

The second and equally relevant critical aspect of assessing narcissism in youth is a more theoretical and epistemological one that to some extent derives from the psychoanalytic idea of narcissism as part of normal personality development and on the other hand originates from a wider problem in conceptualizing the existence of personality disorders, or at least recurrent personality patterns, in individuals who are still in developmental age. A typical argument which is made against the possibility of identifying personality disorders in children in particular would be the fear of labeling a young individual with a "carryover" diagnosis that could negatively affect the young personality in the developmental process. Moreover, a further concern would be connected to the effects that a personality diagnosis could have on the representation of the child that people involved in his or her care could have, such would be the case of educational settings and the relationships between young students and teachers (Freeman, Reinecke, & Tomes 2007).

Additionally, and especially in the case of adolescence, some empirical findings suggest that narcissism would be a distinctive psychological dimension intended to serve specific functions in different ages and lifetimes. The view of the adolescent as typically self-

centered and absorbed by him/herself would be in fact present also in popular imagination and concepts of this specific period of life (Hill & Lapsley, 2011). Adolescence is actually by definition a stage of profound identity construction (Erikson, 1950, 1968; Marcia, 1980) and, at least for some more traditional authors (Elkind, 1967), levels of self-idealization and self-enhancement would peak at that time. A number of studies also sought to show how narcissism would be an adaptive and necessary trait during adolescence and adulthood, because of specific life-tasks and expectancies related to age such as pursuing one's own goals and aspirations (Arnett, 2000; Staudinger, 1996). Furthermore, narcissism and focus on the self could be also intended during adolescence as an attempt of dealing with personal insecurity towards one's still precarious social status and therefore a way of coping with the subsequent distress (Barry et al., 2008; Jordan et al., 2003).

But the challenge of defining narcissism in childhood and adolescence might be encountered in all its evidence in the context of clinical descriptions and uses of the concept. As anticipated, the existence itself of personality disorders in children is a controversial topic (Kernberg, Weiner, & Bardenstein, 2000; Bleiberg, 2001) and several authors argue against the feasibility of diagnosing personality disorders in childhood for the very variable and developing nature of child's personality (Freeman & Duff, 2006; Freeman & Rigby, 2003). This standpoint is rather clearly reflected by the actual status of personality disorders in developmental age as conceived in the DSM. In fact, if on the one hand the DSM manuals, included the 5th most recent edition indicate the fact of being "generally recognized by adolescence or early adulthood" (APA, 2013, p. 647) as a distinctive feature of personality disorder existence, the manual does not provide any specific guideline for diagnosing personality disturbances and literature about the identification of prodromal signs during childhood is relatively scarce (Freeman & Reinecke, 2007). Whereas a rather solid link between early clinical signs and later development of a PD is postulated in some cases, such

as Antisocial Personality Disorder generally thought to be anticipated by Conduct Disorder, for NPD no potential early equivalents are suggested. Furthermore, as it is to some extent the case also of adult patients, Narcissistic Personality Disorder would lack of the clearly observable and overt behaviors seen for disorders such as Antisocial and would be therefore harder to readily recognize and address in children (Freeman & Reinecke, 2007).

However, albeit specific age- or stage-related behaviors exist and are intrinsic to normal development, children with a narcissistic structure or traits seem to differ from non-narcissistic children in several psychological domains such as self-view, affective functioning, and interpersonal functioning. In contrast to others, narcissistic children display a sense of entitlement, intense envy, and an inability to feel empathy and gratitude. The lack of empathy in turn allows the narcissistic child to exploit others in order to gratify one's own needs (Kernberg, Weiner, & Bardenstein, 2000; Barry et al., 2007).

In many cases, and with potential disruptive effects for the diagnosis and management of early child's personality pathology, signs of narcissism displayed by children would be misinterpreted and often confounded with clinical symptoms such as obsessiveness and anxiety (Freeman & Reinecke, 2007).

Moreover, narcissism seems to present specific features in children and adolescents that could be meaningfully related to the development of less healthy personalities in the subsequent developmental stages (Kernberg, Weiner, & Bardenstein, 2000; Barry et al., 2007; Carlson & Gjerde, 2009). In fact, several recent empirical works provide initial evidence that some behaviors and aspects of personality identified in early childhood can represent antecedents of later narcissism (Carlson & Gjerde, 2009). More specifically, psychological dimensions that are distinctive of NPD as it is displayed by adults such as exhibitionism, exploitativeness and sense of entitlement, predict increased delinquency and conduct problems among adolescents differently from what other related constructs such as

high self-esteem do (Barry et al., 2003; Barry, Grafeman, et al., 2007; Thomaes, Bushman, Stegge, Olthoff, & Denissen, 2008).

Underestimating the presence of prodromal signs of pathological narcissism results problematic not only on an individual perspective but also on a wider social dimension. In fact, while the undiagnosed child is likely to suffer the side effects that come from the neglect of important key features of his or her psychological functioning, the association between early narcissism and later antisocial and maladaptive behaviors later in life can be dangerous also to others.

In conclusion, as pointed out by Barry and Ansell (2011), central to understanding the development and manifestation of narcissism prior to adulthood, and therefore its implications for later life stages, is the need for a clear conceptual framework to guide assessment.

The Second Missing Tile: The challenge of assessing narcissism

As anticipated, a second point is of primary importance to understand the controversial status of narcissism in the scientific literature. Besides the challenges in the theoretical definition of the construct, and in part as a consequence of those, the study of narcissism has often been hampered with difficulties connected to its assessment. The topics of correctly defining and research narcissism on the one hand and the development of valid tools to measure it can be in fact conceived as two inter-reliant problems. Such challenges would affect not only the assessment of narcissism as a personality trait but also the measures developed to diagnose NPD and more in general narcissistic functioning.

Although the integration of NPD in DSM as a formal diagnostic category happened relatively recently (APA, 1980), the efforts of the researchers with the assessment of narcissism and the array of measures developed through the years have been fairly copious. Already in 1988, Raskin and Terry highlighted how almost one half of the - at the time

particularly scarce - quantitative empirical literature on narcissism involved studies aimed at refining methods *to assess* narcissism. Such assessment instruments could be categorized in several ways. One distinction can be based on the format and type of assessment method and, back in 1996, was articulated by Hilsenroth, Handler, and Blais as: a) semi-structured interviews; b) self-report inventories and c) projective techniques. A more up-to-date and epistemologically appropriate extension of this classification would include a) semi-structured interviews; b) self-report inventories (that can gather information from different perspectives such as from the patient or knowledgeable informants) and c) performance tasks, which can be called in a number of ways depending on the specific context as for instance “behavioral tasks”, “free response measures” and “implicit methods” (Meyer & Kurtz, 2006). If this classification definitely includes the majority of measures available to assess narcissism, a second categorization taps more closely into the complexities related to the construct of narcissism itself and its definition. Similarly to what Raskin and Terry pointed out already in 1988, methods to study narcissism ideally reside in two broad categories. The first group encompasses instruments that conceptualize and attempt to assess narcissism as part of an overarching taxonomy of other variables. The widespread interviews and questionnaires to diagnose NPD would be an example of this group, looking upon narcissism as a cohesive personality organization part of a higher-level organization i.e. the DSM Personality Disorders. The second group in this categorization would be represented by measures aimed at studying narcissism independently from any other higher-order taxonomy, where narcissism itself is the target variable of interest. Along these lines but from a more recent view (Watson & Bagby, 2011) which shifts the attention closer to the dichotomy between narcissism as a personality structure *versus* an independent psychological trait, the second group of measures is likely to contain several instruments designed at evaluating

narcissism interpreted as a trait and often used to measure individual differences in the level of the construct in nonclinical contexts and social-personality studies.

As suggested by the analysis of such possible distinctions in the methods available to evaluate narcissism, one important difficulty in assessing the construct in clinical or research contexts and yielding valid results that can be shared within the specialized community, is the heterogeneity of meanings underlying the concept of narcissism in these various methods. While a detailed presentation of the assessment possibilities existing to diagnose NPD and to measure narcissism would require more space than this context can offer (the interested reader may refer to recent reviews of Watson & Bagby, 2011 and of Tamborski & Brown, 2011) some essential points are presented because are crucial to the main scopes of this investigation and to the understanding of the current status of narcissism.

Possibly thanks to the clinical relevance of narcissism and to the importance of the construct for different areas of psychology and psychiatry, several methods to assess it are available, in some cases in terms of *ad hoc* formulated instruments and in other instances as part of more comprehensive assessment procedures. In spite of the large availability of assessment techniques (Ronningstam, 2011), the measurement of narcissism has been often blemished by certain limits in such instruments and especially to the selection of the narcissistic dimensions included. Overall, especially until recently, the most widely used clinical interviews for NPD such as the NPD-scales of instruments like the Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II: First, Gibbons, Spitzer, Williams, & Benjamin, 1997), the Diagnostic Interview for DSM-IV Personality Disorders (DIPD-IV: Zanarini, Frankenburg, Sickel, & Yong, 1996), the International Personality Disorders Examination (IPDE: Loranger, 1999), the Personality Disorder Interview-IV (PDI-IV: Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995), and, finally, the Structured Interview for DSM-IV Personality Disorders (SIDP-IV: Pfohl, Blum, & Zimmermann 1997), greatly relied on the

DSM-IV definition of narcissism. Some exceptions to this trend can be encountered in instruments like the Diagnostic Interview for Narcissism (DIN: Gunderson, Ronningstam, & Bodkin, 1990) and the clinician-rated Q-sort Shedler-Westen Assessment Procedure (SWAP: Westen & Shedler, 1998) that embed to different extents “vulnerable” components of narcissism such as reactivity, affect and mood states, feelings of inadequacy, anxiety and loneliness. Albeit few interesting exceptions like the DIN and the SWAP, the exclusive and massive focus on DSM-IV criteria of NPD have possibly affected in a negative way the development of research and conceptualization of narcissism (Ronningstam, 2011). In fact, as it was discussed early, DSM-IV description of NPD was problematically and entirely based on the grandiose and “high self-esteem” side of the construct, with a neglect of any fragile and vulnerable aspect. On the contrary, themes of vulnerability, shame and dissatisfaction with the self have an important role in the conceptualizations of narcissisms elaborated within very different contexts.

On the self-report realm, particular attention has been given during the last decades to the Narcissistic Personality Inventory (NPI: Raskin & Terry, 1988), originally developed in an early version temporally close to the introduction of NPD in the official PDs taxonomy and still extensively used to measure individual differences in narcissism in nonclinical and clinical populations. Along with its ubiquity and importance in empirical research, the NPI is probably also the self-report instrument for narcissism that received the harshest criticism. Generally the limits reported about NPI pertain to the lack of a stable and replicable factor structure (Kubarych, Deary, & Austin, 2004; Emmons, 1987; Raskin & Terry, 1988) and the poor levels of internal consistency exhibited by its subscales, with the consequent recourse to the total score only (del Rosario & White, 2005). Other principal critical comments on NPI involved its supposed inability to detect pathological narcissism in light of its positive correlations with scales of extraversion and adjustment and its partial overlap with scales of

self-esteem (Trull & McCrae, 2002; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). For the purposes of the present discussion it suffices to say that empirical researchers (Miller & Campbell, 2011) have debated about the limits of NPI and possible alternative explications. What seems more relevant in the attempt to show the connections between controversies in the assessment of narcissism and the status of the construct itself is that the NPI, as it is the case also of most of the diagnostic interviews for NPD presented above, is entirely based on DSM-IV criteria and thus lacking of contents related to vulnerable themes (Pincus et al., 2009). Additionally, this selective coverage of only *overt* facets of the construct characterizes also the narcissistic scales contained in other omnibus self-report questionnaires for personality assessment such as the Personality Diagnostic Questionnaire–4 (PDQ-4: Hyler, 1994), the Schedule for Nonadaptive and Adaptive Personality (SNAP: Clark, 1993; Clark, Simms, Wu, & Casillas, in press), the Multi-Source Assessment of Personality Pathology (MAPP: Oltmanns & Turkheimer, 2006) and the Millon Clinical Multiaxial Inventory–III (MCMI-III: Millon, Davis, & Millon, 1997) which is furthermore inspired by Millon’s evolutionary theory of personality. Beyond more or less severe psychometric problems of the interviews and self-report questionnaires used to assess narcissism and NPD (Watson & Bagby, 2011; Tamborski & Brown, 2011), the most relevant point seems to be the fact that decades of research conducted almost exclusively with measures that privilege *overt* narcissism at the expense of *covert* indicators might have led to an impoverishment in the conceptualization of the construct and to the stratification of contradictory results about its phenomenology at best.

Somewhat surprisingly, other self-reports for narcissism have been for several years limited to *covert* forms of narcissism or were designated for specific populations such as children (Tamborski & Brown, 2011). In the territory of self-report measures to evaluate vulnerable narcissism, the mostly used and validated is the Hypersensitive Narcissism Scale

(HSNS: Hendin & Cheek, 1997), a scale of 10 items describing overt narcissism dimensions such as insecurity and shame. Further vulnerable narcissism self-report measures are the NPDS (Narcissistic Personality Disorders Scale: Ashby, Lee, & Duke, 1979), the SNS (Serkownek Narcissism Scale: Serkownek, 1975), and the Raskin and Novacek Narcissism Scale (RNNS; Raskin & Novacek, 1989). Among these vulnerable narcissism self-reports, HSNS received the biggest empirical attention and studies show its concurrent validity with other measures of overt narcissism (Hendin and Cheek (1997) and related constructs such as neuroticism, yielding also expected negative correlations with Big Five traits such as openness, extraversion and agreeableness. In the light of the positive correlations of the HSNS scores with results from measures of anxious attachment style (Besser & Priel, 2009; Smolewska & Dion, 2005), and shyness (Gleason, Jarudi, & Cheek, 2003), criticism towards the HSNS included that the latter might tap into an area that heavily overlaps with the construct of insecurity, conceived in a nonspecific way and thus not necessarily in the direction of vulnerable narcissism (Tamborski & Brown, 2011).

With the aim of overcoming the limitations inherent to the aforementioned self-report methods and in order to develop measures of narcissism more coherent with the most accredited conceptualizations of the construct, empirical researchers lately worked on the Five-Factor Narcissism Inventory (FFNI: Glover, Miller, Lynam, Crego, & Widiger, 2012; Miller, Gentile, & Campbell, 2012) and the Pathological Narcissism Inventory (PNI: Pincus et al., 2009). The PNI consists of 4 domains to assess covert narcissism and of three domains for overt narcissism. Empirical works attest the satisfactory psychometric properties of the questionnaire and its utility in clinical settings (Pincus et al., 2009; Thomas, Wright, Lukowitsky, Donnellan, & Hopwood, 2012). Similarly to the PNI but from different theoretical positions on personality deriving from the trait-based approaches and more closely to the tradition based on pathological traits (Clark, 1993; Livesley, 1990) as more appropriate

dimensions than general personality traits to assess personality pathology (Glover, Miller, Lynam, Crego, & Widiger, 2012; Miller, Gentile, & Campbell, 2012), the FFNI was recently published as a measure of both vulnerable and grandiose narcissism. As such, the FFNI allows to detect both the vulnerable and grandiose sides of narcissism combining scales such as reactive anger, shame and need for admiration on the one hand and exhibitionism, authoritativeness and grandiose fantasies on the other. Studies show the good discriminant and incremental validity (Glover, Miller, Lynam, Crego, & Widiger, 2012; Miller, Gentile, & Campbell, 2012) and further validation efforts in and outside the United States are currently in progress.

Notwithstanding the noteworthy improvements achieved in the field of self-report assessment of narcissism and the possibilities offered by structured and semi-structured interviews in clinical contexts, assessment of narcissism remains a cumbersome topic which to be accurately assessed and understood in depth requires a multimodal assessment (Hilsenroth, Handler, & Blais, 1996). Narcissism seems to be in fact a construct that is particularly “sensitive” to the method of assessment through which it is assessed – e.g. self-report, clinician-report, observer rating scales, performance based tests – and the empirical validity of the construct could be therefore further damaged if not enough attention is given to this point. In fact, contrasting findings are available from research studies that looked at narcissism through a variety of assessment methods, issue that has contributed to increase over the years the criticism about the validity of the construct.

Meta-analytic evidence about the literature that compared PDs ratings obtained by self-reports and informant-reports places NPD among the disorders with *lowest agreement* between the two methods (Klonsky et al., 2002; Widiger & Coker, 2002).

For example Oltmanns, Melley, and Turkheimer (2002) administered self-report measures of social functioning, DSM-III-R Personality Disorders symptoms, depression, and anxiety to

577 undergraduate students and analyzed the results in relation to peer-ratings on PDs inventories. Although it should be noted that the self-report instrument used for PDs assessment in this study (Schedule for Nonadaptive and Adaptive Personality: Clark, 1993) was based on DSM-III-R conceptualization of PDs whereas the peer-report measure (Peer Inventory for Personality Disorders: Oltmanns, Turkheimer, & Strauss, 1998) was designed on the DSM-IV and this difference might account for part of the discrepancies observed, Narcissistic PD was the only disorder for which findings trended in the opposite direction to what expected. More specifically, in the case of NPD higher self-reported PD scores were associated with worse self-reported social functioning, and people who were rated as more narcissistic by their peers described themselves as having better social functioning. Furthermore, NPD self-informants correlations for the scales assessing Narcissistic Disorder in this study were particularly problematic and NPD was the only PD for which the highest correlation between a peer-rated PD score was not with the corresponding self-report score. Similar results about divergences between self- and other-reported narcissism come from studies in the trait-models domain. Coherently to previous studies on the level of agreements between self and others perspectives on personality disorders (Costa & McCrae, 1990), Miller, Pilkonis and Clifton (2005) described contrasting results about PDs ratings that can be obtained by self- and informant-reports. Starting from the evidence that informants tended to identify in the target clinical sample a larger number of narcissistic PD than do self-reports, the correspondence between the two methods resulted low both at the domain and facet level of the NEO Personality Inventory (Costa & McCrae, 1985) and the self-informant correlations were the lowest for narcissistic PD. Beyond the importance of this recurrent low agreement between self and informant-ratings that occurs in the case of narcissistic individual, Miller and colleagues' results (2005) stress a particularly relevant aspect of the problem, showing not only that narcissistic individuals tend – especially for some

characteristics – to consider themselves differently from how others view them – but also suggest how they (*explicitly*) describe themselves. More specifically, if self- and informant-ratings converged on linking narcissism to antagonistic interpersonal orientation identified by lower agreeableness scores, self-reports of patients with a narcissistic functioning suggested that they viewed themselves as being quite extraverted and not prone to negative emotions, whereas others rated these individuals as likely to experience feelings of shame and embarrassment, to be distrustful and exploitative and, finally, neither introverted nor extraverted.

Issues in the extent of concordance between self-reports and informant-ratings are not novel in psychological assessment and do not hunt only narcissism (Klonsky, Oltmanns, & Turkheimer, 2002; Zimmerman, 1994). However, as suggested by the considerable amount of studies pointing out at Narcissistic Disorder as one of the most problematic, if not the worst, case on this matter, it might be useful to take into account the specific issues related to narcissism and their role in the assessment process. What seems relevant when looking at this problem in the light of the available literature on narcissism and of the critical aspects described throughout this introductory chapter, is that agreement between different methods of analysis of narcissism might be obscured by methodological issues and by dynamics more closely related to narcissism itself. On the one hand, the conceptualizations of narcissism or NPD that underlie assessment instruments compared in the studies often diverge, and on the other hand narcissistic individuals seems to have specific difficulties with the use of self-report methods. In this regard, and especially when considering *self-reported* information from individuals with a certain degree of narcissistic disturbances, the ability itself of the person to accurately *report* about herself is questioned. In fact, at least two factors might interfere with the narcissistic individual's capacity and likelihood to disclose, as objectively as possible since it's the case of a inevitably subjective judgment, his or her own problems,

worries, fears and the like. Such variables, intimately interrelated, might be identified in the tendency to more or less manipulate one's own self-presentation and the actual level of psychological insight available.

Some authors who worked on meta-cognitive abilities on narcissists suggest that individuals with a narcissistic functioning are able to acknowledge that others do not see their performance on a task (Robins & Beer, 2001) or their reputation (Carlson, Vazire, & Oltmanns, 2011) as positively as they themselves do. However, evidences both from research about individual differences on narcissism in nonclinical populations and from clinical personality studies show problems with self-awareness. For example, a work conducted with an experimental design revealed self-aggrandizing memory distortions about personal life-events in male participants evaluated as narcissistic through the NPI (Rhodewalt & Eddings, 2002). The authors discuss these findings as expressions of automatic self-esteem regulation strategies and this seems coherent with the role of defensive self-esteem in narcissism discussed by independent researchers (Raskin, Novacek, & Hogan, 1991). Ideas and results conceptually coherent with such mechanisms underlying the ability of narcissistic individuals to genuinely report about themselves can be found in the realm of empirical clinical personality psychology. In fact, while the narcissistic feature of grandiosity and subsequent self-enhancement is rather unanimously accepted in the psychiatry and clinical psychology field (see for example Ronningstam, 2009) and that might by itself explain part of the problems in self-report results of narcissistic individuals, clinical researchers explicitly pointed out the deficits in insight associated to narcissism (Miller, Widiger, & Campbell, 2010; Pincus & Lukowitsky, 2010).

Personality in Action: Narcissism in the Rorschach Test

As suggested by the discussion above, the assessment of narcissism and NPD is complicated, even more than other PDs and personality constructs, by several methodological

and conceptual problems. In the present section the Rorschach Inkblot Method (RIM) will be presented as a viable alternative of assessment that, with its advantages and drawbacks, can profitably integrate the results obtained through other instruments.

In this context, it seems important to specify that a considerable part of the issues burdening the assessment of narcissism and NPD often extend to the area of personality and its disorders more in general, to the extent that Huprich and Ganellen (2006, p. 27) eloquently affirmed that “The obstacles to assessing personality disorders and their solutions remain a conundrum in clinical practice.”. The problem of the low agreement rates between informants that was seen for NPD is in fact observed also regarding the other PDs. For example, several studies found rather weak diagnostic agreement between clinicians evaluating the same patient (Bronisch, Garciaborreguero, Flett, Wolf, & Hiller, 1992; Mellsop, Varghese, Joshua, & Hicks, 1982; Molinari, Kunik, Mulsant, & Rifai, 1998; Regier, Kaelber, Roper, Rae, & Sartorius, 1994). Along the same lines, not only the judgments expressed by different clinicians can converge to a little extent, but such ratings are often found to correlate even lower with self-report questionnaires completed by the patients (Allard & Grann, 2000; Hyler, Rieder, Williams, & Spitzer, 1989; Piersma, 1987) slightly increasing when the scales to assess PDs are considered dimensionally instead of categorically (Klein, Smith-Benjamin, Rosenfeld, Treece, Husted, & Greist, 1993; Morey, Blashfield, Webb, & Jewell, 1988). In turn, self-reports tend to show low agreement with informant-reports describing the person being assessed (Bernstein et al., 1997; Zimmerman, Pfohl, Coryell, Stangl, & Corenthal, 1988), and the agreement might well be influenced by variables such as the level of interpersonal intimacy between the rater and the rated person (Connelly & Ones, 2010) and the “visibility” of the target personality trait (Miller, Pilkonis, & Clifton, 2005)

Beyond the problems that are inherent to any measure of assessment, be that a self-report (for an extensive discussion refer to Ganellen, 2007), an informant-report or a

performance test and so forth, there are aspects connected to the concept of personality per se – and even more to the one of personality *disorder* – that may directly interfere with the process of asking someone to evaluate *his/her own* psychological functioning. DSM manuals describe PDs patterns of inner experience as characterized by incongruous and distorted representations of oneself. As observed by Huprich and Ganellen (2006), this might have relevant implications in the extent to which a person will be able or willing to provide a “reliable” description of her personality. Specifically, at least two factors might be involved in this process. Firstly, the ability of anyone from the general public and without a specific competence in Psychology or Psychiatry to thoroughly *understand* what an assessment measure is asking about should not be taken for granted, even though assessment instruments are generally designed to be clear and understandable to not specialized users (Huprich & Ganellen, 2006). Secondly, even when an individual is able to fully comprehend what the assessment questionnaire is asking and to readily identify instances of his/her everyday life that might guide in answering specific questions, the pathway towards a trustworthy description of one’s own personality might be hindered by problems in *reporting* about it. In fact, conscious or unconscious distortions of the response that will be yielded can limit the authenticity of the results, and at times can override probes and validity scales that most of self-reports are equipped with (Widiger, 2006). There is a wide range of factors that can diminish the validity of such self-descriptions, from social desirability, to reluctance to admit one’s own flaws, and, in more severe cases to intentional manipulative attempts and malingering or also the pleasure to deceive the clinician or the examiner (Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995). As shown in regards to the assessment of narcissism and NPD, another factor that could complicate the process of studying personality disorders through self-reports is definitely the person’s level of insight (Ganellen, 2007). In fact, just as an obsessive-compulsive patient might have difficulties judging on a 5-points Likert scale

how “repetitive” his or her checking and cleaning behaviors, a narcissistic individual could be not in contact with his/her own feelings of vulnerability and inferiority investigated by the questionnaire.

Interestingly, the aforementioned studies on interrater diagnostic agreement (Molinari, Kunik, Mulsant, & Rifai, 1998; Regier, Kaelber, Roper, Rae, & Sartorius, 1994) revealed low concordance even when the two raters interviewed the patient jointly. This exemplifies how also clinicians’ ratings, although generally free from the distortions typical of disordered personalities and sustained by competence and professional expertise, are subjected to the unavoidable influence of subjectivity. In fact, research shows how informant ratings of others’ personalities, including not only clinicians but also informants such as peers and close relatives, can be biased by distortions similar to those observed for self-reports (Widiger & Frances, 1987, Widiger et al., 1995).

Presenting the limitations of self- and informant-reports clearly does not mean to discredit one or the other assessment tool. On the contrary, the aim is to emphasize how different methods of assessment, with their strengths and weaknesses, can meaningfully be integrated to reach a thorough personality assessment which is warranted in particular in the case of complex conditions such as narcissism and NPD. In fact, while self-report questionnaires may throw light in the person’s subjectivity and give information about how the individual wishes to present himself or herself, informants and clinicians can provide information and judgments about aspects of the individual’s psychological functioning that he or she might not be aware of or willing to reveal. It has been actually pointed out in literature how different assessment methods can uniquely contribute to the overall understanding of personality, each with its own specific contribution as unique source of information (Handler & Meyer, 1998; Meyer et al., 2001).

It is in this context of integration that performance based personality tests can be used as valuable tools that can complement the assessment process and guide judgments. Among performance based personality tests, to the aims of the present investigation, attention will be in particular on the Rorschach Test. In fact, as suggested by an extensive corpus of literature (Ganellen, 2007; Mihura, Meyer, Dumitrascu, & Bombel, 2013) and pointed out also from authors not traditionally publishing on the test (Widiger, 2006), the Rorschach can help uncovering key aspects of psychological functioning that are less readily available to the individual's awareness. Additionally, the Rorschach Test is able to provide useful information about the psychological functioning in different settings and ages (see for example Porcelli & Mihura, 2010; Stokes, Pogge, Grosso, & Zaccario, 2001). While an exhaustive description of the Rorschach Test would require far more space than this context allows, a few hints about the constitutional features of the Rorschach that made it through the years a valid and reliable tool for personality assessment are briefly presented, in relation to its centrality in the present investigation.

The Rorschach Test was published in 1921 by the Swiss psychiatrist and psychoanalyst Hermann Rorschach, in the form of a set of 10 inkblots that the Author carefully selected and artistically enriched from a larger group of visual stimuli in which he was researching while working in creativity and related mental processes. The numerous systems to use the test that appeared through the years soon after Rorschach's premature death in 1922 focused on different aspects of the task (e.g. thematic contents, psychoanalytic interpretations, perceptual and cognitive processing) and generated several scientific diatribes. Nonetheless the core potential of the Rorschach Test² as it is conceived today in its most recent and empirically founded applications is very similar to what its inventor had designated almost one century ago: to understand people by *what they do* instead of *what they say they do* (Meyer & Eblin,

² The Rorschach Test can also be called Rorschach Inkblot Method (RIM) especially when stressing its applications in research and general Psychology as performance based task.

2012, Meyer et al., 2011). As such, the respondent who is taking the Rorschach Test is asked to examine the inkblots and answer the question: “*What might this be?*”. Accordingly to the first empirically grounded system for the use of the test (Comprehensive System, CS: Exner, 1974, 1986, 1993, 2003) and even more in the vision of the most up-to-date evidence-based R-PAS (Rorschach Performance Assessment System: R-PAS, Meyer, Viglione, Mihura, Erard, & Erdberg, 2011), the answer to such a question requires the examinee 1) to engage in a process of visual attribution to the stimuli represented by complex but only partially structured inkblots, 2) to provide a verbal explanation of that response. “Based on this, the task provides a standardized, in vivo sample of problem-solving behavior that can be understood from multiple viewpoints, including: direct observation of task behavior; comparison of numerous dimensions of visual and verbal performance with normative expectation; and analysis of the content, imagery, and sequence of responses.” (Meyer & Eblin, 2012, p. 107). Notable behavioral observations are annotated by the examiner during the administration and the respondent’s verbal production is recorded verbatim.

Right after the administration or shortly after that, the responses are coded according to a series of distinct perceptual classes of features of the inkblot, depending on what the respondent identified as relevant in determining his or her response. In the aforementioned CS and R-PAS, such perceptual classes or “*determinants*” are: *Form* (the shape is the only determinant); *Color* (chromatic color contributes to different extents to the response examined); *Achromatic Color* (black, grey or white colors are involved in the explanation of the percept by the examinee); *Shading* (light and dark ink gradations give to the percept a tactile quality, convey an idea of depth or dimensionality or more indefinitely contribute to the definition of the object seen); *Movement* (the respondent experiences the object seen as moving, or human/animal sensations and emotions are embedded in the response) and *Reflection* (the symmetry of the inkblot is used to describe objects mirrored or reflected). The

scoring process leads to a set of scores and indexes that are evaluated against normative parameters and concur to create a highly individualized and rich description of the individual's core psychological dimensions. These components include reality testing abilities and information processing, quality of ideation, copying abilities and resources, emotional functioning, self and others' representations, relevant concerns and inner motivations.

As any other assessment measure, the Rorschach Test is not without limitations. In the case of the Rorschach, a first drawback is represented by the difficult learning process required for a proficient use of the test and the foreseeable serious consequences that a thoughtless or naïve practice with it can have (Huprich & Ganellen, 2006). A second critical point, which has also to some degree penalized previous empirical studies focused on personality disorders, is that the Rorschach *is not* intended to be a diagnostic instrument. In other words, the Rorschach Test is not able to provide a DSM-oriented diagnosis of personality disorders neither to measure symptoms as they are conceived in the traditional psychiatric nomenclature. Rather, and in this limitation paradoxically resides one of its strengths, the RIM is a valid tool to assess the aforesaid *components* of the psychological functioning which, in an extended and integrated view of personality assessment, might be particularly informative in the diagnostic process. For instance, concepts such as representations of self and others, management of emotions and integrity of reality testing, are part of the Rorschach assessment of personality as well as they are key aspects taken into consideration while considering a personality disorder diagnosis (Widiger, 2006).

The benefits of looking at narcissism through the lenses of a measure designed to study the “personality in action” (Meyer et al., 2011, p. 1) and collect spontaneous samples of behavior are appealing. In fact, the construct of narcissism has risen interest also in the Rorschach literature. Previous efforts in the field led to a number of rather sophisticated

clinical works and intuitions, that can be categorized into three main and sometimes overlapping areas.

Starting from seminal contributions of Wolman (1967), Exner (1969) and Harder (1979), quite a few authors worked in the direction of differential diagnostic research for NPD through the Rorschach, seeking to identify features of NPD patients' protocols such as emotional and object relations characteristics along with defensive operations that would differentiate them from other DSM PDs or nonclinical controls (Farris, 1998; Berg, 1990; Gacono, Meloy, & Berg, 1992; Hilsenroth, Fowler, Padawer and Handler, 1997; Hilsenroth, Hibbard, Nash, & Handler, 1993). In particular, variables that have been pointed out as meaningfully related to narcissism and NPD include primitive idealization contents and three variables initially developed in the Comprehensive System: *Reflections* (Exner, 2003), *Egocentricity Index* (Exner, 1969, 1973, 2003)³ and *Personal Knowledge Justification*⁴ (Exner, 2003). Such works yielded somewhat mixed and heterogeneous results and received more or less valid methodological criticism (Nezworski & Wood, 1995) but can nonetheless still be considered nowadays as suggestions for the creation of a coherent and empirically validated assessment of narcissism and grandiosity through the RIM. For example, results presented from Hilsenroth and colleagues (1997) suggest that although the presence of more Personal Justification Responses or higher Egocentricity Index scores "provided some utility in the differentiation of NPD from the nonclinical group, these variables also differentiated many of the other clinical groups as well" (Hilsenroth et al., 1997, p. 118). Additionally, the presence of one or more Reflections in a Rorschach protocol would be typically developed by individuals satisfying *some* of the DSM-IV criteria for NPD – in particular those reflecting

³ Derived from a combination of Reflections responses and Pairs (relying on the symmetry of the inkblot the respondent identifies two identical objects, human, animal or inanimate) and weighted by the number of responses in the protocol.

⁴ The respondent explains why the object looked the way it did referring to personal knowledge or experience, generally not shared with the examiner.

intrapsychic and cognitive characteristics of the narcissistic individuals such as the fantasies of unlimited success and power – *but not a full diagnosis* of the disorder.

A second group of contributions (see for example Exner, 2003 and Weiner, 1998), worked to identify recurrent patterns Rorschach variables related to self-perception and interpersonal functioning typical of NPD patients, describing for instance limited interest in others and lack of empathy, deficiencies in processes of identification, social avoidance and interpersonal insecurity. Although clinically important, it should be noted that such literature is not specific for NPD (Handler and Hilsenroth, 2006), and similar levels of the aforementioned variables, or abnormalities within them, might be encountered also in the protocols of individuals with other psychological difficulties.

Finally, various authors working clinically with the Rorschach sought to develop content-related variables as well as guidelines to categorize narcissistic individuals' interactive behaviors with the overall aim to capture a number of aspects meaningfully related to the construct of narcissism. These efforts led to a series of theoretically and clinically sophisticated concepts that would reflect distinctive grandiose narcissistic dynamics and would include Primitive *Idealization* from the Rorschach Defense Scales (Cooper & Arnow, 1986; Cooper, Perry, & Arnow, 1988) and Lerner Defense Scales (Lerner & Lerner, 1980); Grandiosity Content proposed by Berg (1990); Exhibitionism (Wagner, 1965); Omnipotence from the Rorschach Defense Scales (see references for Primitive *Idealization*) and the associated content of Magic (Homann, 2013). To date, such variables do not form a cohesive construct and are not embedded in the most recent systems for the use of the RIM.

Although Exner (1995) reacted to some harsh criticism that questioned the ability of the Egocentricity Index and of the Rorschach to validly assess NPD (Nezworski & Wood, 1995) by discouraging the conceptualization of a one-to-one relationship between Egocentricity and self-esteem or self-concept and suggesting Reflections as the best RIM

indicator of narcissism, none of these variables enjoys good empirical support. More precisely, the authors of the recently developed R-PAS system for the Rorschach (Meyer et al., 2011) investigated over all the CS variables and selected which ones to retain and which weight assign them in the interpretative process relying on a series of criteria, three of which are relevant for the present discussion. The CS variables were specifically evaluated on 1) empirical support from published literature which is represented by systematic reviews and a recent extensive meta-analysis (Mihura et al., 2013); 2) behavioral representation on the response process and therefore alignment of the target variable with its interpretative meaning; 3) utility as evaluated by experienced practitioners. As a result, *Egocentricity Index* proved to have almost no empirical support as a measure of narcissism-related constructs such as self-esteem and self-focus. *Reflections*, the variable identified by Exner himself as a more reliable measure of narcissism, received only limited empirical support and its link to narcissistic features might be appropriate only when relative a sentient being is actually looking at itself in a reflective surface. Research (Horn, Meyer, & Mihura, 2009) suggests in fact that visual features of the cards per se would elicit more reflection responses (e.g. an animal reflecting over a pond) when the inkblot is turned sideways, exposing the examinee to the landscape position. Finally, *Personal Knowledge Justification*, although limitedly to male samples, received some support as a measure of self-referencing behavior as a protection from criticism and was rated highly by the clinicians for its interpretative validity (Meyer, Hsiao, Viglione, Mihura, & Abraham, 2013).

In synthesis, to date there is no variable or index of the RIM has been systematically validated as a reliable indicator of narcissism (Handler & Hilsenroth, 2006). Considering the possibilities provided by the RIM to potentially “overstep” the narcissistic façade and capture in vivo samples of grandiose behavior, the development of a more cohesive and thorough way to assess narcissism through the test seems beneficial. Efforts in this direction could not

only increment the utility of the RIM for research purposes on narcissism and provide further help in clinical practice, but also contribute to the conceptual understanding of the construct.

Chapter II

Assessing Narcissism Using Rorschach-Based Imagery and Behavior

Validated by Clinician-Reports: Studies with clinical and nonclinical adults⁵

Narcissism can be considered one of the most intriguing yet complex psychological constructs. If on the one hand narcissism is widely present, especially in Western cultures, in the common social imagery, being easily found in mass media and literature works as well as in layman's descriptions, a precise and widely accepted definition of the term itself has not been found yet. One of the most typical controversial points about the construct might be synthesized by the question "Is narcissism a fundamental, healthy, aspect of personality itself or is it a clinical manifestation indicating some degree of psychological disturbance?". In fact, depending on the sociocultural environment and specific context, the construct of narcissism can be connoted by positive or pejorative judgments, coming to describe a range of scenarios that go from high functioning, successful and self-confident individuals, to egoistic, self-absorbed characters. Beyond the health Vs. pathology debate, similarly to what happens with most of personality dimensions, literature still disagrees in establishing if narcissism should be considered a trait identifiable across different psychological organizations in a dimensional perspective, or if it would be more accurate to describe narcissism as limited to a more cohesive and defined category of personality functioning, such as would be for its clinical variant of Narcissistic Personality Disorder (NPD) (for a discussion of the dimensional and categorical perspective, see for example Livesley, 2001). These and further substantial challenges in outlining narcissism, that will be briefly discussed

⁵ This study was conducted in collaboration with Gregory J. Meyer Ph.D. and David Marino M.S.

below, definitely make the assessment of narcissism and NPD particularly problematic and worth a more integrated, multi-method perspective.

As anticipated, the definition itself of narcissism is problematic and often leaves wide space for interpretations and, in some cases, *misinterpretations*. When considering the clinical variant of narcissism, Narcissistic Personality Disorder (NPD), the formal most up-to-date psychiatric classification (American Psychiatric Association, 2013) depicts narcissistic individuals as characterized by a “Pervasive pattern of grandiosity (in fantasy or behavior), need for admiration, and lack of empathy”, identifiable in specific personal and interpersonal psychological features such as sense of entitlement and self-importance. Well-grounded clinical theory (Kernberg, 1975/1978, 1984/1987; Kohut, 1971, 1977) and research (Rhodewaldt & Morf, 1998; Russ, Shedler, Bradley, & Westen, 2008; Ronningstam, 2011) suggest on the contrary how such description and the focus on “high self-esteem” in particular, although proposed in one of the actual most established diagnostic manuals, might be missing a key part of narcissistic functioning, that could be better described as a disturbing and continuous oscillation between high and low self-esteem states. Such distinction is central for a thorough understanding, assessment and treatment of individuals displaying a narcissistic functioning, and from a theoretical standpoint has assumed even more drastic tones that take form on the epistemological contraposition of rather opposite categorical views of narcissism – grandiose and vulnerable – depending on the emphasis given to the “inflated sense of self” component. In a complex and florid taxonomy, the two clinical configurations have been referred to also as “Overt” and “Covert” (Akthar & Thomson, 1982; Cooper, 1981), “Mirror-hungry” and “Ideal-hungry” (Kohut & Wolf, 1978), “Thick-skinned” and “Thin-skinned” (Rosenfeld, 1987), “Oblivious” and “Hypervigilant” (Gabbard, 1989, 1998, 2009), “Willful” and “Hypersensitive” (Wink, 1992), just to cite a few of them (for a detailed review see Pincus & Lukowitsky, 2010). However, although such

divergent conceptualizations of NPD were proposed and elaborated into thorough theoretical frameworks, many authors question the legitimacy itself of such dichotomy. It is still an open question, in fact, if the “grandiose” and “vulnerable” profiles should be conceived as two different psychological categories - supposing that categorical distinctions and dichotomizations are acceptable when studying personality (Oldham et al., 1992) - or if they rather reflect coexisting features of the same psychological organization (Morf & Rhodewalt, 2001), where painful feelings of inadequacy would coexist with an external self-aggrandizing behavior.

Such controversies in the diagnostic definition of narcissism contributed to throw a negative light on the construct itself, undermining its scientific status to the point that Narcissistic Personality Disorder was among the disorders that were suggested for removal from the current edition of the Diagnostic and Statistical Manual of Mental Disorders by the DSM-5 Task Force. As it is known, such a proposal arose the concerns among the community of mental health providers and clinical researchers (Miller, Widiger, & Campbell, 2010; Ronningstam, 2011), worried for the possible detrimental effects this would have had for the individuals suffering from NPD, who, instead, appear to be a particularly psychologically vulnerable population. Although NPD is a personality disorder (PD) that “does not make noise” as other more externalizing clinical conditions such as Borderline or Antisocial PDs, narcissistic patients experience important impairment in vital areas such as interpersonal relations, social and emotional life and work, often failing to conduct emotionally fulfilling, satisfactory lives (Stone, 2009; Ronningstam & Maltzberger, 1998).

Despite what could be at a first sight might appear as a good level of adaptation, in fact, underlying subtle disturbing dissatisfaction with themselves undermine the psychological well-being of narcissistic patients, always struggling with chronic unrealistic expectancies and excessively high ideals (Sperry, Lewis, & Carlson, 1993). Clinical narcissism seems to

impact especially the interpersonal domain, where patients seem to fall short in meeting others' affective needs, experiencing empathy and commitment and ultimately causing high distress both to themselves and others (Campbell, Foster, & Finkel, 2002; Miller, Campbell, & Pilkonis, 2007). Beyond such relevant dysfunctions in emotional and interpersonal functioning, NPD is also frequently found in comorbidity with other psychiatric conditions, both of Axis I and Axis II of DSM-IV-TR, along with some controversies in the reported prevalence rates, with the latter being probably a result of the quite narrow definition of NPD present in the DSM (Stinson et al., 2008; Widiger, 2011; Simonsen & Simonsen, 2011; (Widiger, 1991; Oldham et al., 1992; NESARC: Grant, Kaplan, & Stinson, 2005).

The condition of narcissistic patients is also complicated by the fact that, despite such important clinical issues, the nature itself of the personality organization, so focused on self-aggrandizement, might make it more challenging for them to have an insightful view on their own psychological problems and engage with psychotherapeutic treatment. In fact, patients with clinical narcissism hardly seek treatment spontaneously, tending to blame others for their own difficulties and failures (Behary & Dieckmann, 2011), and are often referred to clinical attention by significant others (e.g. a spouse or a close relative) or in relation to the distress caused by external circumstances threatening their reputation and perceived self-esteem such as work or legal problems (Behary & Dieckmann, 2011). Even in case a treatment starts, high complexity of treatment of patients with NPD is acknowledged by clinicians and authors of diverse orientations, to the point that narcissistic disorders are considered among the most difficult to treat (Diamond, Yeomans & Levy, 2011; Doidge et al., 2002; Gabbard, 2009; Cukrowicz, Poindexter, & Joiner Jr., 2013). Despite the general lack of empirical and systematic studies on the treatment of NPD (Reed-Knight & Fischer, 2011), which is often presented through single clinical cases and analyses of sessions transcript instead, complicating factors in therapy are reported. Such critical issues

encompass important difficulties in the relationship between therapist and client that may result, for instance, in distorted transference and countertransference patterns (Gabbard, 2009; Rosegrant, 2012); hurdles in building therapeutic alliance (Ronningstam, 2012); painful and disturbing affects such as envy and fear of humiliation connected to the fact of being in a clinical relationship that can be therefore perceived to some extent as imbalanced (Kernberg, 2009).

Also if a detailed exposition of the history of narcissism is beyond the aims and limits of this paper, it appears important to remark that narcissism as a clinical trait is not only associated to relevant existential and subjective distress, but is also a construct with an abiding tradition in the history of psychology. In fact, since H. Ellis in 1898 introduced in the psychological literature the term “Narcissus-like” to describe cases of individuals with a massive, and sometimes total, absorption of the sexual emotions in self-admiration, terms semantically referring to “narcissus” were progressively adopted by clinical scholars with a variety of meanings. Almost contemporary to Ellis’ first writings on the topic, the first use of the term to specifically denote clinical conditions by the addition of the suffix “-ism” appeared with P. Näcke’s work on autoeroticism and sexual perversion (1899). The term “narcissism” was then resumed by S. Freud from 1914 and introduced in the psychoanalytic theoretical background with multiple connotations and functions, defining at the same time a metapsychological concept common to universal human development and functioning as well as a diagnostic category or pathological functioning. Starting from this sophisticated but yet contrasting bases, the widespread interest arose around the construct of narcissism took a myriad of different paths through subsequent theoretical elaborations (just to cite a few: Rosenfeld 1964, 1971, 1987; Kernberg, 1970, 1975; Kohut, 1971, 1977; Meissner, 1978; Pulver, 1970; Stolorow, 1975) at times resulting in the antinomies described above and ultimately was included as a psychiatric-nosographic condition in the DSM-III (1980).

It might be surprising to note that, despite this relevant clinical significance and longstanding history, the construct of narcissism has received quite limited empirical attention (Paris, 2003; Stinson et al., 2008). In fact, except for more recent studies that focused on the impact of NPD traits on the quality of life and functional impairment in clinical and community samples (Cramer, Torgersen, & Kringlen, 2006; Miller, Campbell, & Pilkonis, 2007), systematic works have generally involved more observable and externalizing PDs – such as Antisocial and Borderline – and the theme of narcissism has been discussed more from a clinical-theoretical perspective and from the point view of social-personality psychology.

Among the array of explanations for such scientific status of narcissism, that goes from the supposed minor clinical relevance and social dangerousness – also if it might well be argued that this could be the result of a vicious cycle in which a construct is under-investigated and thus are its outcome and possible complications – to the complexity and controversies surrounding its definition to encompass, finally, specific issues connected to the methods used for its assessment. In this regard, two points seem to be particularly problematic. Firstly, NPD results to be by far more sensitive than other PDs to the assessment tool used, with very dissimilar results that can be yielded by different sources of information. As a matter of fact, NPD is the PD where self-informant correlations are between the lowest (Klonsky, Oltmanns, & Turkheimer, 2002; Oltmanns, Melley, & Turkheimer, 2002). More specifically, observers (e.g. peers, clinicians, family members) tend to rate narcissistic individuals as more severely impaired and less likable (Miller, Widiger, & Campbell, 2010), whereas narcissists would often present themselves in a favorable light (Miller, Pilkonis and Clifton, 2005). A second central point, closely related to the first and to the overall aim of the present work, is that most of the systematic studies on narcissism, although sophisticated and important (Carlson, Vazire, & Oltmanns, 2011) generally relied on self-reports methods

and more in general on assessment instruments (e.g. the NPI) which are largely based on the DSM understanding of the construct and expressively target the high self-esteem and sense of entitlement components (Pincus et al., 2009). Although inflated exhibited sense of worth might be a central aspect of narcissistic individuals' functioning, such approach could risk to neglect the meaning of the narcissistic attitude and its compensatory or defensive purposes.

In the light of such challenges in understanding and adequately assessing narcissism, the present work represents the basis of an overall attempt to refine a measure that could complement the methods normally used and in particular contribute to clarify narcissistic functioning by accessing a different order of information that is obtainable from subjective and informant ratings. In fact, if on the one hand, informants – clinicians included – not only can be affected by their own subjectivity but can also be exposed to possible manipulations of the individuals motivated to omit information about themselves that they feel like improper or unacceptable (Handler & Hilsenroth, 2006), an assessment of narcissism limited to self-reports might be flawed by possible defensive responses of narcissistic individuals (Gunderson et al., 1990), who tend to be hardly disposed to challenge themselves and with scarce psychological insight (Hilsenroth, Handler, & Blais, 1996; Miller et al., 2005; Huprich & Ganellen, 2006).

Therefore, the challenge of assessing and conceptualizing narcissism seems to be a context which might particularly benefit from the use of assessment methods such as the Rorschach Test, designed to capture motives and psychological dimensions which are less available to the individual's rational control and awareness such as performance based tests (otherwise called measures of "implicit" or "mental processes" indicators, as opposed to "explicit" or "mental experiences", see McClelland, Koestner, & Weinberger, 1989; Greenwald & Banaji, 1995; McGrath, 2008 for further discussion). In fact, providing a problem-solving task setting that draws on perceptual organization processes and associational/projective operations

(Kubiszyn, Meyer, Finn, et al., 2000), performance based personality tests can usefully integrate the data obtained by other sources of information (Meyer & Kurtz, 2006; Kubiszyn et al., 2000) allowing to gather meaningful data about various implicit aspects of personality such as perception, affective functioning, self- and interpersonal representations.

In regard to the Rorschach Inkblot Method (RIM), various have been the attempts over the years to elaborate valid and replicable inferences from protocols that would permit to detect and comprehend narcissistic functioning, beginning from the pioneer works of Wolman (1967) and Harder (1979). More in detail, studies sought to identify specific indicators of narcissism, generally delineated by particular characteristics of perceptive, relational and affective functioning (Berg, 1990; Blais, Hilsenroth, Castlebury, Fowler, & Baity, 2001; Farris, 1988; Urist, 1977). Such current of research has pointed as possible indicators of narcissism Rorschach at variables like Reflection and Personal Knowledge Justification Responses from Exner's Comprehensive System (2003); Omnipotence and Primitive *Idealization* from Cooper and Arnow's Rorschach Defense Scales (1988); *Idealization* from Lerner and Lerner's Rorschach assessment of primitive defenses in borderline personality structure (1980) and, finally, Grandiosity Content from Berg (1990). Although such contributions have been important and represent in part the theoretical foundations of the conceptualization to assess narcissism via the RIM that we present in this paper, a recent extensive meta-analysis warned about specific problems in the validity of some of these variables (i.e. Reflections and Egocentricity Index, see Mihura, Meyer, Dumitrascu, & Bombel, 2013 for a detailed discussion).

In the current work we present a set variables, both elaborated from previous literature and newly developed, to more thoroughly study narcissism through the RIM encompassing the dynamic aspect of it represented by a compresence of grandiose and vulnerable themes. Contextually, we present results about the factorial structure of these indicators and their

external validation.

Grandiosity and Narcissism Variables

To the aim of capturing more thoroughly the construct of narcissism and related psychological constructs via the RIM, we developed a set of 11 variables (Omnipotence, OMP; Idealization, IDL; Reflection, r; Personal Knowledge Justification, PER; Exhibitionism, EXH; Magic, MAG; Elevated Mood States, EMS; Expanded Personal Reference, EPR; Narcissistic Devaluation, NDV; Narcissistic Deflation, NDF; Narcissistic Denial, NDN). Of these Grandiosity and Narcissism Variables (GNVs: Meyer, Gritti, & Marino, unpublished manuscript), some of which we modified from previous literature: Omnipotence and Idealization (Cooper, Perry, & Arnow, 1988); Reflection (Exner, 2003), Personal Knowledge Justification (Meyer et al., 2011), Exhibitionism (Wagner, 1965), Magic (Homann, 2013), and Elevated Mood States (Cooper and Arnow, 1986); and some of which we developed: Expanded Personal Reference, Narcissistic Devaluation, Narcissistic Deflation, Narcissistic Denial. A synthesis of the conceptual and coding rationale of all the 11 variables is presented in Table 1 of the Appendix and the detailed guidelines are available contacting the first Author. In regards to the variables that largely relied on previous literature, the basic changes were as follows: a) to the original OMP criteria developed by Cooper and Arnow, we have added an aggrandizing form of intellectualization that draws on some of their coding criteria for the Intellectualization defense and we extended the code to instances in which the person asserts that the task is easy, that the response is obvious, that he or she is doing well, or that the percept looks the way it does because of personal wishes or feelings; b) for IDL, we added to Cooper and Arnow's original criteria an element from their *Hypomanic Denial* coding in which inkblot features are aggrandized, even when the content itself is not; c) EMS coding was derived from two subcomponents of *Hypomanic Denial* and one subcomponent of *Pollyannish Denial* from the Cooper and Arnow (1986) Rorschach

Defense Scales; d) we expanded Wagner's coding guidelines for EXH to encompass non-Movement responses consisting of objects that are designed for display to an audience or actually on display to an audience and to include also animal percepts.

In the two subsequent works that will be presented below we aimed at studying the factor structure of this set of GNVs and validate them against clinician-ratings of personality.

Study 1: Normative adults

Outline

We ran a principal component analysis (PCA) of the GNVs to determine if these variables are targeting a cohesive construct. Additionally, by establishing empirical and conceptual parallels, if they exist, the collection of historical research findings for the individual variables can be synthesized and aligned. Based on theory, we expected to find a one dimensional structure with substantive loadings from all eleven of the GNVs. However, since all eleven variables were compiled or created in an effort to cast a broad net for capturing potential expressions of narcissism and grandiosity, they differ in their foundation, which may also impact the results. One variable is based on the identification of structural inkblot qualities (i.e., the symmetry contributing to r), six variables are based on perceived content (i.e., IDL, NDV, NDF, NDN, EXH, MAG), two are based on the respondents interaction style with the stimuli and examiner (i.e., OMP, PER), and two are based on perceived content or the interaction style with the stimuli and examiner (i.e., EMS, EPR). These practical distinctions may override the theoretical expectation for a single latent dimension.

Regarding r , Horn, Meyer, and Mihura (2009) using an experimental design found that the rate of reflection responses was strongly influenced by the critical stimulus features related to card orientation and thus was independent of narcissistic characteristics of the respondent. Additionally, these authors concluded that reflection responses are more likely

interpretable as indicating narcissistic qualities “when the imagery in the coded percept is aligned with the phenomenology thought to be associated with narcissistic-like qualities” (Horn et al., 2009; p. 355). Specifically, *r* may serve as an indicator of narcissism “to the extent that a human or animal is viewing itself in a reflective surface and not when the response is simply a landscape reflection” (Meyer et al., 2011; p. 374). Because of this, we also conducted a series of exploratory analyses using subsets of the reflection codes. Sequentially, these analyses were limited to those with a sentient object present, with a human present, in the upright orientation, with an object looking at itself reflected, both in the upright orientation and with a sentient object present, and both in the upright orientation and with an object looking at itself reflected.

Sample

This study used the subsample of 145 full-text English protocols from the R-PAS normative data set, which is part of the broader internationally-inclusive R-PAS normative sample containing 1396 protocols (Meyer et al., 2011). This sample contains nonpatient adults with approximately 48% of respondents being male. The mean age is approximately 39 with a standard deviation of about 15. To compute interrater reliability, we randomly selected 21 protocols and a second rater independently scored each of them⁶. Using Cicchetti’s (1994) benchmarks and the exact agreement intraclass correlation (ICC) for a single rater under a one-way random effects model, interrater reliability at the protocol level was good to excellent for EMS, PER, MAG, *r*, *r*-Sent, *r*-Humans, *r*-Upright; fair for IDL, EPR and EXH and poor for NDF. For OMP and NDV, the very low base rate of these codes in the 511 responses from 21 randomly selected protocols coded by the two raters led to a *k* and an ICC of zero. In presence of such a low frequency of the codes, also one only disagreement can lead to an agreement of zero. In fact, OMP was not assigned for any of the 511 responses by

⁶ The two independent raters were David P. Marino and Emanuela S. V. Gritti.

rater 1, whereas rater 2 coded it just 3 times; similarly, rater 1 never coded NDV and rater 2 coded it once. The low agreement obtained for NDF might be due to a similar reason concerning the low base rate of the variables, which was assigned only 5 times by rater 1 and once by rater 2; In this context, the absolute percent agreement (i.e. the top-left to bottom-right column total divided by total N) is a more informative measure of the actual agreement between the two raters for so low base rate count variables. As such, absolute percent agreement for NDF is 99%, 100% for NDV and OMP. Interrater reliability coefficients could not be calculated for NDN, r-Look and r-UpLook because none of the raters assigned those codes on this 21 protocols, meaning therefore a 100% agreement. Moreover, absolute percent agreement was 94% for IDL, 95% for EPR, 97% for EXH and 99% for NDF.

Materials

Rorschach Inkblot Method is presently considered as a performance based personality test (Meyer & Kurtz, 2006; Kubiszyn et al., 2000) that permits to gather meaningful information about various implicit aspects of personality such as perception, affective functioning, self- and interpersonal representations. It consists of a set of 10 cards, (5 chromatic and 5 achromatic) containing graphical stimuli that differ in level of structuration. The examinee is asked to respond the question “*What might this be?*” and his/her response is annotated *verbatim* by the examiner. This response phase is followed by an inquiry phase where the examiner can question the respondent in order to completely understand key features of the response which are later used to score the protocol, such as localizations and determinants (i.e. the features of the inkblot that induced the examinee to produce that specific response). The scoring and interpretation of the protocol is carried out relying on objective and empirically validated criteria.

Statistical Procedure

In running the PCA we examined variable distributions to identify potential confounds from skewness, which we expected to be present for these low frequency count variables. Table 1 shows the descriptive data for all variables, including the reflection subsets. The eleven primary variables (OMP, IDL, PER, r, NDV, NDF, NDN, EXH, MAG, EMS, & EPR) had skew between about 1.3 and 8.1, and the supplemental reflection variables had skew between 2.1 and 4.7. We applied a square root transformation to seven variables (i.e., PER, EPR, NDV, NDF, NDN, EXH, MAG), an inverse reciprocal square root transformation to one variable (i.e., OMP), and did not transform three variables (i.e., IDL, EMS, r) because their skewness and kurtosis were adequate. The revised skewness values are shown in the final column of Table 2. After the square root transformation was implemented, the skew of six variables (PER, EPR, NDV, NDF, EXH, and MAG) fell into a good or acceptable range, though this was not so for OMP, NDN, and the r subtypes due to their small range. After the inverse reciprocal square root transformation was implemented to two variables (i.e., OMP, NDN), the skew for OMP fell into a good range, although NDN did not due to the restricted range making it impossible to fully correct skew. For instance, NDN has the largest range of the still skewed variables. Even after adding the constant 1 to all scores (to avoid values of zero) and applying an inverse reciprocal transformation of the squared variable, skew only dropped from 8.10 to 6.88. Thus, the analyses proceeded using the square root transformed scores.

Next, the intercorrelation matrices for the sample was analyzed using the Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) statistic to ensure that the matrix was suitable for factor analysis. Second, parallel analysis (PA; Horn, 1965) and the minimum average partial correlations (MAP; Velicer, 1976) were analyzed to help determine how many components to retain (Velicer, Eaton, & Fava, 2000; Zwick & Velicer, 1986) using O'Connor's (2000) SPSS syntax.

PA allows a comparison of the eigenvalues from the R-PAS normative data to the average eigenvalues extracted from correlation matrices of randomly generated, uncorrelated variables that contain the same number of cases and variables as the R-PAS normative data set. If the actual eigenvalue from the R-PAS normative data set is bigger than its corresponding eigenvalue from the parallel random data, that factor is retained. In order to obtain a sampling distribution for each eigenvalue, researchers typically generate many random datasets. To enhance accuracy it is optimal to compare actual eigenvalues to the 95th percentile of the sampling distributions for the random eigenvalues as opposed to the mean of those distributions (Longman, Cota, Holden, & Fekken, 1989). We compared our actual eigenvalues to the 95th percentile of the eigenvalues drawn from 500 random datasets. For the MAP test (Velicer, 1976), the number of components to retain is determined by successively extracting components from the correlation matrix, computing the average of the squared residual off-diagonal correlations in the matrix, and finding the minimum of those averages.

Table 1. *Descriptive statistics for the primary and supplemental variables*

	Mean	SD	Min	Max	Skewness	Kurtosis	Skew After Transformation
<i>OMP</i>	0.32	0.96	0	9	6.02	48.34	1.56
<i>IDL</i>	1.84	2.14	0	10	1.66	2.63	Not transformed
<i>r</i>	0.50	0.88	0	4	1.73	2.20	Not transformed
<i>PER</i>	0.90	1.47	0	8	2.72	8.86	.87
<i>r-Sentient</i>	0.34	0.70	0	3	2.14	3.96	1.53
<i>r-Human</i>	0.10	0.35	0	2	3.58	13.21	3.03

<i>r-Upright</i>	0.13	0.41	0	2	3.31	10.71	2.79
<i>r-Looking</i>	0.09	0.31	0	2	3.59	13.32	3.15
<i>r-UpLook</i>	0.06	0.27	0	2	4.70	23.82	4.08
<i>r-UpSent</i>	0.12	0.41	0	2	3.45	11.67	Not transformed
<i>EMS</i>	1.59	1.61	0	8	1.34	2.00	-0.06
<i>EPR</i>	1.72	2.44	0	15	2.25	6.59	.63
<i>NDV</i>	0.28	.56	0	3	2.17	4.91	1.47
<i>NDF</i>	0.28	.59	0	3	2.59	8.06	1.50
<i>NDN</i>	0.03	.20	0	2	8.10	70.18	7.13
<i>EXH</i>	0.51	.98	0	6	2.69	8.89	1.27
<i>MAG</i>	.17	.43	0	2	2.51	5.89	2.56

Results

To determine if the R-PAS normative data set was suitable for factor analysis, the KMO test indicated that the eleven-variable correlation matrix was within the mediocre range (.61) and Bartlett's sphericity test was significant ($p < .0001$) indicating it was not an identity matrix and correlations were indeed present for analysis. As can be seen in Figure 1, PA results indicated there was one real factor present, as the eigenvalues for the two, three, and four factor solutions were less than those expected by random chance. In addition, MAP results indicated only one factor was present (see Figure 2). Thus, PA and MAP results indicated it was appropriate to extract only one factor.

Figure 1. *Parallel Analysis for R-PAS Sample*

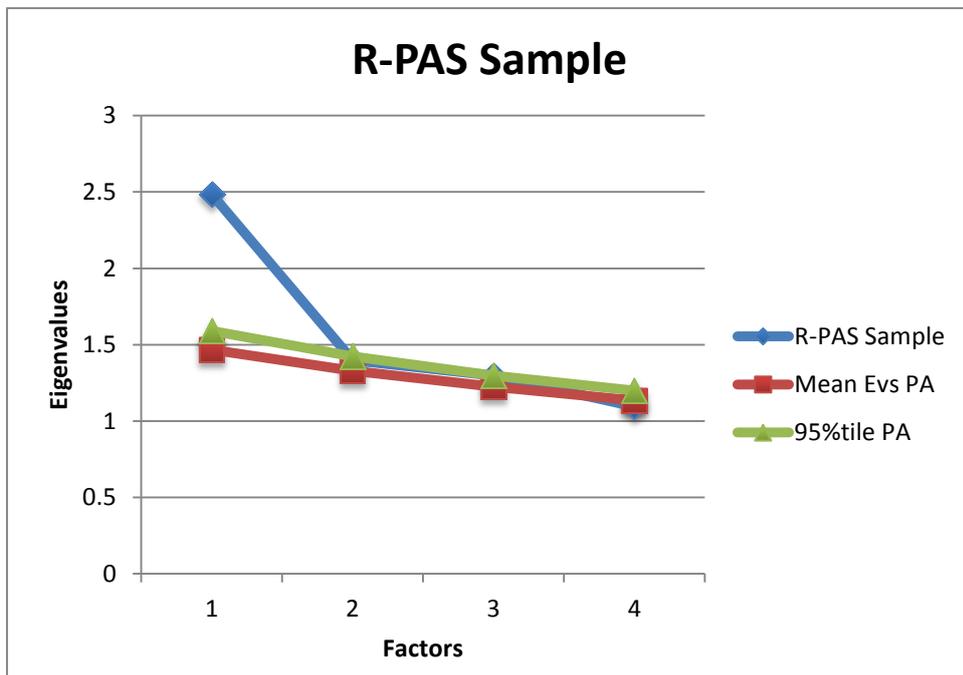
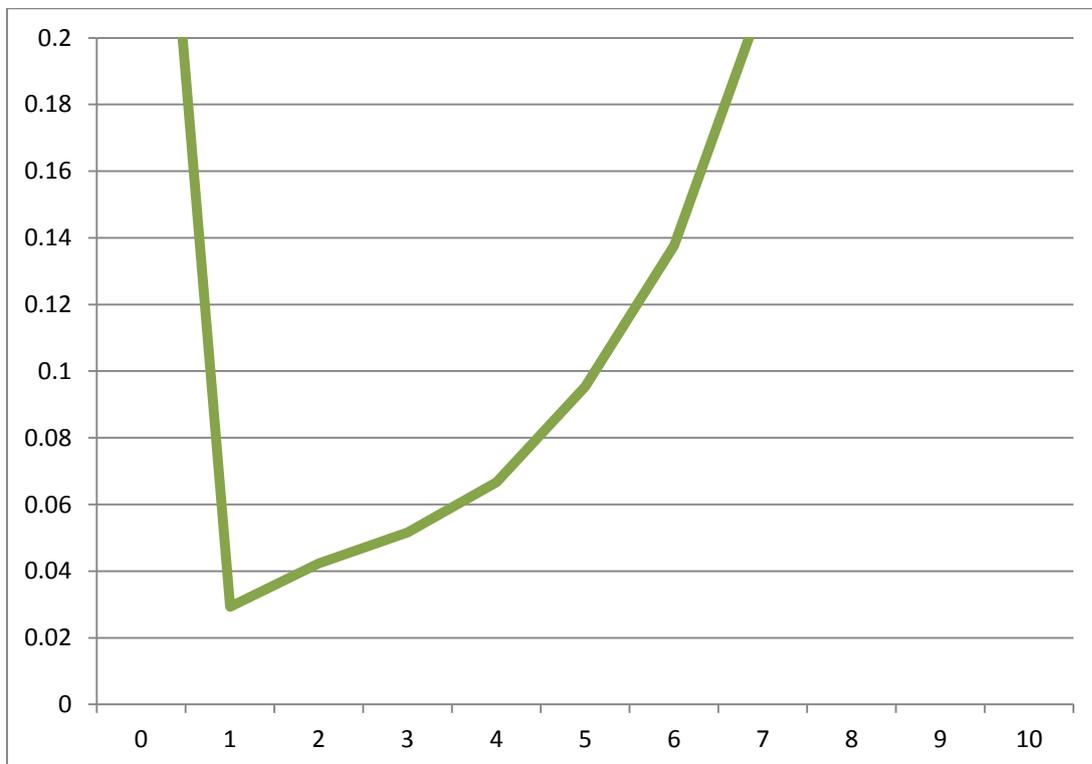


Figure 2. *Minimum Average Partial Test for R-PAS Sample*



After a single factor was extracted from the R-PAS normative sample, four of the GNVs (EPR, PER, OMP, & IDL) loaded highly ($>.60$) onto it; NDN and EMS both had a

modest loading (see Table 2). Because *r* did not provide a significant loading onto the factor, we did not examine the more specific subtypes of reflections.

Table 2. *PCA with 1 factor and 11 variables: Factor loadings for GNVs*

GNVs	Average Loading
<i>Expanded Personal Reference</i>	.78
<i>Personal Knowledge Justification</i>	.64
<i>Omnipotency</i>	.62
<i>Idealization</i>	.61
<i>Narcissistic Denial</i>	.48
<i>Elevated Mood States</i>	.48
<i>Exhibitionism</i>	.33
<i>Narcissistic Devaluation</i>	.32
<i>Narcissistic Deflation</i>	.14
<i>Reflection</i>	.13
<i>Magic</i>	.12

Study 2: Clinical adults

Outline

In Study 2 we aimed at analyzing the factorial structure of the GNVs in a clinical sample and to validate the potential factor(s) using as a criterion clinician-ratings measures. Finally, we sought to test the incremental validity of the Rorschach Inkblot Method over a more readily obtainable self-report measure in assessing narcissistic and grandiosity traits. Considering previous evidence on the sizes of the correlations between RIM variables and external criteria

(Mihura, Meyer, Dumitrascu, & Bombel, 2013), we expected the GNVs and its associated factor(s) to be associated more closely to the clinicians' ratings than to the self-report measure.

We expected to find a replication of the factorial structure obtained in the nonclinical sample at least for the variables that reported higher factor loadings in Study 1 (EPR, PER, OMP, IDL) and ultimately to be able to validate the narcissistic and grandiose factor against the criterion measure.

Considering the literature presented above on specific types of Reflection responses and their psychological correlates, we anticipated a significant correlation with the narcissistic criterion only for r responses regarding a human or animal viewing itself in a reflective surface or no correlation at all between reflection and the relevant criteria.

Participants: Patients and Clinicians

The present study involved outpatients of a private mental health clinic located in Milan, Italy. All the patients undergo a diagnostic process (composed of psychological testing via a standard assessment battery and history taking) soon after intake in order to evaluate psychological functioning and plan treatment. After this evaluation, some patients start treatment whereas others spend a few sessions with the clinician to identify and discuss some key-features of their psychological functioning that emerged from the integrative assessment. The present data concerns a clinical series of 100 patients (age: $M=34.7$, $SD=12.2$; 62 female, 38 male) who underwent this assessment process. SWAP-200 clinician ratings were obtained for 55 patients and MCMI-III records were available for 60 of them.

In order to maximize the external validity and generalization of the findings to usual scenarios of outpatient facilities, we did not set any eligibility criteria. Of the clinicians contacted to participate in the study, almost all consented to collaborate and completed the SWAP-200 for their patients. All patients provided written, informed consent as part of

routine clinic procedures to indicate that their de-identified data could be used for research purposes.

The treating clinicians (N=17) were predominantly females (71%) and of Caucasian ethnicity, with a mean age of 57.4 years ($sd = 10.9$). Clinicians were quite well experienced with an average of 29 years of practice ($sd = 10.7$). With reference to training, most clinicians had a degree in Psychology (41%), while the remaining had obtained an analogous title (Degree in Literature or Philosophy and specialization in Clinical Psychology) within the Italian education system (30%) or had a degree in Medicine (29%). With respect to theoretical orientation, more than half indicated a psychodynamic orientation (53%), 29% psychoanalytic, 12% cognitive-behavioral and 6% systemic. These therapists were also expert on personality assessment as reflected by the fact that the majority (82%) of the clinicians had advanced training in identifying, through a multi-method assessment and extended history-taking, the focus of the patient's psychological functioning conceived as a potentially powerful therapeutic factor.

The procedure of the present work largely relied on the standard routine of the clinic, providing a naturalistic test of our hypotheses. Clinicians had contact with their patients as part of their regular practice, including about 2-3 intake sessions before referring them to the assessment process, which was undertaken with licensed psychologist who specialized on using tests and conducting extended history taking. Importantly for the present study, the MCMI-III was administered to clients during this assessment process (i.e., separately from the context in which treating clinician completed the SWAP-200). We further ensured that the MCMI-III response-sheets as well as the reports were kept in separate folders and not attached to the assessment reports delivered to the clinicians. This made it impossible that the primary clinician had access to the MCMI-III results, maintaining independence between the

self-report and clinician-report ratings. Later in the treatment process, the primary clinician provided ratings on the SWAP-200.

As a result of this natural setting, there was no rigidly predetermined interval between the moment when the patient took the MCMI-III (that, as anticipated, temporally coincided with the routine psychological assessment) and the rating of the SWAP-200 by the clinician. In most cases ($n = 24$), the SWAP-200 was completed between 2-12 months later, but some were rated within the first two months ($n = 12$), and some were completed more than a year later ($n = 19$). The overall median was 6.0 months after the completion of the MCMI-III. Although the interval between the rating of the MCMI-III and the SWAP-200 was not the same for all the patient-clinician dyads because of the naturalistic setting of the study, the differences were rather randomly distributed in terms of timing, and the frequent long interval observed between the two measures has considerable benefit as it indicates that clinicians would have been quite well-acquainted with the client.

Materials

The *Rorschach Test*, that has already been described for Study 1, has been used in the present study along with two other measures of narcissism, one a clinician-rated Q-sort instrument (SWAP-200) and the other a self-report questionnaire (MCMI-III). Before briefly describing the other two measures used, a summary of the interrater reliability for the 11 GNVs and r subtypes is given. We randomly selected from the entire dataset ($N = 100$) 20 protocols that were independently coded from a 2nd rater⁷ unaware of the codes assigned by the first rater. Using Cicchetti's (1994) benchmarks and the exact agreement intraclass correlation (ICC) for a single rater under a one-way random effects model, interrater reliability at the protocol level was good to excellent for all the 11 principle GNVs except for NDF, for which it was poor.

⁷ Gregory J. Meyer Ph. D.

Agreement was excellent also for the r subtypes. It might also be noted that the absolute percent agreement for NDF was 98%.

As anticipated, two external measures of narcissism were used as well. Specifically, given the literature showing low correlations between the RIM and self-reports, the MCMI-III was not used as a criterion measure per se but mostly to assess the incremental validity of the RIM to predict clinician-ratings from the SWAP-200 in comparison to a more readily used measure like a self-report.

The *Shedler-Westen Assessment Procedure – 200* (SWAP-200; Shedler & Westen, 2007; Westen & Shedler, 1999a, 1999b). The SWAP-200 is an informant-report Q-sort method, that can be rated by an observer with knowledge of the individual, normally the clinician, to evaluate and describe the personality. It is composed of 200 clinical statements that encompass both psychological characteristics pertaining DSM personality disorder criteria and specific and relevant behavioral variables (e.g. item 40: “Tends to engage in unlawful or criminal behavior”), both more inferential and internal processes (e.g. item 76: “Manages to elicit in others feelings similar to those he or she is experiencing; e.g., when angry, acts in such a way as to provoke anger in others; when anxious, acts in such a way as to induce anxiety in others”). It seeks to measure psychopathological features but also personal resources and adaptive traits. The standard version of the SWAP-200 was adopted in this study, clinicians were therefore asked to evaluate patients employing the software version of the SWAP-200 that allows to electronically “sort” the 200 cards into the identified piles, for ease of collection and scoring the data. The SWAP-200 ratings were then scored for the *DSM-IV Personality Disorders (PD T-Scores)* and for the empirically-derived *PD prototypes (Q T-scores)*. Since the data collection took place in Italy and all the clinicians spoke Italian, they completed the Italian version of the SWAP in the present study (Westen, Shedler, & Lingardi, 2003). The Italian translation of the items was realized by Vittorio Lingardi and

Francesco Gazzillo, in collaboration with a work-group of the Società Psicoanalitica Italiana, Centro Milanese di Psicoanalisi and the SWAP's original authors. The Italian version has widely been used in process- and outcome-research: Both in single-case studies to identify the patterns of change in personality connected to the therapeutic process (Lingiardi, Shedler, & Gazzillo, 2006; Lingiardi, Gazzillo, & Waldron, 2010; Di Riso, Colli, Chessa et al., 2011) as well as on group studies with a variety of clinical populations and measures (Gazzillo, Lingiardi, Peloso et al., 2013). Both the NPD DSM-IV oriented scale and the Q-sort derived scale of the SWAP-200 (SWAP-200 Narcissistic PD-T and SWAP-200 Narcissistic Q-T) were used in the present study as criterion measures for the GNVs. Psychometric qualities for both the narcissistic scales are good. Internal consistency is equal to or above 0.90 for both the SWAP-200 scales for narcissism (Westen & Shedler, 1999a). The Narcissistic PD-T scale and the Narcissistic Q-T scale shown in the standardization sample a correlation of 0.61 (N = 446) and 0.51 (N = 496) with clinicians' ratings respectively (Westen & Shedler, 1999a, 1999b).

Millon-Clinical-Multiaxial Inventory - III (MCMI-III; Millon, 1994; Millon, Davis, & Millon, 1997). The MCMI-III is a self-report personality inventory that consists of 175 items on a True/False format. The MCMI-III is based on Millon's conceptualization of personality and it provides scores for the ten *DSM-5* PDs. The MCMI-III is widely used as a measure of personality with strong empirical support (see for instance Blais, Holdwick, McLean et al., 2003; Craig & Olson, 1998; Barbot, Hunter, Grigorenko, and Luthar, 2013). The MCMI-III raw scores are transformed into weighted base rate (BR) scores consequently used for interpretation purposes. The Italian adaptation of the MCMI-III, realized through a translation and back translation process and approved for use by Pearson Assessment Inc, has been used in prior studies (Zennaro, Ferracuti, Lang, & Sanavio, 2008; Del Corno, Lingiardi, Carnaghi, Abbate, Forino, 2008; Zennaro, Ferracuti, Lang et al., 2013). The 24-items NPD scale of the

MCMI-III has a Cronbach alpha of 0.67 (n = 398) and a test-retest reliability of 0.89 (n = 87) at a 5-14 days follow-up (Millon, Davis, & Millon, 1997).

Statistical Procedure

This study aimed at testing whether the grandiose narcissistic factor structure found in the sample of R-PAS normative adult dataset (Study 1) starting from an analysis of the 11 Grandiosity and Narcissism Variables would replicate in a clinical sample of Italian adults and what would be the divergences, if any. Furthermore, Study 2 sought to empirically validate the narcissism and grandiosity factor(s) potentially discovered analyzing them in relation to two clinical criterion measures. Such criteria included an informant-report (i.e. SWAP-200) and a self-report (i.e. MCMI-III). The statistical analytic procedure was articulated into the following four sequential steps.

1) The 100 full-text Rorschach protocols were scored for the aforementioned GNVs and the 5 subtypes of reflection. Once the scoring was completed and possible coding issues resolved discussing with the co-authors⁸ the factorial structure of the GNVs was assessed through Principal Components Analysis. The correct number of components to retain was evaluated through Parallel Analysis (PA) based on SPSS syntax developed by O'Connor (2002), coherently with what was done in Study 1. Also in this case, before running the PCA the variable distributions were analyzed in depth in order to identify potential confounds from skewness, expecting that low frequency count variables as the GNVs could have been associated to skewed distributions. Table 3 shows the descriptive data for all the Rorschach GNVs variables, including the reflection subsets. The eleven primary variables (OMP, IDL, PER, r, NDV, NDF, NDN, EXH, MAG, EMS, & EPR) had skew between about 0.8 (EMS) and 5.0 (NDN), and the supplemental reflection variables had skew between 1.7 and 2.0. Appropriate transformations were used to correct skewness, favoring more simple operations

⁸ Gregory J. Meyer, Ph.D. and David P. Marino, M.S.

(e.g. the square root or the inverse reciprocal of the original value) on less abnormal variables and limitedly to the cases in which more substantial transformations led to only trivial improvements. We therefore chose a square root transformation for ten of the primary variables (i.e. all but OMP) and three of the r subtypes (specifically r-Human, r-Upright and r-Sentient). For OMP we resorted to the inverse reciprocal of the original squared variable to take its severe skewness to an at least acceptable range and we retained the original variable for two subtypes of Reflection for which no transformation succeeded in fixing the skewness as a result of their small range (viz r-Looking and r-UpLook). The revised skewness values are shown in the final column of Table 3. After the square root transformation was implemented, the skew of ten of the 11 primary GNVs (OMP, IDL, EMS, PER, EPR, NDV, EXH, MAG and r) fell into a good or acceptable range, though this was not so for NDN for which also after applying the transformation the value of skewness remained 4.41, falling above the cut-off of 3 that describes a severely non-normal variable. Thus, the analyses proceeded using the square root transformed scores for IDL, EMS, PER, EPR, NDV, NDF, NDN, EXH, MAG and r as well as for three r subtypes (r-Human, r-Upright and r-Sentient), the inverse reciprocal of OMP squared and the untransformed variable for r-Looking and r-UpLook.

2) Next, the intercorrelation matrix for the sample was analyzed using the Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) statistic to ensure that it was suitable for factor analysis. PA (Horn, 1965) was used to determine how many components to retain using O'Connor's (2000) SPSS syntax.

3) The Rorschach narcissism and grandiosity factor(s) obtained has been subsequently correlated through Pearson correlation with the three external criteria represented by the two scales for narcissism from the SWAP-200 and the NPD scale of the MCMI-III.

4) Finally, the incremental validity of the RIM indicators we developed and identified with Factor Analysis was tested for their predictive value on the clinicians ratings of narcissism (SWAP scales) against a more readily administrable measure as the MCMI-III. In this last step we used multiple regression analyses.

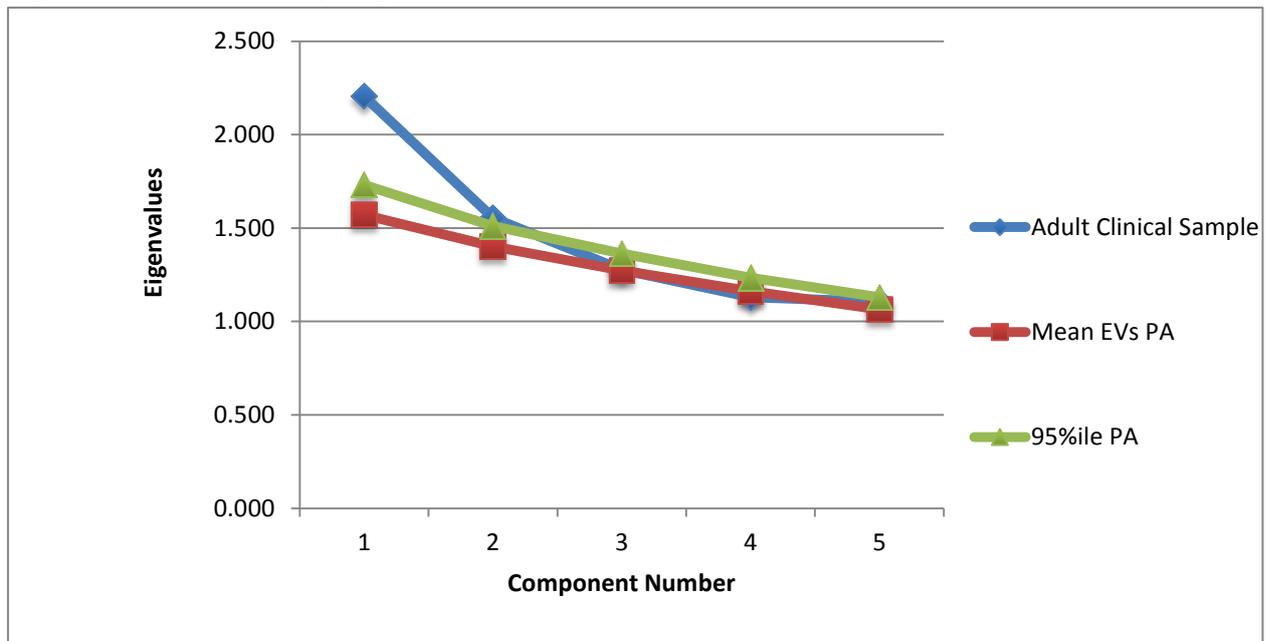
Table 3. *Descriptive statistics for the primary and supplemental Rorschach GNVs variables*

	Mean	SD	Min	Max	Skewness	Kurtosis	Skew After Transformation
<i>OMP</i>	0.20	0.65	0.00	5.00	4.92	30.67	2.28
<i>IDL</i>	1.32	1.30	0.00	6.00	1.23	1.48	-0.11
<i>EMS</i>	1.20	1.28	0.00	4.00	0.80	-0.41	0.05
<i>PER</i>	0.53	0.95	0.00	5.00	2.31	6.15	1.12
<i>EPR</i>	1.17	1.89	0.00	8.00	2.11	4.22	0.88
<i>NDV</i>	0.20	0.49	0.00	3.00	3.01	11.20	1.98
<i>NDF</i>	0.44	0.69	0.00	3.00	1.46	1.51	0.86
<i>NDN</i>	0.07	0.33	0.00	2.00	4.99	25.47	4.41
<i>EXH</i>	0.85	1.18	0.00	5.00	1.42	1.34	0.59
<i>MAG</i>	0.18	0.46	0.00	2.00	2.60	6.29	2.12
<i>r</i>	0.54	0.95	0.00	4.00	1.99	3.56	1.09
<i>r-Sentient</i>	0.44	0.76	0.00	4.00	2.07	5.10	1.05
<i>r-Human</i>	0.24	0.55	0.00	3.00	2.62	7.50	1.81
<i>r-Upright</i>	0.25	0.48	0.00	2.00	1.72	2.13	1.37
<i>r-Looking</i>	0.15	0.36	0.00	1.00	1.99	2.00	-
<i>r-UpLook</i>	0.15	0.36	0.00	1.00	1.99	2.00	-

Results

The measures of appropriateness for factor analysis of the intercorrelation matrix with all the 11 GNVs shown the matrix was suitable for factor analysis. In fact, although the KMO test (Kaiser, 1974) was in the miserable range (.58), Bartlett's Sphericity Test was significant ($p < 0.001$). Secondly, following Parallel Analysis results (PA; Horn, 1965), the comparison of the actual eigenvalues of the components from the adult clinical dataset with those that would have been obtained by 1000 parallel randomly permuted data sets indicated that it was appropriate to extract two factors (see figure 3).

Figure 3. Parallel Analysis for 11 variables and 100 cases on 1000 random data sets.



A first PCA with two factors and oblique rotation with Kaiser normalization shown that the first component was strongly defined by EPR, PER, OMP (factor loadings $> .60$) and slightly less sharply by IDL (0.55). The second component had a high loading ($> .60$) by EXH, more moderate from EMS, r, NDV, MAG ($> .40$) and was more weakly defined by NDF (factor loading = 0.35). NDN did not significantly contribute to any of the components (factor loading = 0.14 on the first dimension and -0.10 on the second).

Since the two components were basically uncorrelated ($r = -0.11$) and therefore the structure matrix and the rotated component matrix would have been virtually identical, we reverted to an orthogonal Varimax rotation. Table 4 shows the factor loadings for the final solution with 11 GNVs and two factors extracted. As anticipated, results were similar to those obtained with oblique rotation. As such, the first Component was defined by EPR, PER, OMP and IDL, the second by EXH, EMS, r, NDV, MAG and NDF. NDN loaded scarcely onto both variables, though somewhat more on Component 2. Differently from Study 1, we decided to test the potential contribution of supplemental r subtypes although regular r did not bring significant results. The five subtypes of Reflection were sequentially entered in the FA in place of regular r. Since none of them contributed to a more cohesive factor structure and did not load into the two components significantly higher than regular r, the factorial scores for the final two components solution with regular r were saved and used for subsequent analyses.

Table 4. Final PCA solution with 2 factors and 11 variables: Factor loadings for GNVs.

GNVs	Component Loading	
	Component 1	Component 2
<i>Expanded Personal Reference</i>	0.75	0.24
<i>Personal Knowledge Justification</i>	0.74	-0.11
<i>Omnipotence</i>	0.62	-0.14
<i>Idealization</i>	0.54	0.31
<i>Exhibitionism</i>	0.12	0.70
<i>Elevated Mood States</i>	0.17	0.57
<i>Reflection</i>	0.05	0.53
<i>Narcissistic Devaluation</i>	0.04	0.50
<i>Magic</i>	-0.19	0.45
<i>Narcissistic Deflation</i>	-0.04	0.35
<i>Narcissistic Negation</i>	0.10	0.14

PCA with Varimax rotation, rotated component matrix.

The two Components extracted (RIM-NG Factor 1 and RIM-NG Factor 2) were therefore correlated with the clinicians' informant ratings of narcissism (SWAP Narcissistic PD-T and Narcissistic Q-T) and with the self-report (MCMI-III NPD Scale). Before running the correlations, the distributions of the variables were analyzed in order to exclude departures from normality. All the three external scales of narcissism were normally distributed (see Table 5). As can be seen in Table 6, RIM-NG Factor 1 positively correlated rather strongly and significantly with both the SWAP-200 scales for narcissism ($r > .40$) and more moderately with the MCMI-III NPD scale ($r > .30$). A more detailed examination of the correlations shows furthermore that all the individual GNVs composing Factor 1 positively

and significantly correlated with both the SWAP scales, while only one of them (EPR) that was significantly associated to the MCMI-III scores of narcissism ($r > .30$). Contrarily to what observed for RIM-NG Factor 1, RIM-NG Factor 2 did not exhibit any significant correlation with any external criteria and neither did its individual variables. Although not suggested from the results of the aforementioned PCAs, the different types of *Reflection* were correlated with the SWAP narcissism scales to see if any r subtype would have been associated with clinicians' ratings of narcissism. Coherently with the other findings of Study 1 and 2, no r subtype was significantly correlated with any of the SWAP scales (Pearson r values between -0.16 and 0.08, $p > .001$).

Furthermore, to examine what was shared in common among the predictors and criteria as well as to better visualize they location of the SWAP-200 criteria in a bi-dimensional space with the GNVs, we run an exploratory Factor Analysis joining all the variables and extracting two factors. As displayed in Figure 4, PER, OMP, EPR and to some extent IDL all shared variance with the SWAP-criteria. Accordingly, the Structure Matrix for this PCA with oblique rotation (Kaiser Normalization) shown again the presence of two components and especially of Component 1 with substantial loadings ($> .60$) by PER, the two SWAP-200 scales for narcissism, EPR, OMP and IDL (the latter with a loading of 0.45). Component 2 was defined very similarly to what has been observed for the final PCA without the criterion variables.

Table 5. Descriptive statistics for the SWAP-200 narcissistic scales and MCMI-III NPD.

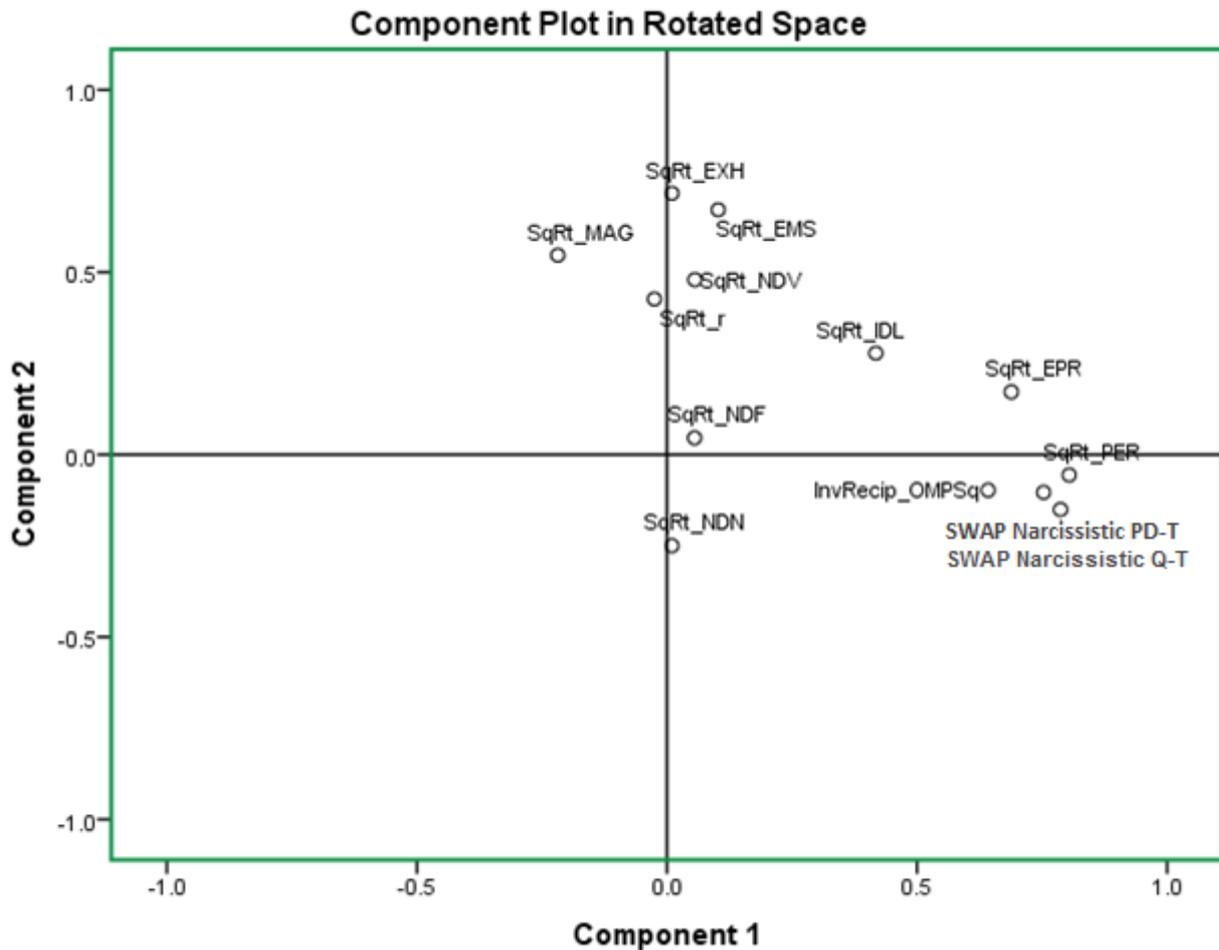
External Criterion Scale	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
<i>SWAP Narcissistic PD-T</i>	35.01	66.16	47.40	7.60	0.66	-0.31
<i>SWAP Narcissistic Q-T</i>	31.65	76.09	47.48	9.10	0.45	0.61
<i>MCMI-III NPD</i>	6.00	98.00	59.07	20.08	-0.28	-0.30

Table 6. Pearson Correlations of the RIM-NG Factors and GNVs with the criteria.

	SWAP Narcissistic PD-T (N55)	SWAP Narcissistic Q-T (N55)	MCMII-III NPD (N57)
<i>RIM-NG Factor 1</i>	0.45**	0.41**	0.32*
<i>EPR</i>	0.31**	0.31**	0.39**
<i>PER</i>	0.51**	0.38**	0.22
<i>OMP</i>	0.31*	0.29**	0.21
<i>IDL</i>	0.15	0.27**	0.08
<i>RIM-NG Factor 2</i>	-0.05	0.02	-0.13
<i>EXH</i>	0.01	0.01	-0.10
<i>EMS</i>	-0.01	-0.02	-0.11
<i>r</i>	0.05	-0.02	-0.18
<i>NDV</i>	0.17	0.16	0.10
<i>MAG</i>	-0.16	-0.06	-0.10
<i>NDF</i>	0.03	0.18	0.12
<i>NDN</i>	0.03	0.00	0.04

Note: ** The correlation is significant at the $p < .01$ level; * The correlation is significant at the $p < .05$ level.

Figure 4. PCA with RIM predictors and informant-rated criteria.



Note. SqRt_EPR = Expanded Personal Reference; SqRt_PER = Personal Knowledge Justification; SqRt_IDL = Idealization; InvRecip_OMPSqO = Omnipotence; SqRt_NDF = Narcissistic Deflation; SqRt_NDN = Narcissistic Negation; SqRt_r = Reflection; SqRt_NDV = Narcissistic Devaluation; SqRt_EXH = Exhibitionism; SqRt_MAG = Magic; SqRt_EM = Elevated Mood States.

Supported from the promising results of the correlations between Factor 1, its associated GNVs, and the criteria, we examined through multiple regression the incremental validity of RIM-NG Factor 1, that had shown the strongest links with the criteria in the previous analyses, against the MCMI-III NPD scale to predict the SWAP-200 scores. On these analyses, we focused on the SWAP-200 PD-T scale for NPD instead of the one derived through Q-sort method by the Authors of the instrument (Shedler & Westen, 2007; Westen & Shedler, 1999a, 1999b) since the first is more aligned with DSM-IV NPD criteria similarly to the MCMI-III and therefore more appropriate for comparison. Interestingly, our expectation

was confirmed and RIM-NG Factor 1 markedly resulted a better prediction than the MCMI-III NPD scale in predicting the ratings of narcissism assigned by the clinicians to their clients (see table 7).

Table 7. Multiple regression predicting SWAP Narcissistic PD-T from MCMI-III NPD (step 1), MCMI-III NPD and RIM-NG Factor 1 (step 2).

Predictor	SWAP Narcissistic PD-T	
	ΔR^2	β
Step 1	0.04	
MCMI-III NPD		0.20
Step 2	0.16**	
MCMI-III NPD		0.03
RIM-NG Factor 1		0.43**
Total R^2	0.19**	
n	50	

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

Discussions for Study 1 and Study 2

Study 1 and Study 2 aimed at examining the factorial structure and validity of the 11 GNVs we developed and elaborated from previous literature to assess narcissism from Rorschach protocols. To the aim of a more reliable replication of potential findings, Study 1 and 2 largely relied on similar methodology but working with an adult normative sample and an adult clinical sample respectively.

Overall, results from the two studies strongly confirm the validity of a core of four variables (namely Expanded Personal Reference, Personal Knowledge Justification, Omnipotence and *Idealization*) in assessing narcissism in clinical and nonclinical contexts. However, the information gathered by the two works differ in one important aspect. While results of Study 1 support the existence of a single factor structure organizing the 11 GNVs, Study 2 rather

suggests the presence of two different components in the data. While the variables included in Component 1 substantially overlap with the four variables having the highest loadings on the factor found in Study 1 (EPR, PER, OMP and IDL), the remaining variables (EXH, EMS, r, NDV, MAG, NDF and NDN) defined a distinct dimension. Since this second Component was not significantly associated to the clinician-rated criteria we used in Study 2, and neither were its defining variables, its meaning is still unclear and further investigation in clinical samples is warranted. It is in fact unclear if the two different components emerged from the results of the clinical adult study might represent two different psychological instances or if they are rather due to specificity of this particular clinical sample. Hence, interpretations follow on the core of four narcissism markers represented by Expanded Personal Reference, Personal Knowledge Justification, Omnipotence and Idealization in which evidences from both studies converged.

Among these more strongly supported narcissism indicators, EPR and PER are in the first place for their strong relationships with the external ratings of clinicians, being followed by OMP and IDL. As such, patients perceived by their therapists as displaying more narcissistic traits are more likely to put themselves in relation to the percept they are seeing in the Rorschach inkblots and tend to recur to personal knowledge and experiences in justifying their responses. Especially about this latter point, it might be interesting to point out that Personal Knowledge Justification and the first Narcissism Factor in general correlated more strongly with the SWAP-200 scales of NPD which resembles the DSM-IV description of the disorder, overly focused on overt aspects (SWAP-200; Shedler & Westen, 2007; Westen & Shedler, 1999a, 1999b) than with the Q-sort scale. It is therefore plausible that the “one-upmanship” behavior represented by PER (Meyer et al., 2011) and observable in a rather defensive use of one’s own private experiences or knowledge might be an implicitly assessed parallel of the grandiose and self-centered attitude described for NPD individuals in the

psychiatric and psychological literature. At the same time, the drive of the patient to defend and support his or her own responses in a way that is not vulnerable to external judgment and therefore by the use of material that is not shared with the examiner, speaks about the inner narcissistic need to protect the self from criticisms and reduce one's own insecurity (Parolin, Di Riso, & Napoli, 2007).

Along similar lines but with even more extreme manifestations, acts Omnipotence when displayed in the testing situation. Behaviors like giving instructions and lecturing the examiner during the administration of the Rorschach Test account for the grandiose narcissistic tendency to make claims of unrealistic powers and influence in an effort to deal with disavowed or denied disturbing feelings of powerlessness (Cooper & Arnow, 1986; Cooper, Perry, & Arnow, 1988). Also in this case, these RIM markers of narcissism and grandiosity reflect the DSM-IV sense of specialness and superiority and haughty, contemptuous behaviors described for NPD. Accordingly, the presence of Omnipotence in the Rorschach protocols of clients included in this study made it more likely that they were rated by their treating clinicians as more narcissistic and grandiose.

The positive and significant association between Idealization and the Q-sort empirically derived description of narcissistic personality style proposed in the SWAP-200, that specifically encompasses also characteristics of vulnerability of the self-image and emotional instability, might suggest that IDL is a better target of such aspects of clinician-rated narcissism. At any rate, results of Studies 1 and 2 suggest that Idealization is able to capture the dual narcissistic dynamic of boasting the self in order to defend one's own self-image from external insults as well aggrandizing the objects in order to protect them by projected aggression and also to vicariously share their greatness (Cooper & Arnow, 1986). This is in tight relationship with the main conceptualizations of narcissism depicting the

narcissistic self as exaggeratedly aggrandized as a result of various pathological processes (see for example Kernberg, 1970, 1975, 1984; Kohut, 1971, 1977).

Finally, the findings of the present investigation further supported the literature questioning the relevance of Reflection responses as markers of narcissism in the RIM (Mihura et al., 2013; Nezworski & Wood, 1995). In fact, not only Reflection had an almost negligible loading on the narcissism factor in the normative adult sample (0.13), but it even defined a distinct dimension in the clinical dataset together with variables different from those more aligned with the criteria of narcissism in Study 2. Furthermore, neither the addition of more “narcissistic” or “egocentric” qualities to the code of Reflection like would be those including percepts of sentient beings, of humans and of sentient beings looking at themselves in a mirroring surface and so forth, contributed to the view of Reflection as an indicator of narcissism.

In conclusion, our findings show the incremental validity and clinical utility of the Rorschach to assess narcissism and grandiosity over a popular self-report measure of personality. In this regard, it is not the correlation between the RIM scores and the MCMI-III that matters, but rather the ability of the Rorschach Test to predict external clinician-rated criteria useful to the understanding of a target psychological construct and that are not better captured by more quickly and easily administrable measures such as a self-report. In fact, as pointed out by Mihura et al. (2013), if redundancy exists between the information provided by a longer and more complex test such as the Rorschach and those gathered with a less time-consuming method such a self-report, and this would imply that a second strategy would be more appropriate. On the contrary, what our findings show in the case of narcissism is that the a subset of the Rorschach GNVs (EPR, PER, OMP and IDL), can provide useful information that can orient the clinical assessment process of individuals with narcissistic disturbances.

Appendix

Table 1. *Brief Description of the Rorschach Narcissism and Grandiosity Variables in Alphabetical Order.*

RIM Variables	Psychological meaning	Synthesis of Coding Rationale	Rorschach Scoring Example
<i>EMS</i> (Adapted from Cooper & Arnow, 1986)	Efforts through selective perception, minimization, and reversal in fantasy to be conscious of only cheerful, optimistic, pretty untroubled, and otherwise positive aspects of experience. Ultimately EMS represents an attempt to avoid the recognition or experience of emotional pain.	The respondent identifies positive and uplifted affective states with an emphasis on fun, pleasure, happiness and euphoria, in percepts or in him/herself.	“I know I’m going to enjoy this because I’m in such a good mood” “Two people dancing to exhaustion”
<i>EPR</i> (Meyer, Gritti & Marino, 2014)	The core phenomenon being coded is the notion that “everything relates to me.”	As an expansion of PER, EPR includes seeing one’s self in the card, putting one’s self in the response in some way, linking one’s self to the percept.	“Very nice colorful clothes. I always dress up in colors, and the walls of my house are all red and blue”.
<i>EXH</i> (Adapted from	Expression of the need to display oneself in order to provoke interest,	The examinee provides responses that encompass percepts engaged in activities performed for the benefit of an audience	“Skating”; “Dancing”; “Playing an instrument”; “A ballerina”

Wagner, 1965)	admiration, desire.	or describes objects designed for display.	
<i>IDL</i> (Adapted from Cooper, Perry, & Arnow, 1988)	A person identifies with unrealistic, all-good or powerful objects. As Cooper, Perry and Arnow note, the defensive aim of this aggrandizement of others serves the function of protecting the individual from “bad objects” and at the same time to make the objects so powerful that they cannot be destroyed by the individual’s own projected aggression. Another aim would be to vicariously share the power of this idealized objects to satisfy narcissistic needs.	The respondent describes unrealistic, all good and powerful objects or shows an idealizing, laudatory attitude toward the examiner or the inkblot.	“Jesus Christ” “A crown, a king’s crown” “These tests were really amazing – you must have learned so much about me. I know you can help me”
<i>MAG</i> Adapted from (Homann, 2013)	Expression of the psychological recourse to omnipotence to manage self-esteem and preserve the affective equilibrium.	Percepts involve magical figures and objects associated with magic.	“A witch” “A wizard” “A magic bottle”

<p><i>NDF</i> Gritti, 2014)</p>	<p>(Meyer, Marino, 2014) This code captures imagery of inadequacy, ineptitude and incompleteness.</p>	<p>The respondent describes objects that are missing a key part of their identity, possess deflated or impotent parts or are described as dying, decaying, deteriorating or eroding. The code refers to instances when a sentient object would likely feel ashamed of itself if it were on display.</p>	<p>“A deer with broken antlers” “A bird without wings”; “A giant with tiny limp arms”</p>
<p><i>NDN</i> Gritti, 2014)</p>	<p>(Meyer, Marino, 2014) The person implicitly aims to preserve a positive or inflated perception by denying or minimizing the impact of perceptions connected to themes of weakness, vulnerability, fragileness, inferiority, or unattractiveness.</p>	<p>Features or the percept inherent to the themes of inferiority, vulnerability, fragileness, unattractiveness and the like are negated, significantly diminished in their significance or further elaborated in contradictory positive terms. Furthermore, such imagery can be placed in a funny or lighthearted context.</p>	<p>“This person is not desperate” “It looks like a girl crying. She’s not really crying – probably just acting”.</p>
<p><i>NDV</i> Gritti, 2014)</p>	<p>(Meyer, Marino, 2014) Devaluation in this context is intended as a defensive movement towards feelings of ineptitude and inadequacy and/or a reaction towards object that elicit the person’s envy.</p>	<p>Narcissistically invested, embellished or otherwise positive and appealing objects are also devalued, dismissed, denigrated.</p>	<p>“A stupid giant” “It looks like a wizard wearing a dunce cap”</p>

<p><i>OMP</i> (Adapted from Cooper, Perry, & Arnow, 1988)</p>	<p>The person claims to have or acts as if s/he has unrealistic powers, specialness, influence, or inflated worth in an effort to deal with fears of powerlessness and worthlessness, which are disavowed or denied.</p>	<p><i>OMP</i> is coded for specific relational attitudes of the respondent towards the examiner and/or the testing situation that include giving the examiner the permissions on what to write down, lecturing him/her about testing procedures and techniques, using the “editorial we” (Schafer, 1954, p. 241), showing overly polished verbiage and asserting the task is obvious or that the percept looks the way it does because of personal wishes or feelings.</p>	<p>“You might do better doing the pictures first (points to location sheet) and from these you could easily write down what I saw”</p>
<p><i>PER</i> (From Exner’s Comprehensive System 2003; guidelines from R-PAS)</p>	<p>The individual makes use of private or specific knowledge in an attempt to avoid the feeling of insecurity that might arise when his/her opinions, experiences and the like are being challenged. The relational effect of such functioning may be a sort of “defensive authoritarianism”.</p>	<p>Recourse to assertions of personal – most often private and not shared with the examiner - knowledge to justify or bolster a response in a way that can be perceived as self-centered, boastful, and annoying.</p>	<p>“It looks like a boomerang because I’ve used them before and that’s what they look like”</p>
<p><i>r</i> (From Exner’s Comprehensive</p>	<p>Reflection responses might suggest a need for mirroring affirmation or a</p>	<p>The response contains an object and its symmetrically identified mirror image or</p>	<p>“A woman looking at herself in the</p>

System 2003; self-centered view in one's reflection.
guidelines from processing. The alignment of the
R-PAS) common landscape reflections given
with the card turned sideways with
such mirroring psychological needs
have been questioned by recent
meta-analytic works (Mihura et al.,
2013).

mirror”

Chapter III

Narcissistic Functioning in Children and Adolescents: Multi-method clinical studies with the Rorschach Inkblot Method⁹

The present work aims at studying narcissistic functioning in development using an integrated point of view following the multi-method assessment tradition. In the theoretical rationale of the study, challenges connected to the definition and assessment of narcissism will be presented, as well as the state of the art about narcissism as a function of developmental age.

Narcissism is considered a dysfunctional view of the self, associated with recurrent impaired or maladaptive functioning in vital areas such as work or social and emotional life that can cause significant distress both to the individual and others (Miller, Campbell, & Pilkonis, 2007). In fact, although narcissistic individuals can actually display a formally adequate quality of life, their emotional experience is often accompanied by an underlying disturbing dissatisfaction with themselves and their condition, caused by their chronic unrealistic expectancies and their excessively high ideals (Sperry et al., 1993). Beyond the individual suffering and distress, narcissism, and its DSM descriptive counterpart of Narcissistic Personality Disorder (NPD), is often recognized as a serious mental condition frequently found in comorbidity with other clinical problems both in adults and children (Frick et al., 2000; Widiger, 2011; Oldham et al., 1992). Moreover, narcissistic traits are associated with aggression, psychopathy and antisocial behavior across different ages (Rhodewalt & Morf, 1995; Cooke & Michie, 2001; Washburn, McMahon, King, Reinecke, & Silver, 2004).

⁹ This study was conducted in collaboration with Gregory J. Meyer Ph.D., John. Stokes, Ph.D. and David L. Pogge, Ph.D.

Along with its renowned clinical complexity, NPD is still problematic in regard to its diagnosis and evaluation, to the extent that the scientific status of the construct is at times controversial. There appear to be two principal reasons for this: first there are issues in the operationalization of the construct and second there are related difficulties to reach a valid and unanimous measurement of narcissism across distinct assessment methods.

Particularly after the initial DSM-5 Task Force proposal to exclude NPD from the future edition of the Manual, the debate about the conceptualization of the disorder has re-flourished. In this context it is important to underline that the actual diagnostic definition of NPD provided by the DSM-IV-TR is often considered unsatisfactory and in contrast not only with most of the historical and influential clinical theories (Kernberg, 1978, 1984; Kohut, 1971, 1977) but also with relevant empirical research findings (Rhodewaldt et al., 1998; Russ et al., 2008; Ronningstam, 2011) suggesting that narcissistic personality organization occurs on multiple levels of the self where painful feelings of inadequacy coexist with an external self-aggrandizing behavior. In this theoretical conceptualization, narcissistic functioning would be linked to a *constant and disturbing oscillation of self-esteem*, rather than with a simple elevation of self-esteem. The result of this dynamic would be a persistent fluctuation between a high and idealized vision of the self and self-devaluation, confirmed by the contingent self-esteem observed in individuals reporting higher levels of narcissism (Fetterman & Robinson, 2010). In such a scenario, it is possible to consider narcissistic grandiose imagery and behavior as defensive mechanisms that protect against a disturbing core of inadequacy and vulnerability, as suggested by self-psychology theory (Kohut, 1971).

The conceptualization and the validation of empirically derived theories that could explain narcissistic functioning in children and preadolescents is even more challenging and often called into question. Although several influential clinical theorists have illustrated the existence and phenomenology of narcissism in children (Kernberg, Weiner, & Bardenstein,

2000), the topic is still somewhat neglected in empirical research (Washburn et al., 2004). In this context, it should also be noted that the existence itself of personality disorders in children is a somewhat controversial topic (Kernberg, Weiner, & Bardenstein, 2000; Bleiberg, 2001). In fact, if on the one hand the DSM manuals, included the 5th most recent edition, indicate the fact of being “generally recognized by adolescence or early adulthood” (APA, 2013, p. 647) as a distinctive feature of personality disorder existence, the manual does not provide any specific guideline for diagnosing personality disturbances and literature about the identification of prodromal signs during childhood is relatively scarce (Freeman & Reinecke, 2007). Compared to other PDs, the case of NPD is also more complicated considering the exiguity of works about its potential early equivalent, as happens for example for the Antisocial Personality Disorder, thought to be often anticipated by Conduct Disorder.

The study and theoretical formulation of a coherent description of narcissism in children seems to be further complicated by the recurrent use of Freud’s concept of narcissism from his initial psychoanalytic theories (Freud, 1957/1914; 1961), which led to the assumption that narcissism is a feature commonly present in all children. Although the research literature is to a certain degree lacking in the area, narcissism seems to present specific features in children that could be meaningfully related to the development of less healthy personalities in the subsequent developmental stages (Kernberg, Weiner, & Bardenstein, 2000; Barry et al., 2007). In fact, even if it must be taken into account that specific age- or stage-related behaviors exist and are intrinsic to normal development, children with a narcissistic structure or traits seem to differ from non-narcissistic children in several psychological domains such as self-view, affective functioning, and interpersonal functioning. In contrast to other children, narcissistic children display a sense of entitlement, intense envy, and an inability to feel empathy and gratitude towards others. The lack of empathy in turn allows the narcissistic child to exploit others in order to gratify one’s own

needs. The underestimation of the presence of personality disorders in children is likely to have the side effect of at least neglecting important key features of the psychological functioning in young patients, who then would be more likely to be diagnosed with only Axis I conditions and treated pharmacologically, as well as ignoring the possible implications that a personality disorder could have in treatment planning.

Regardless the period of age considered, as noted above, there are difficulties in assessing NPD that complicate the situation even more, considering also that NPD is one of the personality disorders that is most influenced by the diagnostic instrument used to assess it (Oltmanns et al., 2002). In this context it appears particularly pertinent to note how personality research and clinical practice would benefit from a multi-method assessment that is not limited to one source of data, such as relying only on self-reports and therefore the patient's point of view, but that also considers more latent personality dimensions (Meyer et al., 2001; Huprich, 2011; McWilliams, 2012). In fact, this is particularly important in the case of narcissistic patients, who often experience difficulty presenting themselves with a deep insight using explicit measures based on self-reports (Freeman & Reinecke, 2007).

Narcissism is currently assessed with a variety of methods, ranging from questionnaires to structured interviews. The focus of the present work will be the study of narcissism with the Rorschach Inkblot Method (RIM), considered as an instrument that can yield unique and specific contributions to the psychological evaluation and enhance the incremental validity of a multi-method assessment based on various instruments (Blais et al., 2001). There have been various attempts over the years to elaborate valid manifestations that would permit one to detect narcissistic functioning on the RIM, beginning from the pioneer works of Wolman (1967) and Harder (1979). Various studies have attempted to identify specific indicators of narcissism, generally delineated by particular characteristics of perceptual, relational, and affective functioning (Berg, 1990; Blais et al., 2001; Farris, 1988;

Urist, 1977). The development of the Comprehensive System for the RIM (Exner, 1993) has demonstrated statistically significant elevation of some scores reported by narcissistic individuals when compared to other clinical groups (Gacono et al. 1992; Hilsenroth et al. 1993; Hilsenroth et al., 1997). However, existing research efforts in this area still represents a rather non-cohesive theoretical background. The contributions so far available about the indicators of narcissistic functioning in the Rorschach originate in fact from very heterogeneous works starting from different methodological premises and often not using the same scoring methods.

More recently, attempts have been made by Marino, Meyer, and Mihura (2012) and Gritti, Lang and Meyer (2013) to obtain by empirical investigation a better validation of the Rorschach variables connected to narcissism and develop further indexes capable of detecting self-aggrandizing features in adults. In these works, the authors found a cohesive pattern in the characteristics of Rorschach responses that cluster into a single factor ascribable to narcissistic grandiosity with substantive loadings from Personal Knowledge Justification (PER: Meyer et al., 2011) and the defense scales of Omnipotence (OMP) and Idealization (IDL) from Cooper et al. (1998). Given the encouraging findings coming from these studies with adult samples, the present work is an attempt to generalize the observed narcissistic pattern to preadolescents and adolescents and to identify any peculiarities that may be connected to specific ages. Moreover, the whole set of 11 Narcissism and Grandiosity Variables (GNVs, Meyer, Gritti, & Marino, 2014, see *Materials* section)

Partially as a result of the relative vagueness that accompanies the topic of narcissism in early development, literature regarding the assessment of narcissistic functioning in young populations is rather limited especially in regard to the RIM (Bardenstein, 2009). However, evidence in favor of the possibility of meaningfully assessing narcissism in development arise both from clinical theorizing (Kernberg, Weiner, & Bardenstein, 2000) and research studies

that successfully detect narcissistic features in children and adolescents, often with analogue approaches used for adult individuals (Barry, Frick, & Killian, 2003; Barry, Grafeman, Adler, & Pickard, 2007). Although Rorschach protocols of children naturally seem to differ from those produced by adults in terms of their structure (e.g., frequency of determinants), conventionality, and content, they allow to explore an analogous array of psychological areas such as affects, cognitive functioning, and self- and interpersonal-representations (Kernberg, Weiner, & Bardenstein, 2000). In particular, an interesting point of contact with what is observed for adults is represented by the suggested recurrence in children's Rorschach protocols of contents and coding dimensions indicating the presence of defenses such as omnipotent control, idealization, and devaluation.

Given the aforementioned theoretical background, the present study will aim at assessing the generalizability of the grandiose narcissistic functioning in children and adolescents, with a specific focus on the more latent and implicit personality dimensions detectable through the RIM. The goal will be also to contribute knowledge about the features of narcissistic disorder in developmental age. More precisely and thoroughly identifying the manifestations of narcissism in children and adolescents not only would benefit the treatment of adult personality disorders through a more complete knowledge of their precursors, but would also help managing the care of young patients, who are more often diagnosed with Axis I conditions and thus prescribed medications (Freeman & Reinecke, 2007; Bleiberg, 2001). Furthermore, given the association between narcissism (particularly when accompanied by low self-esteem) and aggression, and the connection of aggressive traits with antisocial and violent behavior later in life (Loeber 1990), a study of the personality dimensions facilitating the development of such traits during early development is warranted. Finally, as pointed out by Barry et al. (2007) studies investigating also the inner and

subjectively perceived features of self-views – as opposed to more conscious and “expressed” self-views – may be useful in order to achieve a better understanding of youth narcissism.

Outline of the Developmental Studies

To the aim of a) assessing the generalizability and potential differences of the Rorschach assessment of narcissism and grandiosity developed to developmental age and of b) exploring narcissistic manifestations of narcissism and grandiosity on clinical children and adolescents, Study 1 and Study 2 were carried out. As will be detailed below, Study 1 focused on a clinical sample of preadolescents (9-12 years of age) as Study 2 on adolescents (13-16 years of age). For each group, 120 cases were considered. No particular inclusion criteria were applied to the participants to be included in the research.

The samples involved in Study 1 and Study 2 were comprised of inpatients from Four Winds Hospital in Katonah, NY, USA, a psychiatric inpatient facility providing therapeutic services to children and families, typically during a crisis, or during an acute phase of the child's disorder. Average length of stay for the populations is approximately 20 days. Participants for this study were selected from those patients who had been referred by their treatment team for a comprehensive psychological evaluation which included cognitive and neuropsychological assessment as well as a range of personality assessment procedures including the Rorschach, Children's Interview for Psychiatric Symptoms, and parent ratings of psychopathology and personality functioning, including the Devereaux and Personality Inventory for Children (PIC-2). Pre-adolescents involved in the study had typically completed the M-PACI. Adolescents involved in the study had typically completed the MACI and MMPI-A. Participants selected for the study had to have provided a valid Rorschach protocol ($R > 13$). The present studies can be considered as an archival research in that the analyses were conducted on routinely administered tests. All the individuals taking part in the evaluations gave their informed consent, along with their parents or guardians.

Study 1: Clinical Preadolescents

Participants

The sample included 120 preadolescent patients from the Hospital (age: $M=11$, $SD=1.21$; 82 male, 38 female; 60% Caucasian, 18% African American, 12% Latinos, 10% mixed or other ethnicities). Typical primary discharge DSM-IV diagnoses for children admitted at Four Winds Hospital are rather diverse (55.3% mood disorders, 14.2% psychotic disorders, 4.2% anxiety disorders, 8.2% disruptive behavior disorders and 18.1% other disorders, including post-traumatic stress disorders and reactive attachment disorder, as well as 15% of the outpatient sample had a single Axis I diagnosis, ADHD or a learning disorder).

Materials

Narcissism and grandiosity were implicitly assessed through the Rorschach Inkblot Method (RIM) and once one or multiple factors were extracted as appropriate, they were correlated with a composite score obtained from the combination of informant-ratings and self-reports of narcissism and grandiosity.

1) Implicit assessment of narcissism and grandiosity. The RIM is a performance based personality test (Meyer & Kurtz, 2006; Kubiszyn et al., 2000) that permits one to gather meaningful information about various implicit aspects of personality such as perception, affective functioning, and self- and interpersonal-representations. It consists of a set of 10 inkblot cards (5 chromatic and 5 achromatic) containing graphical stimuli that differ in their level of structure. The examinee is asked to respond the question “*What might this be?*” and his/her response is recorded verbatim by the examiner. This response phase is followed by an inquiry or clarification phase where the examiner can question the respondent in order to completely understand key features of the response, which are later used to score the protocol. These key features include the location where objects are perceived and the features of the inkblot that induced the examinee to produce that specific response (i.e., determinants).

The scoring and interpretation of the protocol is carried out relying on objective and empirically validated criteria. Considerable research has demonstrated the validity of many RIM scores in describing psychological functioning and personality features, as well as predicting outcome (Kubiszyn et al., 2000; Mihura et al., 2013).

For the routine practice of the clinic, administration and scoring of the RIM were initially carried out according to the Exner Comprehensive System (CS: Exner, 1993). For the purposes of the present study, 120 full-text protocols were scored for target variables of narcissism and grandiosity. Specifically, Rorschach Grandiosity and Narcissism Variables (GNVs: Meyer, Gritti, & Marino, unpublished manuscript) were: (Omnipotence, OMP; Idealization, IDL; Reflection, r; Personal Knowledge Justification, PER; Exhibitionism, EXH; Magic, MAG; Elevated Mood States, EMS; Expanded Personal Reference, EPR; Narcissistic Devaluation, NDV; Narcissistic Deflation, NDF; Narcissistic Denial, NDN; Gritti, Marino, Lang, & Meyer, 2014). More specifically, this set of variables reflect specific and distinct imagery, contents, and task-behaviors displayed by the examinee. In synthesis, OMP refers to a defense in which the individual makes claim to unrealistic powers, influence, and inflated worth, often in an attempt to deal with fears of powerlessness and worthlessness that are denied. In the Rorschach context, this is expressed for example by laudatory remarks towards the self and suggestions towards the examiner on how to improve her/his skills and the testing procedure. Omnipotent phantasies are moreover caught by MAG, which refers to the presence of percepts representing magical figures and more in general possessing supernatural powers. IDL refers to response content or comments directed to the person administering the test that indicate all-good and powerful object images, in a defensive attempt to ensure the individual's protection against "bad" objects. PER refers to the examinee's use of personal and private knowledge to justify her or his response, making it challenging for the examiner to completely evaluate the adequacy of the response itself. This

form of “intellectual authoritarianism” puts the individual that is making use of it in a position of greater perceived security, where her or his perceptions and verbalizations seem to be less easy to judge or criticize. On conceptually related but distinct lines, EPR captures the idea of “everything relates to me”, in which features of the inkblot are put in close relationship to the self. To identify narcissistic exhibitionism, EXH was used and such a code is assigned for percepts engaged in activities performed for the benefit of an audience or describes objects designed for display. The narcissistic component of inadequacy and vulnerability underlies the code of NDF, that is assigned to percepts possessing inflated or impotent parts, as well as to instances in which a sentient object would feel ashamed if it was on display. The defensive reactions that individuals with a narcissistic functioning might use in order to cope with – or avoid – the recognition of ineptitude and incompleteness we elaborated different variables that capture distinct aspects of the phenomenon. NDV reflects the narcissistic reaction towards objects that might be perceived as superior (e.g. more powerful, more attractive etc.) and elicit the person’s envy. In this code, narcissistically invested, embellished or otherwise positive and appealing objects are also devalued, dismissed, denigrated. Instances of devaluation have been previously identified in the Rorschach protocols of children with narcissism (Bardenstein, 2009). NDN describes in turn a more specific and linguistically relevant form of negation of vulnerability and fragileness. This in the Rorschach take the form of verbalizations that negate, significantly diminish in their affective burden or express through contradictory terms, themes of inferiority and frailness. Finally EMS reflects the presence of a somehow uplifted affective state in the (often unconscious) effort of selectively perceive, minimize or reverse in fantasy negative and painful aspects of experience. *Reflection* (Exner, 2003; Meyer et al., 2011) was coded as well in accordance to previous literature and clinical practice suggesting its involvement on narcissism (Hilsenroth, Fowler, Padawer, & Handler, 1997). Additionally, to verify if more

specific type of reflection responses would have contributed to define narcissism and grandiosity through the RIM, we coded the protocols for the five r subtypes. These r supplemental variables included reflection responses with a sentient object present (r-Sentient); with a human being present (r-Human); in the upright orientation (r-Upright); with an object looking at itself reflected (r-Looking), and both in the upright orientation and with an object looking at itself reflected (r-UpLook). However, *Reflection* was expected not to contribute to a potential narcissistic factor accordingly to the results of our previous studies and to recent meta-analytic evidences not supporting its bond with narcissistic tendencies (Mihura, Meyer, Dumitrascu, & Bombel, 2011). Interrater reliability was coded for all the 11 GNVs and the five subtypes of Reflection joining the two samples from Study 1 (Preadolescents) and Study 2 (Adolescents) and randomly extracting 15 protocols from each data set. Consequently, a total of thirty protocols were coded by a second rater¹⁰ blind to the codes of the first rater. Interrater reliability was calculated both at the response level through Cohen's k and at the protocol level through exact agreement intraclass correlation (ICC). We used Cicchetti's (1994) benchmarks and the (ICC) for a single rater under a one-way random effects model to interpret the interrater reliability levels reached by the GNVs. At the response level, reliability was good to excellent for OMP, IDL, EMS, PER, EPR, NDF, r and all its subtypes but r-Upright, for which it was fair. For EXH, reliability at the response level was poor. For NDV and NDN, k was undefined because none of the two raters coded these variables in the 30 protocols used for interrater reliability, therefore there was 100% agreement. At the protocol level, interrater reliability was good to excellent for all the variables but IDL for which it was fair and EXH for which it was poor. The low agreement registered for EXH is likely due to the very low frequency of these codes in the 30 randomly selected protocols for reliability (EXH was never coded by rater 1 and was coded just 4 times

¹⁰ Gregory J. Meyer, Ph. D.

by rater 2). With such a low base rate, also few disagreements can generate a poor interrater reliability score. For example, NDN was coded only in one instance by rater 2 and never by rater 1 in the total of 507 Rorschach responses composing the 20 protocols response level dataset. With such a low absolute frequency just this one disagreement led to an agreement of zero. As discussed in Chapter II, the absolute percent agreement is a more informative indicator in this case and for EXH it was 99%.

2) *Informant report of narcissism and grandiosity.* The *Devereux Scales of Mental Disorders* (DSMD; Naglieri, LeBuffe & Pfeiffer, 1994) were used to obtain an external criterion of narcissism. DSMD-Child Form is an informant-rated questionnaire composed of 111 items that assess problematic behaviors and psychological features. The items are rated on a 5-point Likert scale that ranges from “Never” to “Very frequently”. The DSMD was extensively validated on a sample of 2,042 children (976 boys; 1,066 girls) representative of the U.S. population in terms of socio-demographic indicators. The scale helps to understand whether a child or adolescent is experiencing, or is at risk for, an emotional or behavioral disorder, relying on DSM-IV categories. The DSMD provides six factor-analytically derived scales, which fall within three superordinate categories. Such categories and their sub-scales are organized into Externalizing (Attention and Conduct scales), Internalizing (Anxiety and Depression scales), and Critical Pathology (Autism and Acute Problems scales). The median values for internal reliability coefficients exceed the .80 minimum described by Bracken (1987). The DSMD supplementary scale for narcissism provided by Naglieri based on matching item content to DSM criteria was used. To obtain a more trustworthy measure of the internal consistency of the DSMD supplemental NPD scale, reliability analyses were computed on a wider sample of the Four Winds inpatients population (N=714). This analysis shown an average interitem correlation of .35 and an alpha of .83 for DSMD NPD. The DSMD was completed by the mother of the child in the majority of the sample (63%), while

the ratings were collected by the father in the 6% of the cases, by the grandmother in the 3%, the guardian in the 2% and the foster parent in 1% of the cases. The remaining DSMD reports were rated by members of the Unit staff (i.e. therapist or other members of the clinical staff).

Additionally, the *Personality Inventory for Children—Second Edition* (PIC-2; Lachar & Gruber, 2001) was used to obtain a second informant-rated measure of narcissism. The PIC-2, contains 275 True/False items describing the child's feelings, behavior and family relationships that form three validity scales (inconsistency, dissimulation [FB-P], and defensiveness [DEF-P]), as well as nine adjustment scales (Cognitive Impairment, Family Dysfunction, Psychological Discomfort, Social, Withdrawal, Impulsivity and Distractibility, Delinquency, Reality Distortion, Somatic Concern and Social Skills Deficit). Coefficient alphas for the nine adjustment scales range from .75 to .95 with a median of .84 for the standardization sample, while the coefficient alphas and (7–10 day) test–retest reliabilities fall within acceptable limits for FB-P. In order to assess narcissism, we used a scale recently developed by Stokes, Baron, Pogge, Blank and Zaccario (in progress) through Principal Component Analysis and Parallel Analysis (O'Connor, 2000). The scale yielded an acceptable level of internal consistency (Cronbach alpha = .73) in the archival sample of 598 PIC-2 protocols (predominantly inpatient, but including a subset of 63 outpatients) that had been completed by parents as part of a comprehensive psychological evaluation of their child between the ages of 6 and 13 ($M = 9.82$; $SD = 2.23$; 68% males; 17.5% African American, 26.1% Hispanic, 42.3% Caucasian, and 14.1% Other or Mixed Ethnicity). The Narcissism scale proposed by Stokes et al. (in progress) used for the present paper consists of seven items tapping various manifestations of child narcissism and grandiosity (namely: Bragging; Showing off; Good at lying that avoids trouble; Fearlessness; Bragging about misbehavior; Responding to dares; Cheating on other children).

3) *Self-report assessment of narcissism and grandiosity.* The *Millon Pre-Adolescent Clinical Inventory* (M-PACI; Millon, Tringone, Millon, & Grossman, 2005) is a validated self-report instrument designed for children between 9 and 12 years of age in clinical settings. The M-PACI is composed by 97 true-false items that allows to assess both the child's Emerging Personality Patterns (Confident; Outgoing; Conforming; Submissive; Inhibited; Unruly; Unstable) and Current Signs, as well as two response validity indicators (Anxiety/Fears; Attention Deficits; Obsessions/Compulsions; Conduct Problems; Disruptive Behaviors; Depressive Moods; Reality Distortions). The 11-items Confident Scale of the instrument was used in the present study, which in Millon's vision of preadolescent personality would describe children who developed a superior self-image, feel special and might show interpersonal exploitation and sense of entitlement. The scale psychometric properties were evaluated in a Development Sample (N=186; M=119; F=56; Missing Gender= 11) and in a Cross Validation Sample (N=100; M=69; F=31) and the Coefficient Alpha obtained in the Cross Validation Sample was of $\alpha = .67$. The M-PACI Confident Correlates negatively with a range of BASC scales for Children (Behavior Assessment System: Self-report of personality Form C, BASC SRP-C; Reynolds & Kamphaus, 1998) ranging from $-.22$ (Attitude toward teachers) to $-.54$ (Anxiety). The scale correlates positively ($r=.34$) with BASC Relation to Parents scale. Children completed the M-PACI on the day of testing, the same day that they took the Rorschach.

Finally, the PIY (*Personality Inventory for Youth*; Lachar & Gruber, 1995) was used in order to obtain a second indicator of self-reported narcissism and grandiosity. The PIY is a 270- item scale comprised of four validity scales (validity, inconsistency, dissimulation, defensiveness) and nine nonoverlapping clinical scales parallel to those contained in the Informant-Version of the instrument (Cognitive Impairment; Impulsivity and Distractibility; Delinquency; Family Dysfunction; Reality Distortion; Somatic Concern; Psychological

Discomfort; Social Withdrawal and Social Skills Deficits. For the nine clinical scales, internal consistency estimates range from .71 to .92 with a median of .82 in a regular education sample and a median of .85 in a clinically referred sample; test–retest correlations ranged from .81 to .91 with a median of .85 in the regular education sample and a median of .83 in a clinically referred sample. Coefficient alphas and test-retest correlations reported for the child response bias scales scale were within acceptable ranges in the regular education samples and clinically referred samples. The measure of narcissism used in the present study for the PIY reflects the same developmental procedure, number of items and constructs covered by the aforementioned PIC-2 Narcissistic scale (Stokes et al., in progress). Stokes et al. (in progress) report that the narcissistic scale narcissism significantly and fairly correlates ($r = .31$; $p=.017$) with its informant-rated PIC-2 counterpart, accordingly to what is typically expected for agreement between parent and child ratings on psychopathology (Stokes, Pogge, Wecksell & Zaccario, 2011).

Statistical Procedure

The study tested whether the grandiose narcissistic factor structure found with adults using the 11 Grandiosity and Narcissism Variables would replicate in a clinical sample of preadolescents and what would be the potential differences. Similarly to the case of the clinical adult study, the external validity of the factor(s) extracted was evaluated against the informant-report and self-report measures of narcissism.

After 120 full-text Rorschach protocols were scored for the aforementioned narcissistic variables, the structure of the grandiose narcissistic factor(s) was assessed through Principal Components Analysis. The correct number of components to retain was evaluated through Parallel Analysis (PA) based on SPSS syntax developed by O'Connor (2002). Rather than using the mean of the randomly generated Eigenvalues (EV), the 95th percentile of each EV has been recommended as a more stringent and appropriate criterion for retaining

components. Instead of comparing EVs to the value 1.00 to determine if a component should be retained, in PA the EV is compared to one generated from random data sets that parallel the actual data set, having the same sample size and number of variables. Components are retained as long as the observed eigenvalue is greater than the corresponding EV of components derived from random data. Because it adjusts for the effect of sampling error, PA stands as one of the most accurate methods for determining the number of factors or components to retain.

Before running the PCA we examined variable distributions to identify potential confounds from skewness, expecting that low frequency count variables as the GNVs would have been associated to skewed distributions. Table 1 shows the descriptive data for all the Rorschach GNVs variables, including the reflection subsets. The eleven primary variables (OMP, IDL, PER, r, NDV, NDF, NDN, EXH, MAG, EMS, & EPR) had skew between about 1.3 (IDL) and 6.4 (NDV), and the supplemental reflection variables had skew between 0.1 and 11. Appropriate transformations were used to correct skewness, with the general rule being that of preferring more simple transformations for less abnormal variables and when more substantial transformations led to only slight improvements. NDN never occurred in the present preadolescent dataset and therefore was dropped from the subsequent analyses. We applied a square root transformation to nine of the primary variables (i.e., OMP, IDL, EMS, PER, EPR, NDV, NDF, EXH, MAG, r) and maintained the original variable for MAG and all the subtypes of Reflection because their skewness could not be fixed by any transformation. The revised skewness values are shown in the final column of Table 2. After the square root transformation was implemented, the skew of five variables (IDL, EMS, PER, EPR, NDF) fell into a good or acceptable range, though this was not so for OMP, NDV, EXH, MAG, r and its subtypes, for which also more important transformations such as the inverse reciprocal of the square root did not produce such an improvement to take skewness to the good or

acceptable range, due to their small range. Thus, the analyses proceeded using the square root transformed scores for OMP, NDV, EXH and r, that was more simple, and the not transformed value for r subtypes and MAG.

Next, the intercorrelation matrices for the sample was analyzed using the Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) statistic to ensure that the matrix was suitable for factor analysis. Second, parallel analysis (PA; Horn, 1965) was analyzed to determine how many components to retain using O'Connor's (2000) SPSS syntax.

In order to obtain a more thorough indicator of narcissism to use as an external criterion for the RIM and that might better represent the complex manifestations of the construct in young age, the scores from the two informant ratings (DSMD and PIC) and self-reports (PIY and M-PACI) were combined. To properly account for missing values in the patients' or informants' responses, the single scale was calculated with the mean instead of the sum. More specifically, a defined minimal number of items was required to compute the mean for the scales, and it was adjusted accordingly to the length of each specific scale. To the aim of combining items from different sources and that were not always in the same metric or had different means and standard deviations, the scores of each scale were transformed into z scores before being combined into Narcissism Informant Composite (DSMD and PIC-2 ratings) and Narcissism Self-report Composite (M-PACI and PIY ratings) and ultimately into the Narcissism Informant-Self Composite (Narcissism Self-report Composite and Narcissism Informant Composite).

Table 1. Descriptive statistics for the primary and supplemental Rorschach GNVs variables

	Mean	SD	Min	Max	Skewness	Kurtosis	Skew After Transformation
<i>OMP</i>	0.05	0.29	0.00	2.00	6.07	37.56	5.51
<i>IDL</i>	0.98	1.27	0.00	6.00	1.27	1.64	0.42
<i>PER</i>	0.45	0.83	0.00	4.00	2.15	4.96	1.21
<i>r</i>	0.08	0.33	0.00	2.00	4.33	19.47	3.70
<i>r-Sentient</i>	0	0.04	0.00	1.00	4.65	19.91	Not transformed
<i>r-Human</i>	0.02	0.13	0.00	1.00	7.65	57.43	Not transformed
<i>r-Upright</i>	0.02	0.13	0.00	1.00	7.65	57.43	Not transformed
<i>r-Looking</i>	0.01	0.09	0.00	1.00	10.95	120.00	Not transformed
<i>r-UpLook</i>	0.01	0.09	0.00	1.00	0.09	10.95	Not transformed
<i>EMS</i>	0.64	0.87	0.00	4.00	1.40	1.71	0.53
<i>EPR</i>	0.35	0.63	0.00	3.00	1.81	2.91	1.19
<i>NDV</i>	0.04	0.24	0.00	2.00	6.36	0.00	5.51
<i>NDF</i>	0.23	0.53	0.00	3.00	2.58	7.50	1.77

<i>NDN</i>	0.00	0.00	0.00	0.00	NA	NA	NA
<i>EXH</i>	0.11	0.36	0.00	2.00	3.56	13.04	3.01
<i>MAG</i>	0.07	0.25	0.00	1.00	3.52	10.56	Not transformed

Expected Findings

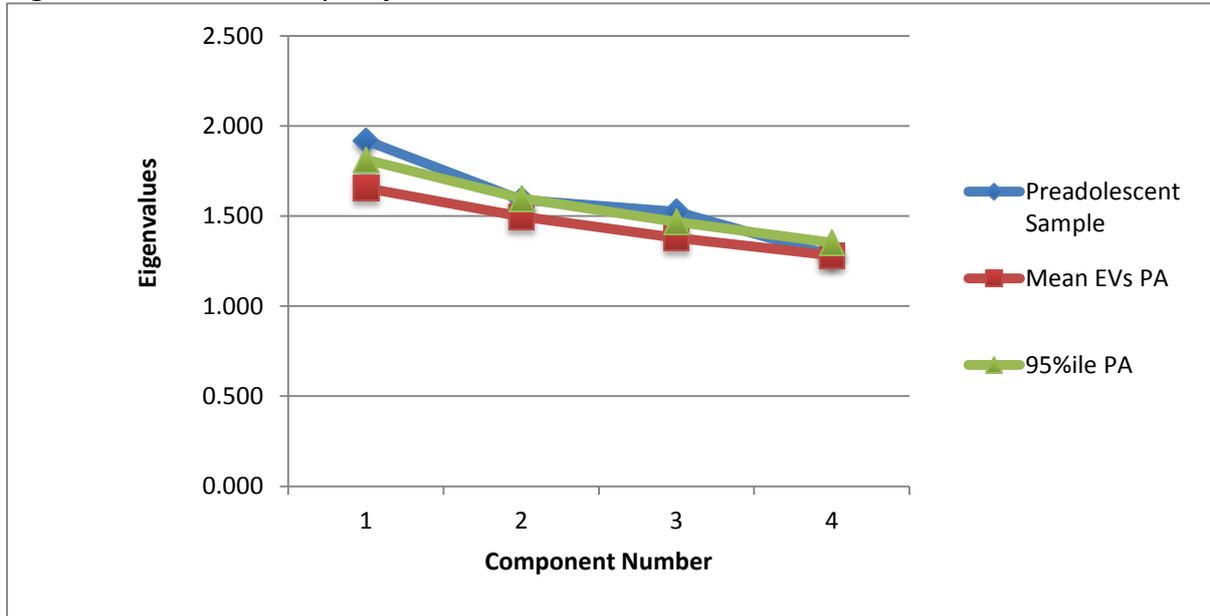
Considering the existing literature and clinical suggestions on the topic, Rorschach-based indicators of a narcissistic functioning were expected to be found in children (Freeman, & Reinecke, 2007). However, a full “replication” of the factorial structure validate in the adult samples was not hypothesized, given the relative instability and indefinite nature of personality in development. Furthermore, considering existing literature regarding the relationships between RIM scores and other measures (Meyer, Finn, Eyde et al., 2001; Mihura et al., 2013), Rorschach-based indicators of narcissistic functioning were expected to correlate to a greater extent with informant-ratings than with self-reports questionnaires.

Results

To determine if the preadolescent data set was suitable for factor analysis, the KMO test results were evaluated, indicating that the variable correlation matrix was just within the miserable range (.54), as it would be expected when working on variables describing very specific and differentiated latent dimensions such as the GNVs, while the Bartlett’s sphericity test was significant ($p < .0001$) indicating it was not an identity matrix and that correlations suitable for analyses were present. As can be seen in Figure 1, PA results for a parallel analysis with 10 variables on 120 cases and 1000 datasets, indicated there were three real factors present, as the eigenvalues for the four factors solution were less than those expected by random chance. However, the eigenvalue of the second component was just barely above the critical value. The different subtypes of Reflection were evaluated alternatively to regular

r one at the time, but none of them helped in obtaining a more cohesive factor structure and therefore analyses proceeded with regular r, extracting three factors with oblique rotation.

Figure 1. *Parallel Analysis for 10 variables and 120 cases on 1000 random datasets.*



After three factors were extracted from the preadolescent sample, four of the GNVs (OMP, EXH, NDV, IDL) loaded rather highly ($>.55$) onto it while EPR had a modest loading of $.37$. The second component was defined by EPR and PER and just weakly by r ($.32$). The third component had high loadings from NDF ($.80$) and lower loadings from MAG and EMS ($.50$ and $.43$ respectively, see Table 2). Considering the pattern matrix, the genuineness of the third factor was evaluated against random variables. Five random variables were therefore computed and analyzed with FA together with the actual GNVs, after determining the appropriate number of factors to extract through PA for 15 variables (corresponding to 10 actual GNVs and five randomly computed variables). PA indicated that three factors had to be extracted (PA eigenvalues: 1.813, 1.599, 1.467, 1.353, and 1.260 versus 1.919, 1.589, 1.524, 1.281 and 1.228 for the eigenvalues of the actual variables). FA with oblimin rotation and 50 iterations shown that all factors were defined almost as strongly by random data as by real data, indicating overextraction. We therefore tested a 2 factors solution with also the random variables kept in the analyses and this evidenced again a problem of overextraction.

Finally, we reverted to a single component solution, in which MAG and r were dropped because they were not defining that dimension. The one factor solution without MAG and r was tested with random variables as well, indicating that the component was defined primarily by OMP, IDL and EPR (loadings >.50) and secondarily by EXH, NDV, EMS, NDF and PER (>.30). Finally, the one factor solution with OMP, IDL and EPR, EXH, NDV, EMS, NDF and PER was run without the random variables and the factor score (RIM Narcissism and Grandiosity Factor) was saved for further validity analyses. Loadings of the final single factor solution with eight variables are shown in Table 3.

Table 2. Factor Loadings for GNVs: Initial PCA solution with 3 factors and 10 variables.

GNVs	Component Loading		
	Component 1	Component 2	Component 3
<i>Omnipotence</i>	0.77	0.12	-0.11
<i>Exhibitionism</i>	0.55	0.09	-0.11
<i>Narcissistic Devaluation</i>	0.55	-0.41	0.24
<i>Idealization</i>	0.55	-0.18	0.54
<i>Expanded Personal Reference</i>	0.37	0.70	0.07
<i>Personal Knowledge Justification</i>	0.01	0.70	0.10
<i>Reflection</i>	-0.19	0.32	-0.22
<i>Narcissistic Deflation</i>	-0.04	0.00	0.80
<i>Magic</i>	-0.08	0.01	0.50
<i>Elevated Mood States</i>	0.05	0.39	0.43

Structure Matrix, Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

Table 3. Factor Loadings for GNVs: Final PCA solution with one factor and 8 variables.

GNVs	Component Loading
<i>Omnipotence</i>	0.62
<i>Idealization</i>	0.62
<i>Expanded Personal Reference</i>	0.58
<i>Narcissistic Devaluation</i>	0.42
<i>Exhibitionism</i>	0.42
<i>Elevated Mood States</i>	0.40
<i>Narcissistic Deflation</i>	0.30
<i>Personal Knowledge Justification</i>	0.29

Finally, to test criterion validity of the RIM Narcissism and Grandiosity Factor, the factor was correlated with the composite self- and informant-report scores. Before running the correlations the normality of the distribution for the composite scores was checked (see Table 4) and no abnormal values were found as it was expected by converting the raw scores to z scores. As it is shown in Table 5, only Idealization was positively and significantly correlated to the combined self- and informant-ratings. To verify if Idealization would have been more correlated to the informant-report than with the self-report as it was predicted for a correlation between a RIM variable and external criteria, in a second analyses we analyzed the relationship with the two composites individually. As can be seen from table 6, this was the case and Idealization was moderately and positively correlated with Narcissism Informant Composite ($r = 0.31, p < 0.01$).

Table 4. Descriptive statistics for Narcissism Informant-Self Composite, Narcissism Informant Composite, Narcissism Self-report Composite (z scores).

Composite Scale	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
<i>Informant-Self Composite</i>	-2.51	1.87	-0.02	0.80	-0.31	0.22
<i>Informant Composite</i>	-1.91	1.95	-0.02	0.75	-0.24	0.20
<i>Self-report Composite</i>	-2.31	1.73	0.03	0.96	-0.82	0.04

Table 5. Correlations between the RIM Narcissism and Grandiosity Factor and the Narcissism Informant-Self Composite

	<i>Narcissism Informant-Self Composite (N=119)</i>
<i>RIM Narcissism and Grandiosity Factor</i>	0.05
Omnipotence	-0.10
Idealization	0.26**
Elevated Mood States	-0.02
Personal Knowledge Justification	-0.04
Expanded Personal Reference	-0.02
Narcissistic Devaluation	0.08
Narcissistic Deflation	-0.03
Exhibitionism	0.00

**The correlation is significant at the $p < .01$ level.

Table 6. Correlations of the RIM Narcissism and Grandiosity Factor with the Narcissism Self-report Composite and the Narcissism Informant Composite

	Narcissism Informant Composite (N=92)	Narcissism Self-report Composite (N=118)
<i>RIM Narcissism and Grandiosity Factor</i>	0.14	-0.08
Omnipotence	-0.01	-0.18
Idealization	0.31**	0.05
Elevated Mood States	0.02	0.02
Personal Knowledge Justification	-0.03	-0.02
Expanded Personal Reference	0.03	-0.10
Narcissistic Devaluation	0.07	0.07
Narcissistic Deflation	-0.06	-0.02
Exhibitionism	0.09	-0.12

**The correlation is significant at the $p < .01$ level.

Study 2: Clinical Adolescents

Participants

Participants for this study were drawn from a sample of 906 (487 female, 419 male) adolescent inpatients of the Four Winds Hospital who completed the RIM as part of a routine psycho-diagnostic assessment, similarly to what was described for the preadolescent sample. The ethnic distribution of the initial sample was 68.4% Caucasian, 14.6% African American, 13.0% Hispanic/Latino, and 3.3% unknown or other ethnic groupings. The discharge diagnoses obtained from their medical records included psychotic disorders (9.8%), mood disorders (70.3%), disruptive behavior disorders (13.3%), and other disorders (6.5%).

For the present study 120 RIM full text-protocols (age: M=15, SD=1.28; 64 M, 51 F; 60% Caucasian, 18% African American, 12% Latinos, 10% mixed or other ethnicities) were selected with no specific inclusion criteria.

Materials

1) *Implicit assessment of narcissism and grandiosity.* As for the preadolescent sample, the Rorschach Test was used (see above).

2) *Self-report assessment of narcissism and grandiosity.* The *Millon Adolescent Clinical Inventory* (MACI; Millon, 1993) contains 160 true-false items that allow for the assessment of personality patterns as well as self-reported concerns and clinical symptoms. The test was standardized on a population of adolescents between 13 and 19 years of age. Adolescent personality patterns are evaluated along 11 scales (Introverted, Inhibited, Doleful, Submissive, Dramatizing, Egotistic, Unruly, Forceful, Conforming, Oppositional and Self-Demeaning), whereas the clinical syndromes that can be examined through the MACI include eating disorders, delinquency and conduct problems, impulsivity, anxiety, depression, substance abuse and suicidal potential. Additionally, the MACI includes three Modifying Index that can account for the respondent's specific style in completing the test (Disclosure, Desirability and Debasement). An even more refined interpretation of the patient's scores can be achieved by using the three subscales available for each disorder that were developed from the Grossman Facet Scales (Millon, 2006). Since the focus of the present study was on narcissism, the Egotistic Scale of the instrument was used, along with its three facets. In describing the Egotistic Scale, Millon (2008) explicitly draws a parallel with the DSM-IV Narcissistic Disorder, and the MACI scale description refers to young individuals with a high level of self-confidence but requiring constant admiration, and tend to be perceived by others as arrogant and self-centered. In more detail, the Egotistic Scale includes three facet scales: Admirable Self-Image (believes self to be special, deserving of praise); Cognitively

Expansive (excessive fantasies of success are present, imagines success) and, finally, Interpersonally Exploitative (the patient is characterized by entitlement, lack of empathy and uses others to enhance self). MACI Confident Scale has an alpha coefficient of .80 and a test-retest reliability of .82. Moreover, the moderately scale correlates with clinicians ratings of egotistic personality. Similarly to the preadolescent patients, the adolescents completed the self-reports measures, and so the MACI, in the day of testing, i.e. at the same time of the RIM.

Statistical Procedure

The procedures of Study 2 are very similar to those used for Study 1, with the exception that no formal informant-ratings of narcissism were available in the archival data considered. Hence, the external criterion used was represented by the self-report of narcissism only. Beyond this difference the analytic techniques are the same described in Study 1 and therefore won't be presented again for the sake of conciseness.

Once 120 full-text Rorschach adolescent protocols were scored for the Rorschach GNVs and the subtypes of Reflection, the structure of the grandiose narcissistic factor(s) was assessed through Principal Components Analysis. The correct number of components to retain was evaluated through Parallel Analysis (PA) based on SPSS syntax developed by O'Connor (2002).

Before running the PCA we examined variable distributions to find out potential confounds from skewness and departures from normality, expecting again that low frequency count variables as the GNVs could have been associated to skewed distributions. Table 7 shows the descriptive data for all the Rorschach GNVs variables and the reflection subsets. The eleven primary variables (OMP, IDL, PER, r, NDV, NDF, NDN, EXH, MAG, EMS, & EPR) had skew between about 1.1 (EMS) and 11.0 (NDV), and the supplemental reflection variables had skew between 3.2 and 5.3. As in Study 1, NDN had a mean of zero in the

adolescent sample, and was therefore dropped from the subsequent analyses. Appropriate transformations were used to correct skewness, preferring again more simple transformations for less abnormal variables and in case more substantial transformations led to only slight improvements. A square root transformation was applied to four of the primary variables (i.e. IDL, EMS, PER, EXH) and to three of the r subtypes (i.e. r-Sentient, r-Human, r-Upright). The Inverse Reciprocal transformation (with the addition of the constant 1 to all scores to avoid values of zero) was used to correct the distribution of EPR while the Inverse Reciprocal Squared (i.e. the Inverse Reciprocal of the square of the original variable added to the constant 1) to fix those of NDF and r. Finally, we maintained the original variable for OMP, NDV and MAG, r_Looking and r_UpLook because their skewness could not be fixed by any transformation due to their small range. The revised skewness values are shown in the final column of Table 7. After the aforementioned transformations were applied to the variables, the skew of seven variables (IDL, EMS, PER, EPR, NDF, EXH, r and r_Sentient) fell into a good or acceptable range, though this was not the case for OMP, NDV, MAG, and two subtypes of r (i.e. r-Looking and r_UpLook), for which also more important transformations did not produce notable improvements due to their low base rate. Consequently the analyses proceeded using the square root transformation for IDL, EMS, PER, EXH and three subtypes of r (Sentient, r-Human, r-Upright); the Reciprocal transformation of EPR and the Inverse Reciprocal Squared of NDF and r and, finally, the original values for OMP, NDV, MAG, and two subtypes of r (i.e. r-Looking and r_UpLook).

Next, the intercorrelation matrices for the sample was analyzed using the Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) statistic to ensure that the matrix was suitable for factor analysis. Second, parallel analysis (PA; Horn, 1965) was analyzed to determine how many components to retain using O'Connor's (2000) SPSS syntax.

Finally, the factors extracted were correlated with the MACI Egotistic scale and its three subscales.

Table 7. *Descriptive statistics for the primary and supplemental Rorschach GNVs variables*

	Mean	SD	Min	Max	Skewness	Kurtosis	Skew After Transformation
OMP	0.02	0.13	0	1	7.65	57.43	Not Transformed
IDL	0.68	0.87	0	4	1.54	2.74	0.41
EMS	0.90	1.02	0	4	1.08	0.72	0.15
PER	0.18	0.45	0	2	2.47	5.62	2.01
EPR	0.25	0.69	0	4	3.55	14.43	2.07
NDV	0.01	0.09	0	1	10.95	120.00	Not Transformed
NDF	0.12	0.37	0	2	3.36	11.53	2.73
NDN	0.00	0.00	0	0	-	-	-
EXH	0.21	0.45	0	2	2.01	3.34	1.66
MAG	0.06	0.24	0	1	3.82	12.78	Not Transformed
r	0.28	0.63	0	3	2.71	7.69	1.56
r-Sentient	0.18	0.50	0	3	3.16	11.07	2.30
r-Human	0.07	0.28	0	2	4.60	22.80	3.97
r-Upright	0.08	0.31	0	2	3.91	16.14	3.38
r-Looking	0.03	0.18	0	1	5.27	26.16	Not Transformed
r-UpLook	0.03	0.18	0	1	5.27	26.16	Not Transformed

Expected findings

As outlined above, the external criterion used to test the external validity of the RIM Narcissistic and Grandiosity factor(s) was represented by the MACI self-report only. As such, the expected potential correlation of one or more RIM obtained indicator(s) of narcissism and grandiosity were expected to correlate to a much lower extent with the MACI Egotistic scales, or do not correlate at all.

Results

The measures of appropriateness for factor analysis of the intercorrelation matrices with 10 GNVs (i.e. all the GNVs excluded NDN that did not occur in the present sample) shown the matrix was suitable for factor analysis. In fact, although the Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) was in the miserable range (.52), Bartlett's Sphericity Test was significant. Secondly, Parallel Analysis (PA; Horn, 1965) was analyzed to determine how many components to retain using O'Connor's (2000) SPSS syntax.

As shown in Figure 2, results for PA with 10 variables, 120 cases on 1000 randomly generated datasets, indicated there were two real factors present in the data, as the eigenvalues for the three, four and five factor solutions were less than those expected by random chance. As in Study 1, the five subtypes of Reflection were entered in the factor analysis instead of regular r one at a time and none of them contributed to obtain a more cohesive factor structure. Therefore, regular r was kept in the FA with two factors extracted and oblique rotation. As it can be seen in Table 8, in this initial FA with all the 10 GNVs recurring in the adolescent dataset, the 1st factor was defined by OMP, PER, NDF, negatively by MAG and r; while the 2nd had high loadings (>.60) from EMS, EXH, NDF and rather high by EPR (component loading = .543). It might be noted that EPR contributed to both component 1 and 2, though slightly more to the second (loading for component 1 was .537 and for component 2 was .543). Differently from what observed in the children and adult samples, IDL did not significantly load into either of the factors. To test the authenticity of the second component and the actual variables that substantially load into it, the factor structure was evaluated against five randomly computed variables. The number of components to extract in presence of these random variables was again determined with PA. PA for 15 variables (10 GNVs and 5 random variables) indicated that it was appropriate to extract 4 factors (actual eigenvalues for components from 1 to 5: 1.778, 1.714, 1.467, 1.368, 1.201, versus the eigenvalues from PA: 1.813, 1.599, 1.467, 1.353, 1.260). In the factor

structure obtained with random variables, a first component was defined by EXH, EMS and NDV but shared variance with a random variable while the second component (defined by OMP, EPR, NDF, PER) had no loadings from random variables. The third and fourth components received loadings from r and random variables and from MAG, IDL and another random variable respectively, overall suggesting no authenticity and overextraction.

Figure 2. *Parallel Analysis for 10 variables and 120 cases on 1000 random datasets.*

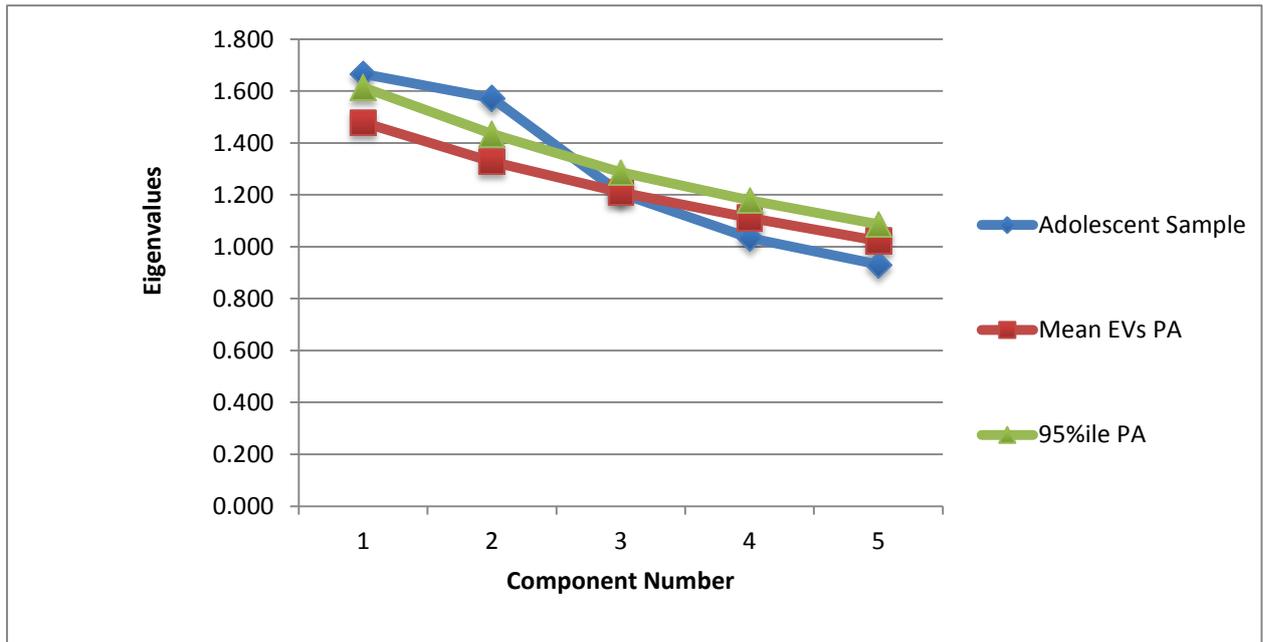


Table 8. Initial PCA solution with 2 factors and 10 variables: Factor loadings for GNVs.

GNVs	Component Loading	
	Component 1	Component 2
<i>Omnipotence</i>	0.69	0.14
<i>Personal Knowledge Justification</i>	0.52	-0.15
<i>Narcissistic Deflation</i>	0.47	0.05
<i>Magic</i>	-0.35	0.18
<i>Reflection</i>	-0.21	0.14
<i>Idealization</i>	-0.11	0.05
<i>Elevated Mood States</i>	-0.36	0.65
<i>Exhibitionism</i>	-0.29	0.63
<i>Narcissistic Devaluation</i>	0.03	0.61
<i>Expanded Personal Reference</i>	0.54	0.54

Hence, PCA was run extracting two factors as originally indicated by PA and dropping the three variables that had shown low or negative loadings (i.e. r, MAG and IDL). As it can be seen in Table 9, the first component was defined by OMP, EPR, NDF and PER while the second by EXH, NDV and EMS. Although factors 1 and 2 explained 23% and 22% respectively of the total variance, it might be noted that factor 1 shared variance with a random variable and factor 2 had modest loadings from two random variables when the 2-factors final structure was evaluated against randomly generated variables.

Finally, the scores of the two RIM Narcissism and Grandiosity Factors 1 and 2 (RIM-NG Factor 1 and RIM-NG Factor 2) were saved and correlated with the MACI Egotistic Scale and its three subscales (i.e. Admirable Self-Image, Cognitively Expansive and

Interpersonally Exploitative). Before running the correlations, descriptive statistics for the raw scores and base rates for the MACI Egotistic scale and facets to ensure their normal distribution. As shown in Table 10, Egotistic scales and subscales fell within the range of a normal distribution, both in cases of raw scores and base rates. The only significant correlation was between EPR and the MACI Admirable Self-Image scale (.20, $p < .05$, see table 11).

Table 9. Final PCA solution with 2 factors and 7 variables: Factor loadings for GNVs.

GNVs	Component Loading	
	Component 1	Component 2
<i>Omnipotence</i>	0.76	-0.01
<i>Expanded Personal Reference</i>	0.66	0.44
<i>Narcissistic Deflation</i>	0.55	-0.10
<i>Personal Knowledge Justification</i>	0.48	-0.23
<i>Exhibitionism</i>	-0.17	0.69
<i>Narcissistic Devaluation</i>	0.11	0.64
<i>Elevated Mood States</i>	-0.15	0.64

Table 10. Descriptive statistics for the MACI Egotistic Scale and its 3 facets

MACI Scale	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
<i>Base rate scores</i>						
<i>Confident</i>	1.00	88.00	40.85	22.22	0.04	-0.77
<i>Admirable Self-Image</i>	0.00	99.00	39.47	31.31	0.19	-1.46
<i>Cognitively expansive</i>	0.00	99.00	47.77	30.51	-0.11	-1.41
<i>Interpersonally exploitative</i>	0.00	97.00	48.90	28.15	-0.27	-1.21
<i>Raw scores</i>						
<i>Admirable Self-Image</i>	0.00	10.00	4.52	3.07	-0.08	-1.39
<i>Cognitively Expansive</i>	0.00	10.00	3.99	1.95	-0.16	0.16
<i>Interpersonally exploitative</i>	0	7	2.50	1.66	0.49	-0.31

Table 11. Correlations of RIM-NG Factor 1 and RIM-NG Factor 2 with MACI scales (N=115).

RIM-NG Factors and GNVs	MACI Egotistic Scales						
	<i>Ego Total</i>	<i>Adm. R</i>	<i>Cog. R</i>	<i>Int. R</i>	<i>Adm. B</i>	<i>Cog. B</i>	<i>Int. B</i>
<i>RIM-NG Factor 1</i>	0.10	0.18	-0.01	-0.05	0.18	-0.05	-0.05
OMP	0.03	0.09	-0.03	-0.12	0.08	-0.06	-0.12
EPR	0.11	.20*	0.01	-0.02	.20*	0.00	-0.01
NDF	0.05	0.02	0.05	0.07	0.05	0.01	0.07
PER	0.04	0.11	-0.07	-0.05	0.10	-0.08	-0.05
<i>RIM-NG Factor 2</i>	0.02	0.05	0.02	-0.05	0.05	0.07	-0.04
EXH	-0.02	-0.02	-0.03	0.03	-0.03	0.01	0.06
NDV	0.06	0.14	0.05	-0.03	0.15	0.08	-0.03
EMS	-0.05	-0.08	0.01	-0.14	-0.08	0.05	-0.14

Note: Ego Total = MACI Egotistic Scale total score. Adm. R = MACI Admirable Self-Image raw score. COG. R = MACI Cognitively Expansive raw score. Int. R = MACI Interpersonally exploitative raw score. Adm. B = MACI Admirable Self-Image base rate. COG. B = MACI Cognitively Expansive base rate. Int. B = MACI Interpersonally exploitative base rate.

* The correlation is significant at the $p < .05$ level.

Discussions for Study 1 and Study 2

The aim of the two studies presented in this chapter was to examine the factor structure of the 11 GNVs among clinical preadolescents and adolescents in order to potentially generalize and validate a measure to assess narcissism and grandiosity through the RIM in developmental age. Additionally, these studies sought to gauge meaningful information about narcissistic functioning among children and adolescents.

For these purposes, archival data of two clinical samples (Study age between 9 and 12; Study age between 13 and 16) from an inpatient facility were collected and the Rorschach protocols coded for the 11 GNVs as well as for the five Reflection subtypes. Once the factor structure of the RIM GNVs was obtained, the components extracted were analyzed in relation to external measures available in the psychological assessment clinical material (self-reports and informant-reports) in order to assess their criterion validity.

Studies 1 and 2 yielded similar yet for some aspects different results. A single factorial structure was found in the sample of children and it was defined primarily by OMP, IDL, and EPR and secondarily by NDV, EXH, EMS, NDF and PER. The results obtained in the adolescent sample yielded a factorial structure based on two components that were described by OMP, EPR, NDF and PER and by EXH, NDV, EMS respectively.

In regards to Study 1, the findings show how it is possible to identify a cohesive and meaningful pattern of functioning from implicit personality assessment that is largely coherent with what would be expected from the literature describing narcissistic children (Kernberg, Weiner, & Bardenstein, 2000; Millon, Tringone, Millon, & Grossman, 2005). The present study suggests how children with narcissistic and grandiose traits would be in fact characterized by an idealized sense of self and the inner need to idealize others, defensive self-centeredness and a sense of superiority and specialness that might be an attempt of dealing with feelings of worthlessness and powerlessness. This organization seems particularly coherent with the description of clinical theorists and researchers of the narcissistic child as displaying a sense of entitlement, intense envy, and an inability to feel empathy and gratitude (Kernberg, Weiner, & Bardenstein, 2000; Barry et al., 2007). In this direction might be interpreted also the presence of devaluation in the pattern found for narcissistic children in the present study, as the manifestation of an inner need to “destroy” others perceived as more powerful, appealing and the like. Along the same lines, the

significant relevance of Idealization in the narcissistic pattern that was found might be the expression not only of idealizing needs potentially normal in young ages, but also of the defensive aggrandizement described by Cooper and Arnow (1986). In this view, the individual, and so the child, would make objects so powerful that can protect the individual from other “bad objects” or could be themselves protected from one’s projected aggression.

Furthermore, the coexistence of such “overt” aspects with themes of deflated self-view and vulnerability (represented by NDF) in the narcissistic structure found in the preadolescent sample, is coherent not only with current views on narcissism (Pincus et al., 2009; Ronningstam, 2011) but also with the results we obtained using similar methods in the clinical adult group. Finally, the tendency to focus rather selectively on pleasant, untroubled and otherwise aspects of the experience (identified by EMS) although might be the expression of the playfulness typical of children’s behavior, might also be an early sign of hypomanic functioning as a reaction to inner feelings of deadness and painful understimulation (Kohut & Wolf, 1978; Arnow & Cooper, 1988) or an instance of negation towards disturbing feelings and thoughts described by Kernberg, Weiner and Bardenstein (2000) for clinical children. However, such consideration would need corroboration from further studies.

In regard to the results of the validity analyses obtained correlating the Rorschach narcissism and grandiosity factor with the composite measures of narcissism from self- and informant- reports on preadolescents (M-PACI, PIC, DSMD and PIY), they highlighted in particular Idealization as a key element of narcissism in children. More in detail the RIM Idealization was a best predictor of informant-rated narcissism ($r = 0.31, p < 0.01$) than a measure combining informant-ratings with self-reports ($r = 0.26, p < 0.01$) and self-reports only ($r = 0.05, p = .670$). This was coherent with previous literature describing RIM variables as substantially more aligned with externally assessed criteria such as the observer ratings

and psychiatric diagnoses and very modestly with introspective methods such as self-reports (Mihura et al., 2013). Furthermore, our results converged with previous findings on RIM correlations with observer-ratings and self-reports, that from meta-analytic evidence would be $r = 0.27$ and $r = 0.08$ respectively. However, it might be noted that the criterion measures used in Study 1 were for some aspects less optimal than the methods used with the adult clinical sample (see Chapter II) in that two of them had not been previously extensively validated (i.e. PIY and PIC conceptually derived scales for narcissism) and because the informant-ratings we used mainly originated from the patients' parents and not clinicians. Although definitely useful and necessary to gather unique information about a child's behavior and personality (Kernberg, Weiner, & Bardenstein, 2000), parents' ratings on their own children might be affected by similar biases (e.g. social desirability, problems with insight) observed for self-reported evaluations themselves especially towards socially inappropriate narcissistic behaviors such as interpersonal exploitativeness and lack of empathy.

Notably, the results obtained in the adolescent sample replicated what was found in the preadolescent sample in regards to four core GNVs (i.e. OMP, EPR, PER and NDF) and therefore much of the interpretations outlined so far for Study 1 might be valid for Study 2. In this sense, the present two developmental studies reflect an important contribution for the refinement of a coherent measure of narcissism through the RIM. However, two main exceptions might be pointed out. Firstly, the factor analyses of the GNVs in the adolescents did not yield a single dimension structure but a two factor solution. Secondly, and maybe more importantly, Idealization did not contribute to the narcissistic and grandiosity factors obtained in the adolescent sample as it did in the case of preadolescents instead. Similarly to the narcissistic functioning observed in children, the pattern of GNVs describing a parallel coherent pattern for the adolescents (identified by OMP, EPR, NDF and PER)

would depict young patients with narcissistic traits as self-centered, with a sense of superiority and use of defensive self-referencing, as well as possessing an inner deflated image of oneself. As observed for preadolescents, this is coherent with the clinical portrait of narcissistic adolescents and more in general with accredited descriptions of narcissistic individuals in general (Millon, 1993; Millon, 2008; Pincus et al., 2009).

What raises as a new question in the present study is in fact the sense attributable to the two distinct factors observed in the adolescent data set and, most of all, the meaning of the observed lack of Idealization. From our data, it is hard to say if the two factors represent two distinct psychological instances where the first (OMP, EPR, NDF, PER) would define an egocentric and self-referencing dimension connected to vulnerability in one's self-view, and the other (EXH, NDV, EMS) describing a more "activated" and interpersonally exuberant dimension characterized by exhibitionism and devaluation of others. The two factors were almost uncorrelated ($r = -0.52$) and none of the variables loading into the second factor was significantly associated to the external criteria. Therefore, such findings on a two factors structure of narcissism in adolescents needs further empirical investigation.

The associations between the GNVs with self-reported narcissism obtained in the adolescent sample show how young individuals who tend to put themselves in relation to the Rorschach inkblot for example expressing personal feelings about the percept they are describing (i.e. EPR) are likely to perceive themselves as special and worthy of praise (MACI Egotistic Scale, Admirable Self-Image facet). Similarly to what pointed in the case of the preadolescents, the use of an introspective method only as a criterion in Study 2 might have limited the significant correlations obtained for the GNVs.

Finally, the evident discrepancy between the role that Idealization had in relation to narcissism in the two different ages considered, might be ascribed to different reasons. In the first place, the lack of correspondence might be due to methodological confounds connected

to the Rorschach protocols coding process for that specific variables. In fact, IDL was between the GNVs that yielded the lowest interrater reliability (i.e. good at the Response Level and fair at the protocol level). Secondly, and on a much more exploratory level, the pattern would be the same for three of the narcissism and grandiosity variables (namely: EPR, PER, OMP) in preadolescents and adolescents but would differ for IDL because these variable actually reflect different coding categories and to some extent different psychological concepts. While the first three variables can be more intended as codes of behavioral and interpersonal aspects, while IDL might be conceived as more genuine measure of idealization that can be directed towards the Self but also towards Others. The last aspect in particular, being consistent with the narcissistic need of affiliation to higher-status others (APA, 2013), might be less prominent in the adolescents manifestation of narcissism. It is in fact possible to speculate that adolescent narcissism as measured through the RIM might manifest itself more through a behavioral manifestations of grandiosity (e.g. recurring to personal knowledge and experiences, assuming a role of power and control towards the examiner) and less on a definite expression of idealized themes involving not only the Self but also the representation of others. The narcissistic adolescent individual might in fact experience the testing context with the adult examiner as situation of passivity and dependency, and might react with a provocative interpersonal attitude and oppositionality (Riva & Trionfi, 2004). These considerations on the differences noticed in the two age groups might also be put in relation to the overall different prevalence that Idealization had in the two samples although the overall similar number of responses (R) contained in the preadolescent and adolescent samples was very similar (IDL Study 1: $M = 0.98$, $SD = 1.27$ with R Study 1: $M = 18.3$ $SD = 4.7$; IDL Study 2: $M = 0.68$, $SD = 0.87$ with R Study 1: $M = 19.0$ $SD = 5.5$). As already stated, however, such speculations would need to be supported by further empirical evidence and future studies on this direction are needed.

Chapter IV

Narcissistic Self-Esteem, Anger and Defensive Patterns: An experimental design with the Rorschach Inkblot Method¹¹

Background

Narcissistic Personality Disorder (NPD) is always more considered as a serious mental condition related to deep individual suffering during the entire life (Stone, 2009; Ronningstam & Maltzberger, 1998). Narcissism can in fact often be associated with recurrent impaired or dysfunctional functioning in vital areas such as work or social and emotional life, causing high distress to both the individual and to others (Miller, Campbell, & Pilkonis, 2007). Narcissistic personalities can actually experience a formally adequate quality of life accompanied by an underlying subtle disturbing dissatisfaction with themselves and their condition, caused by their chronic unrealistic expectancies and their excessively high ideals (Sperry et al., 1993). Moreover, NPD can often be found in comorbidity with other clinical problems, which increase the complexity of the condition and the possibility that the patient will actively seek and commit to a therapeutic process (Widiger, 2011; Oldham et al., 1992).

In spite of its renowned clinical complexity, NPD is still problematic in regard to its diagnosis and evaluation, to the extent that the scientific status of the construct is at times controversial. Two could be the principal reasons of this: first of all a few issues in the operationalization of the construct and, matter related to the former, the difficulty to reach a valid and unanimous assessment.

Particularly after the DSM-5 Task Force proposal, currently withdrawn, to exclude the NPD from the future edition of the Manual, the debate about the conceptualization of the disorder has re-flourished. In this context it is important to underline that the diagnostic definition of the Narcissistic personality Disorder (NPD) provided by the DSM-IV-TR (APA,

¹¹ This study was conducted in collaboration with Gregory J. Meyer Ph.D., Robert Bornstein, Ph.D. and John Stokes Ph.D.

2000), which has influenced literature on the topic and the development of assessment measures in the past decade, is often considered unsatisfactory because of its exclusive focus on features of grandiosity and entitlement, resulting in a diagnostic picture that overlooks the complexity dynamics involved in narcissistic functioning. In fact, although the most up to date edition of the manual (APA, 2013) reconsidered “covert” themes such as vulnerable self-esteem as “Associated Features Supporting Diagnosis” (p. 671), the DSM-IV criteria of NPD in which most of the recent research on the construct has relied on are in contrast with the most historical and influencing clinical theories (Kernberg, 1978, 1984; Kohut, 1971, 1977) but also with some empirical research findings from personality psychology and social psychology (Rhodewaldt & Morf, 1998; Russ, Shedler, Bradley, & Westen, 2008; Ronningstam, 2011) on the topic. In fact, such traditional and more contemporary contributions would suggest that narcissism could be better conceptualized as the coexistence of painful feelings of inadequacy with an external self-aggrandizing behavior. More specifically, several authors debate on the status and phenomenology of the NPD, questioning if the “grandiose” and “vulnerable” profiles should be conceived as two different psychological categories (Cooper, 1981; Akhtar and Thomson, 1982; Rosenfeld; 1987; Gabbard, 1989) - supposing that such a strict dichotomization is arguable when studying the personality - or if they reflect coexisting features of the same organization (Morf & Rhodewalt, 2001). In particular, the model elaborated by Rhodewalt and Morf (Rhodewalt & Morf, 1998; Rhodewalt & Morf, 1995; Morf & Rhodewalt, 2001) seems particularly useful to better understand the dynamics involved in narcissistic functioning. In fact, placing the construct in the wider framework of self-regulation, such conceptualization focuses both on intrapsychic and interpersonal issues connected to narcissism. As such, narcissistic functioning would be linked, rather than with a simple elevation of self-esteem, to a constant and disturbing oscillation of self-esteem itself. The result of this dynamic would be a

persistent fluctuation between a high and idealized vision of the self and instances of self-devaluation, confirmed by the contingent self-esteem levels observed in individuals with higher levels of narcissism (Fetterman & Robinson, 2010).

Uncovering dynamics on self-esteem in narcissistic individuals seems also relevant to help understanding some of the most problematic and socially relevant correlates of pathological narcissism, predominantly aggression (Bushman & Baumeister, 1998; Krizan & Johar, 2014), followed by psychopathy (Schlesinger, 1998; Stone, 2001); suicide (Blasco-Fontecilla et al., 2009; Kernberg, 2001; Ronningstam, Weinberg, & Maltzberger, 2008) and recurrent short-termed sexual relationships with difficulties to intimately and emotionally commit (Jonason et al., 2009; Widman & McNulty, 2010).

Importantly for the focus of the present study, previous works identified anger and hostility among the patterns of reactions displayed by narcissistic individuals when their self-esteem is insulted, along with responses such as devaluation of the task in which they failed, as well as more subtle mechanisms like self-handicapping (Rhodewalt & Morf, 1998; Rhodewalt, Tragakis, & Finnerty, 2006).

As anticipated, the difficulty to assess narcissism complicates the scene yet more, considering for example that the NPD is one of the personality disorders that is most influenced by the diagnostic instrument used to assess it (Oltmanns, Melley, & Turkheimer, 2002). If the warning to use a multi-method assessment that is not limited to a single source of data (i.e. self-reports relaying on the individual's point of view) but considers also more latent personality dimensions is warranted for the study of personality in general (Huprich, 2011; Meyer et al., 2001; McWilliams, 2012), this is particularly relevant in the case of narcissist individuals, who often have problems in reporting about themselves and may lack of insight using explicit measures based on self-report.

In this context, the *Rorschach Inkblot Method* (RIM) may represent an useful option to obtain an *in vivo* sample of narcissistic behavior. In this regard, various have been the attempts over the years to elaborate valid inferences from RIM protocols that would allow to detect and comprehend narcissistic functioning, beginning from the pioneer works of Wolman (1967) and Harder (1979). In synthesis, these studies have attempted to identify specific indicators of narcissism, generally delineated by particular characteristics of perceptive, relational and affective functioning (Berg, 1990; Blais et al., 2001; Farris, 1988; Urist, 1977). Previous research works using the Comprehensive System for the RIM (CS: Exner, 1993) suggested that statistically significant elevations in some variables might characterize narcissistic individuals when compared to other clinical groups and to nonclinical controls (Gacono et al. 1992; Hilsenroth et al. 1993; Hilsenroth et al., 1997). Furthermore, other authors have worked on the unique and specific contribution that the test can provide to the incremental validity of a multi-method assessment based on various instruments (Blais et al., 2001). However, despite being interesting and meaningful, such contributions still represent a rather non-cohesive theoretical background. Efforts that sought to identify possible indicators of narcissistic functioning in the Rorschach originate in fact from very heterogeneous works and starting from different methodological premises or often not using the same scoring methods. In addition, also the variables that have been identified as the most representative for narcissistic functioning (i.e. *Reflection* and *Egocentricity Index*¹²) are lacking empirical support or are at least controversial (Mihura et al, 2013), to the extent that some of them have been removed from the most up to date system for the RIM or are included with specific caveats concerning possible issues in their validity (R-PAS: Meyer et al., 2011).

¹² See Chapter I for a more detailed discussion of the variables.

As such, the RIM variables currently used to assess narcissism through the CS and the R-PAS (e.g. Personal Knowledge Justification and Reflection; Meyer et al., 2011) still require empirical investigation and the development of a more cohesive system to assess the construct from the information provided by the Rorschach needed. To this end, in an effort to capture more thoroughly the construct of narcissism and related psychological constructs via the RIM, we developed a set of 11 variables (Omnipotence, OMP; Idealization, IDL; Reflection, r; Personal Knowledge Justification, PER; Exhibitionism, EXH; Magic, MAG; Elevated Mood States, EMS; Expanded Personal Reference, EPR; Narcissistic Devaluation, NDV; Narcissistic Deflation, NDF; Narcissistic Denial, NDN). Of these Grandiosity and Narcissism Variables (GNVs: Meyer, Gritti, & Marino, unpublished manuscript), some of which we modified from previous literature: Omnipotence and Idealization (Cooper and Arnow, 1988); Reflection (Exner, 2003), Personal Knowledge Justification (Meyer et al., 2011), Exhibitionism (Wagner, 1965), Magic (Homann, 2013), and Elevated Mood States (Cooper, Perry, & Arnow, 1986); and some of which we developed: Expanded Personal Reference, Narcissistic Devaluation, Narcissistic Deflation, Narcissistic Denial. In previous studies (see Chapter II and III) we obtained evidences of the validity and utility for the assessment of narcissism of a core of these variables (namely EPR, PER, OMP and IDL) both in nonclinical and clinical populations and across different ages.

The present work had the double intent of i) further investigating on the validity of the Rorschach GNVs and ii) throwing light on the relationships between narcissism and real-life relevant constructs such as self-esteem and aggression. To this end, starting from the methodological setting used by Rhodewalt and Morf (1998), we sought to generate an experimental manipulation of self-esteem in order to directly produce observable effects in the self and analyze the various reactions in relation to the GNVs and self-reported narcissism.

Outline

In this study the levels of narcissism and investment toward the self, measured both via the Rorschach GNVs and self-reports, have been correlated with the participants' reactions to a transient manipulation of self-esteem. Reactions to the self-esteem insult have been studied along the dimensions of emotional reactivity and state self-esteem and have been measured both via self-reports and via ratings of spontaneous behavior (i.e. the participants' verbalizations about their performance). In this way, it was possible to obtain an *in vivo* measurement of variables connected to self-esteem and narcissism.

Participants and Recruitment Process

We conducted power analysis in order to determine the appropriate number of participants to include in the experimental study. Given specific statistical parameters (correlation ρ H1 = 0.3, α = 0.05, power = 0.80, correlation ρ H0 = 0, in a correlational bivariate normal model) the sample of the study should be of N = 84 participants. Eventually the participants included for the study were 105. Participants have been recruited from the undergraduate students of three North-American universities (University of Toledo, Ohio; Adelphi University, Garden City, New York; Pace University, NYC, New York).

Socio-demographic characteristics of the sample were as follows. The mean age of the 105 individuals who participated to the research study was of 20 years (sd = 4.48) and they were for the 65% female. 55,2% of the participants were Caucasian, 19% African-American, 7.6% Asian or Pacific Islander, 13.3% Hispanic and 4.8% Other. 89.5% of the students declared themselves as Single and 5.7% responded choosing the option "Other", while 1.9% was Married, 1.9% Divorced, and the remaining 1% reported to be living (with a partner).

Students learnt about the study in a variety of ways that included advertising through the SONA System, flyers posted inside the university areas, announcements made in class and occasionally social networks. Participants were given a reward for joining the experiment that

usually consisted in an academic research credit. When this was not an option because the participants did not need academic credits they were compensated 15.00 \$.

The study was approved by the Institutional Review Board of all three the universities where the data collection took place and participants provided their written informed consent before entering the research.

Materials

1. *Implicit assessment of the personality: the Rorschach Inkblot Method* is presently considered as a performance based personality test (Meyer & Kurtz, 2006; Kubiszyn et al., 2000) that permits to gather meaningful information about various implicit aspects of personality such as perception, affective functioning, self- and interpersonal representations. It consists of a set of 10 cards, (5 chromatic and 5 achromatic) containing graphical stimuli that differ in level of structuration. The examinee is asked to respond the question “*What might this be?*” and his/her response is annotated *verbatim* by the examiner. This response phase is followed by an inquiry phase where the examiner can question the respondent in order to completely understand key features of the response which are later used to score the protocol, such as localizations and determinants (i.e. the features of the inkblot that induced the examinee to produce that specific response). The scoring and interpretation of the protocol was carried out relying on objective and empirically validated criteria. In the last years a great amount of research has demonstrated to a relatively good extent the validity of the RIM in describing psychological functioning and personality features, as well as predicting outcome (Kubiszyn et al., 2000; Mihura et al., 2013).

Accordingly to the studies presented on Normative Adults, Clinical Adults, Clinical Preadolescents and Adolescents presented in Chapters II and III, Rorschach protocols from the participants were coded for the 11 Grandiosity and Narcissism Variables (GNVs: Meyer, Gritti, & Marino, unpublished manuscript), namely: *Omnipotency* (OMP); *Idealization*

(IDL); *Personal Knowledge Justification* (PER); *Exhibitionism* (EXH); *Magic* (MAG); *Elevated Mood States* (EMS); *Expanded Personal Reference* (EPR); *Narcissistic Devaluation*, (NDV); *Narcissistic Deflation* (NDF); *Narcissistic Denial* (NDN) and *Reflection* (r). The Reflection supplemental variables were coded as well and they included reflection responses with a sentient object present (*r-Sentient*); with a human being present (*r-Human*); in the upright orientation (*r-Upright*); with an object looking at itself reflected (*r-Looking*), and both in the upright orientation and with an object looking at itself reflected (*r-UpLook*). Nonetheless Reflection was expected not to contribute to a potential narcissistic factor accordingly to the results of our previous studies and to recent meta-analytic evidences questioning its bond with narcissistic tendencies (Mihura, Meyer, Dumitrascu, & Bombel, 2013). A second rater¹³ blind to the codes of the first rater coded for all the 11 GNVs and the five subtypes of Reflection a randomly selected subset of 20 Rorschach protocols from the main dataset. Subsequently, interrater reliability calculated both at the response level through Cohen's k and at the protocol level through exact agreement intraclass correlation (ICC). We used Cicchetti's (1994) benchmarks and the (ICC) for a single rater under a one-way random effects model to interpret the interrater reliability levels reached by the GNVs and the r subtypes. At the response level, reliability was good to excellent for IDL, EMS, PER, EPR, MAG, NDV, r, r-Sent, r-Human, r-Looking. For OMP, NDN and r-UpLook k was zero because the very low frequency of these codes in the 20 randomly selected protocols for reliability (rater 1 assigned OMP 3 times in the 508 responses examiner for reliability, while rater 2 never assigned it and the same was for NDN; conversely, rater 1 never coded r-UpLook in this 508 responses and rater 2 did it once) essentially leads to a low k for any disagreement. With such a low base rate, also one disagreement will generate a poor interrater reliability score. However, the absolute percent of agreement for these three

¹³ David P. Marino M.S.

variables was very high 99.8% for OMP, 99.4% for NDN and 100% for r-UpLook. For NDF k was fair but close to good, whereas for EXH it was poor and for r-Upright it was fair. Disagreements were reviewed and revealed and no systematic discrepancies in the codes of the two raters, being limited to rather debatable cases. Therefore, a subsequent set of 20 randomly selected protocols were coded for EXH and r-Upright and k response level interrater reliability resulted excellent for both variables. At the protocol level, interrater reliability was good to excellent for IDL, EMS, PER, EPR, NDF, MAG, r and all its subtypes except for r-UpLook for which it was zero because as already noted this code had a very low base rate in the 20 selected protocols. Obviously, as in the response level, this last issue occurred also for OMP and NDN, for which the codes recurred very rarely in these randomly selected protocols and therefore agreement was zero. ICC for EXH and r-Upright in the second subset of 20 protocols coded was excellent.

The most up to date guidelines for administration and scoring of the RIM have been used (R-PAS; Meyer et al., 2011). The RIM has been administered at T1 (evaluation before the experimental manipulation) in order to evaluate the validity of the Factor obtained by the GNVs to predict narcissistic reactions to self-esteem injuries and to study their correlation with self-report measures of affects and state self-esteem.

2. *Explicit self-report assessment of narcissism.* The *Five Factor Narcissistic Inventory* (FFNI; Glover et al., 2012) is a self-report composed of 148 items on a 5-points likert scale. The FFNI is based on the Five-Factor-Model of personality and consequently studies the pathological narcissistic functioning considering the various psychological aspects involved and their possible distortions. The inventory contains 15 scales which are derived from the FFM domains and consider both vulnerable and grandiose dimensions. Several studies demonstrate convergent and incremental validity of the instrument with the NEO-PI-R (Costa & McCrae, 1992) and with scale of narcissism emphasizing vulnerable or grandiose

aspects (Glover et al., 2012; Miller, Gentle, & Campbell, 2012). Cronbach's alpha for the FFNI range from .62 (FFNI Shame) to .89 (Exploitativeness). The median absolute convergence of the FFNI scales with the NEO-PI-R Facet Scales is .58. The *Grandiose* and *Vulnerable* scales of the FFNI have been used in this study as measures of narcissism in its overt and covert dimensions. The Grandiose and Vulnerability scales correlate .30 ($p < .001$) and .74 ($p < .001$) with PNI-52 (Pincus et al., 2009) correspondent criteria respectively (Glover et al. 2012). The FFNI has been administered at the baseline (T1) to have a self-report assessment of the participants' level of narcissism independent from the experimental manipulation.

3. *Explicit self-report of emotional state, self-esteem and distress evaluation.* A series of affective and self-esteem dimensions has been assess and their variation in the different moments of the experimental procedure have been measured in order to obtain a measure of the participants' reactions to the experimental self-esteem manipulation. The self-reports used for these purposes are the PANAS-X (Watson & Clark, 1994) and the SSES (Heatherton & Polivy, 1991; Hohler, 1997). Items from the Anger scale from the Resultant Self Esteem Scale (RSES: McFarland & Ross, 1982), as used by Rhodewalt and Morf (1998), have been presented with the PANAS-X items in order to have a broader evaluation of state anger.

3.1. *The Positive and Negative Affect Schedule - Expanded Form* (PANAS-X; Watson & Clark, 1994) is a self-report composed by 60 items which consist of various words and phrases that describe different feelings and emotions. The respondent is asked to indicate to what extent they have felt in the way described by each item during the past few weeks, rating with a 5-point scale. As a development of the original PANAS (Watson, Clark, & Tellegen, 1988), the PANAS-X assesses not only the broad dichotomy of positive vs. negative emotionality, but also more specific affective experiences. More in detail, its 11 scales evaluate affects such as Fear, Sadness, Guilt, Hostility, Shyness, Fatigue, Surprise,

Joviality, Self-Assurance, Attentiveness, and Serenity. Research shows that intraindividual mood fluctuations that occur even in a same day can be adequately assessed and the PANAS-X represents a useful tool to this purpose (Clark, Watson, & Leeka, 1989; Watson & Clark, 1994). These study used 6 of the 11 scales of the instrument to detect possible changes in negative self-reported following emotions: Fear, Guilt, Hostility, Sadness, Self-Assurance and Joviality.

3.2. The *State Self-Esteem Scale* (SSES; Heatherton & Polivy, 1991; Hohler, 1997) is a 20-item self-report that measures state self-esteem on a five response scale ranging from 1 (not at all) to 5 (extremely). Higher sum scores indicate higher state self-esteem. It comprises three subscales (performance, social relationships, appearance self-esteem), all of which have good psychometric properties (Heatherton & Polivy, 1991). The SSES have been administered at T1 (pre-experimental manipulation evaluation), T2 (evaluation after Success) and T3 (evaluation after Failure) to measure the possible variation in state self-esteem as a consequence of the experimental manipulation.

For all the self-report measures of affects and state self-esteem, the scales were computed with the mean of the items instead of the sum to the aim of obtaining more easily interpretable results.

Procedure

a) *Cover story*. Participants read from the Informed Consent Form that in case they accepted to participate, they would have taken part to a study aimed at identifying the relationships between variables of personality and cognitive abilities.

b) *Pre-experimental manipulation evaluation (T1)*. Administration of the *Rorschach Test*, FFNI and self-reports for affects and state self-esteem. The Rorschach Test has been administered individually by a qualified examiner in each of the data collection sites. The questionnaires and the cognitive testing items have been administered electronically on a

computer in a silent lab-room. The software used to program the experimental portion of the study and to administer the cognitive testing and self-report measures was Medialab® Version 2012 (Empirisoft Corporation, 2012).

c) *Experimental manipulation of self-esteem.* A series of items from the culture-free IQ subtests contained in the book “Ultimate IQ Tests” by Carter and Russell (2012) have been presented to the participants with a statement saying that the measure has been shown to predict future achievement and success in life (which is true). The items have been presented via computer so that participants could get immediate feedback on their performance. The items have been selected to be moderately difficult so that the participants would have been uncertain about the accuracy of their responses. The items consisted of matrix reasoning problems, which provide a nonverbal test of fluid reasoning that is very similar to the WAIS-IV (Wechsler, 2008) Matrix Reasoning subtest. Importantly, the feedback conveyed to the participants on their accuracy after completing each item had been artificially set so that they first experienced making relatively few mistakes (Success Condition) and then experienced making relatively many mistakes (Failure Condition), following the methodology used by Rhodewalt and Morf (1998) to implement a transitory self-esteem manipulation. More specifically, in the success condition participants were told that they succeeded on most of the items providing an above average performance, and then, in the failure condition, they were told that they did not get most of the items correct and performed worse than average on the second set of items. We selected this fixed format because previous research (Rhodewalt & Morf, 1998) showed that individuals with higher levels of narcissism only reacted in a defensively irritated and externally blaming manner when the success condition came before the failure condition. Feedback was fixed so that all the participants received the same information about success and failure. In the success condition participants were always told that they had obtained 8 out of the 10 items correct and that they had scored in the 80th

percentile. In the failure feedback condition, participants learnt that they had obtained 4 out of the 10 items correct and that they had scored in the 30th percentile. In order to increase the effect of the self-esteem manipulation and also affect participants who are more narcissistically sensitive to their social appearance rather than intelligence (see for instance Besser & Priel, 2010), we included social embarrassment as a component of the study. Before the cognitive portion of the administration started, participants were told that their performance on the cognitive tests were recorded through a webcam and later reviewed by two judges, aware of their responses on the cognitive tests, who would have rated their nonverbal behavior (such as attentiveness) with the aim of exploring connections between behavior and problem solving activities. The computer webcam actually was not recording anything, but the light of the device was on and visible at the appropriate time. Structuring the self-esteem manipulation in this way permitted to affect also the participants who could be, for example for different narcissistic patterns and traits (see for instance Besser & Priel, 2010), sensitive to stimuli directed to different self-esteem areas (e.g. intelligence/achievement Vs. social appearance). In order to be able to check, during the data analysis process, if the experimental manipulation worked as expected, a series of manipulation checks were embedded in the procedure. The latter consisted on questions to the participants on how many items they had gotten correct and in which percentile rank they had scored. To the same purpose, the following questions were asked: “*Compared to the average college student, how well did you perform on the test? Choose a number from 1 to 7, where 1 indicates ‘Extremely worse’ and 7 indicates ‘Extremely better’*”; “*Compared to how you usually perform, how did you do on the test? Choose a number from 1 to 7, where 1 indicates ‘Extremely worse’ and 7 indicates ‘Extremely better’*” and “*How satisfied are you with your performance on the test?*”.

d) *Post-experimental manipulation evaluation (T2 after Success and T3 after Failure):*

Participants took the PANAS-X, RSES and the SSES after each trial of matrix reasoning items (i.e. after success and after failure).

e) *Closed-ended evaluation of attributions for Success and Failure as a result of the experimental manipulation.* After success and failure conditions participants have been asked to explain in writing why they performed as they did. A similar format of question as the one used by Rhodewalt and Morf (1998) have been adopted: participants have been asked to indicate whether their score on the test was caused by presence of ability or lack of ability, then they have been asked to report the causal importance of this factor in determining the outcome. This rating has been made on a 7 point Likert scale labeled with the endpoints “extremely important” and “not at all important”. The same assessments have been requested for the degree of effort the participants believe to have put into completing the test and the level of difficulty attributed to the test itself. Differently from Rhodewalt and Morf, however, we did not explicitly referenced both options (presence of ability or lack of ability) when asking for ratings of how much ability or effort was a factor. Participants indicated whether their score on the test was caused by 'presence of ability' or 'lack of ability'. This question was followed by a second question asking them to report the causal importance of that factor in determining the outcome 'How much was your ability or lack of ability a cause of your test score?' (p. 679). In the present study the second rating had the following format: "To what degree was your level of ability a factor in your performance?"; during the data analytic process we noticed that this question by default sounds like it references the presence of ability, not its lack. So low scores likely mean lack of ability was a factor; high scores likely mean presence of ability was a factor. Similarly, in case of the rating for Test Difficulty, the question "To what degree was the test's difficulty a factor in your performance?" would refer to the hardness of the test and not its easiness.

f) *Open-ended evaluation of behavioral and verbal expressions of attributions for Success and Failure as a result of the experimental manipulation.* In order to obtain a more spontaneous evaluation of the attributions for success and failure, a series of open-ended questions were proposed before the closed-ended questions for attributions. The participants' verbalizations were rated for three variables that we conceived as potential markers of narcissism along three-points Likert scales we developed. The three attribution variables were: *Narcissistic Aggrandizement*, *Anger* and *Externalization of Blame*. *Narcissistic Aggrandizement* was coded after Success (*AttNarcAggrand*), *Externalization of Blame* after Success and Failure (*AttExternalizationS* and *AttExternalizationF* respectively) and *Anger* was coded for the verbalizations produced after the Failure condition and for the responses to the questions for suspicions explained below (*AttAngerF* and *AttAngerSusp* respectively). Interrater reliability was computed between the first rater and a second rater¹⁴ through intraclass correlation (ICC) for a single rater under a one-way random effects model on a sample of 65 cases. ICC results from good to excellent for all the attribution variables and all disagreements were resolved in order to obtain the final codes.

g) *Suspicion Probes and Debriefing.* At the end of the testing, participants were probed for suspicions with two questions (first question: "Ok, now that the study is over, what do you think was the purpose of the study? Use the Enter key to go to the next line in the text box if you need it.", second: "Please explain any doubts or misgivings you have about the study. Use the Enter key to go to the next line in the text box if you need it."). The two questions were coded through a 0-1 (0 = absence of suspicion; 1 = presence of suspicion) dichotomous scale we developed and also *AttAngerSusp* ratings were assigned since several participants expressed anger and resentment answering this questions. Similarly to the ratings carried out for the questions on attributions, Interrater reliability was computed between the

¹⁴ Gregory J. Meyer Ph.D. and Emanuela S. V. Gritti M.S.

first rater and a second rater through (ICC) for a single rater under a one-way random effects model on a sample of 65 cases and results were excellent. Furthermore, all disagreements were resolved to obtain the final codes. After being probed for potential awareness of the self-esteem manipulation, participants were completely debriefed. They were therefore informed that their actual performance at the cognitive test was not actually recorded and they were thanked for their collaboration.

Aims and Hypotheses

The present study had the dual purpose of further empirically investigating on the validity of the GNVs to assess narcissism and to explore the patterns that link narcissism to anger and hostility.

From the point of view of a validity study, this study expanded the array of external criteria for the RIM indicators of narcissism not only to self-reports or informant-ratings but rather to observable behavior represented by the reactions to the self-esteem manipulations.

As a main hypothesis, we expected to find positive correlations between susceptibility to self-esteem attacks and higher narcissistic scores as assessed by the Rorschach Narcissism factor and the FFNI. Given to previous research and clinical theory, we predicted to find expressed hostility, self-aggrandizing and externalization of blame as reactions to self-esteem attacks in individuals showing higher levels of narcissism (Bushman & Baumeister 1998; Rhodewalt and Morf (1998). As a result, the focus was on assessing the capacity of the Narcissism Factor and of the FFNI *Grandiose* and *Vulnerable* scales to predict an increase in the explicitly self-report assessed emotional state after the manipulation. In particular, accordingly to Rhodewalt and Morf (1998) we hypothesized that individuals showing higher narcissistic traits will report higher levels of anger after the self-esteem insult.

Furthermore, we examined if narcissism was associated to specific attributions for performance, with a focus on attributions related to the initial success condition and

attributions for ability in particular. Rhodewalt and Morf (1998) in their “contextual” hypothesis predicted that attributions for the initial test result would have mediated the link between narcissism and anger. Additionally, they suggested also a “concurrent” hypothesis concerning mediation based on attributions for the test just completed on the affect experienced on that test.

Less central for this study, Rhodewalt and Morf also anticipated greater emotional reactivity in general among narcissists. Furthermore, accordingly to more recent literature showing positive correlations between measures of narcissistic vulnerability and neuroticism (Krizan, & Johar, 2014; Miller, Gentile, and Campbell, 2012), we explored the hypothesis that self-reported narcissism, and vulnerability in particular, would have predicted increased emotional reactivity during the experimental procedure.

Statistical Analyses: Main Steps

The statistical procedure concerning the analyses of the 11 GNVs and the identification of the connected factor structure is identical to the one used in the Studies presented in Chapters II and III. Once the 105 full-text Rorschach protocols from the research participants were scored for the Rorschach GNVs and the subtypes of Reflection, the structure of the grandiose narcissistic factor(s) was assessed through Principal Components Analysis. The correct number of components to retain was evaluated through Parallel Analysis (PA) based on SPSS syntax developed by O’Connor (2002).

Before running the PCA we inspected variable distributions to identify potential departures from normality due to skewness that could affect the subsequent correlations, expecting that low frequency count variables as the GNVs would have been associated to skewed distributions. In Table 1 are reported the descriptive data for all the Rorschach GNVs variables, including the reflection subsets. The eleven primary variables (OMP, IDL, PER, r, NDV, NDF, NDN, EXH, MAG, EMS, & EPR) had skew between about 1.4 (IDL) and 7.1

(NDN), while the subtypes of reflection had skew between 2.3 and 6.9. Appropriate transformations were used to correct skewness, preferring more simple transformations for less skewed variables and in case more substantial transformations brought to only slight improvements. Hence, a square root transformation was applied to nine of the primary variables (i.e., OMP, IDL, EMS, PER, EPR, NDF, EXH, MAG, r) and the five subtypes of Reflection, whereas the original variable was maintained for NDV and NDN because their skewness could not be fixed by any transformation due to their small range. For example, also after the inverse reciprocal of the original value squared was applied to NDV, its skewness was still 7.14. The revised skewness values are shown in the final column of Table 2. Except for NDV and NDN, after the square root transformation was implemented, the skew of all the principal GNVs fell into a good or acceptable range. Regarding the r subtypes, the Square Root transformation fixed the values of skewness bringing them to the good or acceptable level for r-Sentient, r-Human and r-Upright, while for r-Looking and r-UpLook not even more substantial transformations produced significant improvements. Thus, the analyses proceeded using the square root transformed scores for OMP, IDL, EMS, PER, EPR, NDF, EXH, MAG, r and all the r subtypes and the not transformed value for NDV and NDN.

Table 1. Descriptive statistics for the primary and supplemental Rorschach GNVs variables

Variable	Mean	SD	Skew	Kurtosis	Skew After Transformation
OMP	0.21	0.68	3.93	16.14	2.80
IDL	1.49	1.47	1.36	2.48	-0.10
EMS	0.90	1.13	1.49	2.46	0.36
PER	0.54	0.93	2.28	6.22	1.02
EPR	0.60	1.08	2.12	4.19	1.14
NDV	0.02	0.14	7.14	49.92	-
NDF	0.24	0.55	2.61	7.51	1.79
NDN	0.02	0.14	7.14	49.92	-
EXH	0.40	0.64	1.59	2.24	0.93
MAG	0.19	0.44	2.26	4.59	1.86
r	0.60	1.15	2.00	3.29	1.32
r-Sentient	0.44	0.90	2.26	4.79	1.49
r-Human	0.14	0.45	3.25	9.93	2.79
r-Upright	0.31	0.74	2.79	8.34	1.84
r-Looking	0.05	0.25	5.93	37.87	5.13
r-UpLook	0.04	0.24	6.86	50.16	6.03

Note. N = 105.

Results Section I: Factor Extraction on the GNVs

The examination of the tests that evaluate the appropriateness for factor analysis of the intercorrelation matrix shown that correlations were present in the intercorrelation matrix with 11 GNVs and that it was therefore suitable for FA. In fact, although the Kaiser-Meyer-

Olkin (KMO; Kaiser, 1974) was in the mediocre range (.63), Bartlett's Sphericity Test was significant. Secondly, Parallel Analysis (PA; Horn, 1965) was analyzed to determine how many components to retain using O'Connor's (2000) SPSS syntax.

As reported in Figure 1, results for PA with 11 variables, 105 cases on 1000 randomly generated datasets, indicated there one real factor present in the data, as the eigenvalues for the two, three, four and five factor solutions were less than those expected by random chance. Analogously to our previous studies (see Chapters II and III), the five subtypes of Reflection were entered in the factor analysis instead of regular r one at a time and none of them contributed to obtain a more cohesive factor structure. Table 2 shows the results for an initial PCA with all the 11 GNVs and one factor extracted. The factor obtained high loadings ($> .60$) from EPR, PER, IDL and was furthermore defined by EXH, NDF, EMS, OMP and MAG (factor loadings $> .30$). given the very low frequency of NDV and NDN in the present sample, they were omitted from a second PCA. The comparison of the actual eigenvalues (2.339 for the first component, 1.271 for the second, 1.133 for the third, 0.938 for the fourth and 0.887 for the fifth) with those obtained from Parallel Analyses with 1000 randomly generated data sets (1.628 for the first; 1.410 for the second; 1.264 for the third; 1.149 for the fourth and 1.044 for the fifth) indicated again that it was appropriate to extract one factor. Such factor structure was similar to the one obtained in the initial analyses with all the 11 GNVs (EPR, PER and IDL had loadings $> .60$; EXH loaded 0.57, EMS 0.50, NDF 0.45 and OMP loaded 0.39). MAG and r had a lower loading on the factor (0.31 and 0.03 respectively) and they were therefore excluded from the following final PCA. Results of the final PCA with seven variables and one factor extracted are displayed in Table 3. The final Narcissism and Grandiosity Factor (NG Factor) was strongly defined by EPR, PER, IDL (component loadings $> .60$) and more moderately by EXH, EMS, NDF and OMP (loadings $> .30$). in this final solution, KMO was .65 and the factor explained 32.6% of the total variance.

Figure 1. *Parallel Analysis for 11 variables and 105 cases on 1000 random datasets.*

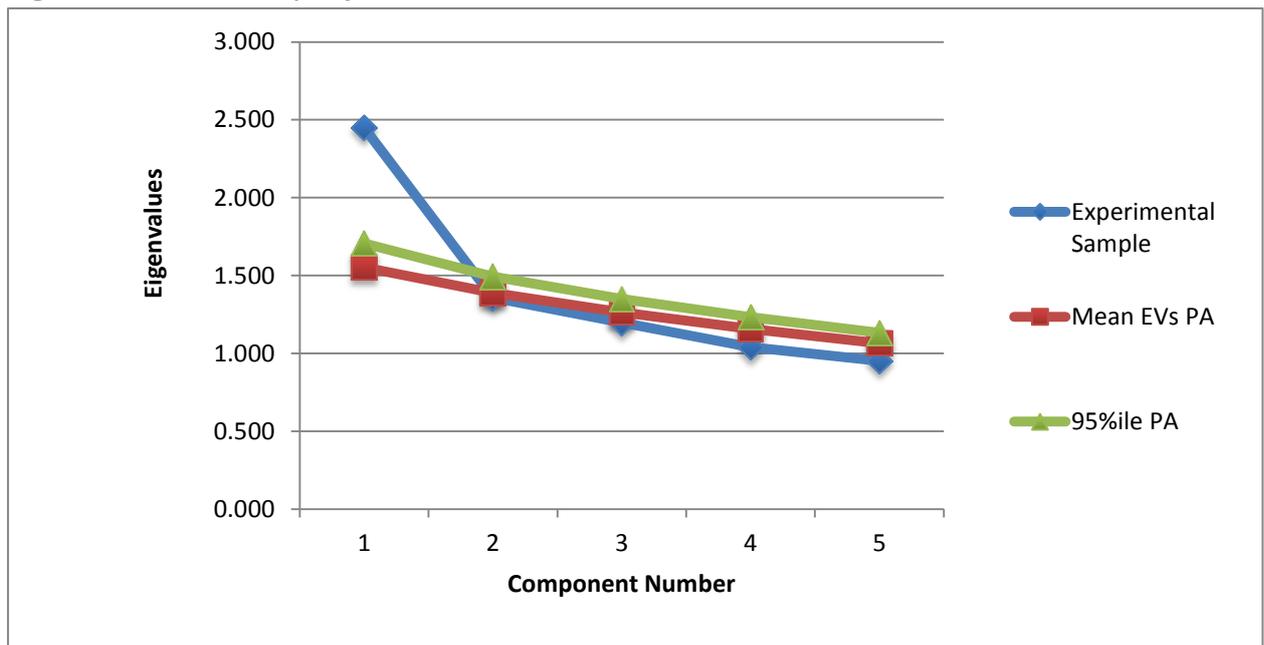


Table 2. *Initial PCA solution with 1 factor and 11 variables: Factor loadings for GNVs.*

GNVs	Component Loading
Expanded Personal reference	0.74
Personal Knowledge Justification	0.64
Idealization	0.60
Exhibitionism	0.53
Narcissistic Deflation	0.47
Elevated Mood States	0.46
Omnipotence	0.36
Narcissistic Negation	0.34
Magic	0.33
Narcissistic Devaluation	0.25
Reflection	0.07

Table 3. Final PCA solution with 1 factor and 7 variables: Factor loadings for GNVs.

GNVs	Component Loading
Expanded Personal reference	0.73
Personal Knowledge Justification	0.67
Idealization	0.62
Exhibitionism	0.57
Elevated Mood States	0.49
Narcissistic Deflation	0.44
Omnipotence	0.39

Target variables for the analyses on Narcissism in Relation to Self-Esteem and Manipulation.

The Narcissism and Grandiosity Factor (NG-Factor) obtained from the PCA and FA from the Rorschach data was used together with the FFNI Grandiose and Vulnerable scales as predictors of narcissism on the subsequent analyses that had as main focus the examination of relationships between narcissistic traits and reactions to the self-esteem insult. Markers of narcissism were analyzed in relation to three main groups of variables:

a) self-report scores on affects (PANAS-X/RSES scales, namely: *Hostility; Joviality; Self-Assurance; Fear; Guilt; Sadness*) before the Success condition (T1), after the Success condition (T2) and after the Failure condition (T3). More specifically, difference scores were calculated between the scores of T3 and T1 to allow the core comparison between affective states at the baseline and after the Failure condition and this led to the corresponding difference scores: *HostilityT3T1Diff; JovialityT3T1Diff; SelfAssuranceT3T1Diff; FearT3T1Diff; GuiltT3T1Diff; SadnessT3T1Diff*. Furthermore a measure of general emotional

reactivity was obtained computing the standard deviations of the scores across repeated measures (T1, T2 and T3) and this resulted in the variables *HostilitySD*; *JovialitySD*; *SelfAssuranceSD*; *FearSD*; *GuiltSD*; *SadnessSD*.

b) Self-report scores on state self-esteem and (i.e. *Performance*; *Social*; *Appearance* SSE scales) at T1, T2 and T3. Likewise for the affect variables, difference and deviations scores were obtained for the three state self-esteem scales. As such, *PerformanceT3T1Diff*; *SocialT3T1Diff* and *AppearanceT3T1Diff* on the one hand and *PerformanceSD*; *SocialSD* and *AppearanceSD* on the other were used in the analyses.

c) Closed-ended attributions for performance after T2 and T3 (i.e. *Success – Determined by Ability Presence or Lack*; *Success – Degree of Ability a Factor* and the same for Effort and Test Difficulty).

d) Open-ended attributions for performance after T2 and T3, coded for the aforementioned *Narcissistic Aggrandizement (AttNarcAggrand)*, *Externalization of Blame (AttExternalizationS* and *AttExternalizationF)* and *Anger*. As anticipated, Anger was coded also for the verbalizations provided by the participants in response to the questions for suspicions, therefore two Anger codes for the open-ended questions were obtained, one after the Failure condition and one relative to the questions for suspicion respectively (i.e. *AttAngerF* and *AttAngerSusp*). Ultimately, after their level of intercorrelation was checked ($r = 0.24$, $p < .05$) *AttAngerF* and *AttAngerSusp* were combined into a more informative and synthetic composite score obtained by the mean of both the scales derived from the responses to the open-ended questions (*MaxAnyOpenAnge*). Table 4 shows the descriptive statistics for all the target variables. The majority of the variables were normally distributed. Square Root transformations were applied to variables with severe skew. However, since these transformations reduced skew, but did not fix the discontinuities in the distributions. the original variables were used.

Table 4. Descriptive Statistics for Target Variables (N = 105).

	Mean	SD	Skew	Kurtosis
<i>Self-reported Narcissism</i>				
<i>FFNI_Grandiose</i>	305.70	46.83	0.19	-0.24
<i>FFNI_Vulnerable</i>	109.64	20.10	0.08	-0.22
<i>Moods and Affects</i>				
<i>HostilityT3T1Diff</i>	0.19	0.96	0.43	1.78
<i>MaxAnyMLAnger</i>	0.70	0.79	0.60	-1.13
<i>MeanAnyMLAnger</i>	0.43	0.53	1.16	0.63
<i>AttAngerF</i>	0.55	0.76	0.96	-0.59
<i>AttAngerSusp</i>	0.30	0.59	1.81	2.17
<i>JovialityT3T1Diff</i>	-0.78	0.78	-0.72	1.19
<i>SelfAssuranceT3T1Diff</i>	-0.82	0.68	-0.30	-0.30
<i>FearT3T1Diff</i>	-0.26	0.54	0.35	4.27
<i>GuiltT3T1Diff</i>	0.19	0.70	0.64	1.78
<i>SadnessT3T1Diff</i>	-0.30	0.71	-0.89	4.05
<i>Self-esteem</i>				
<i>PerformanceT3T1Diff</i>	-0.28	0.62	-0.26	1.43
<i>SocialT3T1Diff</i>	0.12	0.50	-0.18	0.81
<i>AppearanceT3T1Diff</i>	-0.10	0.51	0.55	1.65
<i>HostilitySD</i>	0.41	0.41	1.55	1.76
<i>JovialitySD</i>	0.57	0.37	0.76	0.17
<i>SelfAssuranceSD</i>	0.54	0.33	0.54	-0.18
<i>FearSD</i>	0.26	0.26	1.42	1.93
<i>GuiltSD</i>	0.33	0.35	1.34	1.10
<i>SadnessSD</i>	0.34	0.34	1.73	4.05
<i>PerformanceSD</i>	0.36	0.30	1.28	1.14
<i>SocialSD</i>	0.31	0.23	1.47	2.51

<i>AppearanceSD</i>	0.28	0.23	1.39	2.19
<i>Attributions for Performance</i>				
<i>AttNarcAggrand</i>	0.67	0.73	0.61	-0.89
<i>AttExternalizationS</i>	0.50	0.65	0.97	-0.16
<i>AttExternalizationF</i>	1.09	0.71	-0.12	-0.98
<i>Success - Determined by Ability Presence or Lack</i>	1.05	0.21	4.31	16.90
<i>Success - Degree Ability a Factor</i>	5.21	1.04	-0.54	1.20
<i>Success - Determined by Effort Presence or Lack</i>	1.07	0.25	3.53	10.63
<i>Success - Degree Effort a Factor</i>	5.43	1.23	-0.37	-0.75
<i>Success - Test Easy or Hard</i>	1.34	0.48	0.67	-1.58
<i>Success - Degree Test Difficulty a Factor</i>	4.65	1.31	-0.34	0.19
<i>MeanDegreeOfAbilityEffortS</i>	5.32	1.01	-0.40	-0.22
<i>MeanAbilityEffortSR</i>	0.89	0.42	-3.81	13.76
<i>MeanAbilityEffortByDegreeS</i>	4.78	2.41	-2.78	8.47
<i>Failure - Determined by Ability Presence or Lack</i>	1.62	0.49	-0.50	-1.79
<i>Failure - Degree Ability a Factor</i>	4.02	1.72	0.08	-0.54
<i>Failure - Determined by Effort Presence or Lack</i>	1.48	0.50	0.10	-2.03
<i>Failure - Degree Effort a Factor</i>	4.50	1.58	-0.01	-0.57
<i>Failure - Test Easy or Hard</i>	1.90	0.31	-2.62	4.95
<i>Failure - Degree Test Difficulty a Factor</i>	5.22	1.55	-0.88	0.46
<i>MeanDegreeOfAbilityEffortF</i>	4.26	1.35	0.12	-0.08
<i>MeanAbilityEffortFR</i>	-0.10	0.81	0.18	-1.47
<i>MeanAbilityEffortByDegreeF</i>	-0.44	3.62	0.31	-0.91

Results Section II: Narcissism in Relation to Self-Esteem Manipulation

Manipulation checks

As a preliminary step, manipulation checks were run in order to assure that the experimental manipulation of self-esteem had been effective in letting them perceive to have scored better

in the Success condition, obtaining better results than their peers, and to have had a worse performance on the Failure condition, concluding that their abilities were not so superior than those of their peers. As such, we expected the means in the Failure condition to be significantly lower than those of the Success condition, in regards to number of items the participants recalled to have gotten correct, the percentile rank they have reached and their satisfaction with their performance compared to the average student and to their usual performance. As predicted, T Test analyses with 104 degrees of freedom confirmed the means were lower at a high level of significance ($p < .001$) in the Failure condition for all the target variables: Items Correct ($t = 80.6, p < .001$); Percentile Rank ($t = 130.66, p < .001$); Performance Compared to the Average Student ($t = 17.22, p < .001$); Performance Compared to Usual ($t = 15.51, p < .001$); How Satisfied with Performance ($t = 16.20, p < .001$).

The Analyses presented were repeated excluding suspicious participants (i.e. $N = 6$ participants to whom was assigned a score of “1” in the 0-1 Likert scale for Suspicion, see Procedure section) and the effect sizes stayed about the same but a slight loss of power occurred. For this reason, all the analyses proceeded with the full sample of $N = 105$ participants.

Relationships Between Self-reported Narcissism and Self-reported Baseline Mood and Self-esteem

Table 5 shows correlations between self-reported narcissism (Grandiose and Vulnerable) with the baseline mood and self-esteem. At T1 Grandiosity is positively associated with positive affective indicators such as Joviality, Self-Assurance, and all three Self-esteem scales, whereas is negatively associated with Guilt. On the other hand, Vulnerability is strongly correlated with the neuroticism variables (Hostility, Fear, Guilt and Sadness) and negatively with Joviality, Self-Assurance, and all three Self-esteem variables.

Table 5. Correlations between Self-report Narcissism (Grandiose and Vulnerable) and baseline Affects and Self-Esteem.

Self-report Affect & Mood	<i>r</i>		<i>p</i>	
	<i>FFNI_Grandiose</i>	<i>FFNI_Vulnerable</i>	<i>FFNI_Grandiose</i>	<i>FFNI_Vulnerable</i>
<i>Hostility_T1</i>	0.08	0.37	0.418	0
<i>Joviality_T1</i>	0.33	-0.26	0.001	0.007
<i>SelfAssurance_T1</i>	0.53	-0.25	0	0.009
<i>Fear_T1</i>	-0.13	0.41	0.186	0
<i>Guilt_T1</i>	-0.21	0.46	0.03	0
<i>Sadness_T1</i>	0.03	0.38	0.766	0
<i>PerformanceSE_T1</i>	0.36	-0.45	0	0
<i>SocialSE_T1</i>	0.22	-0.62	0.023	0
<i>AppearanceSE_T1</i>	0.22	-0.38	0.023	0

N = 105. Significant correlations are bolded.

Prediction of T3-T1 Changes in Mood and Self-esteem from Narcissism

As anticipated in the *Aims and Hypotheses* section, according to Rhodewalt and Morf (1998) we predicted that narcissism, assessed through the RIM and the FFNI, would predict an increase in hostility when a failure followed a success. As such, we focused in predicting differences in Hostility and other moods and state self-esteem variables from baseline to the failure condition. Indicators of Anger obtained from the open-ended questions (*MeanAnyOpenAnger*) were included as well together with self-reported anger and hostility. As shown in Table 6, the Rorschach *NG-Factor* was a near significant predictor of increased self-reported hostility ($r = 0.18$, $p = .069$) and verbally expressed anger ($r = 0.17$, $p = .083$).

FFNI_Grandiose scale was *not* associated with increased hostility ($r = 0.03$, $p > .5$) or anger expressed in the spontaneous responses to open-ended questions ($r = 0.04$, $p > .5$). In turn, *FFNI_Vulnerable* scale was a near significant predictor of increased self-reported hostility ($r = .17$, $p = .078$) but not of verbally expressed anger ($r = .02$, $p > .5$). Furthermore, grandiosity from the FFNI predicted a decrease in Self-Assurance following failure ($r = -0.22$, $p = .027$), whereas vulnerability was associated to a decline in Appearance Self-esteem ($r = -.21$, $p = .030$) and to an increase in guilt ($r = .18$, $p = .068$) following failure.

Table 6. Prediction of T3-T1 Changes in Mood and Self-esteem from Narcissism.

	r			p		
Affect & Mood	NG-Factor	FFNI_G	FFNI_V	N-G Factor	FFNI_G	FFNI_V
<i>HostilityT3T1Diff</i>	<i>0.18</i>	0.03	<i>0.17</i>	0.069	0.759	0.078
<i>MaxAnyOpenAnger</i>	<i>0.17</i>	0.04	0.02	0.083	0.666	0.88
<i>MeanAnyOpenAnger</i>	<i>0.17</i>	0.04	0.02	0.079	0.685	0.836
<i>JovialityT3T1Diff</i>	0.07	0.00	-0.06	0.511	0.969	0.532
<i>SelfAssuranceT3T1Diff</i>	0.07	-0.22	0.00	0.512	0.027	0.994
<i>FearT3T1Diff</i>	-0.06	0.12	-0.13	0.549	0.223	0.198
<i>GuiltT3T1Diff</i>	0.05	0.01	<i>0.18</i>	0.607	0.934	0.068
<i>SadnessT3T1Diff</i>	0.05	0.00	-0.03	0.585	0.991	0.744
<i>PerformanceT3T1Diff</i>	-0.08	0.06	-0.14	0.4	0.514	0.147
<i>SocialT3T1Diff</i>	-0.08	-0.06	-0.12	0.397	0.557	0.222
<i>AppearanceT3T1Diff</i>	-0.08	-0.09	-0.21	0.445	0.377	0.03

N = 105. Significant correlations are bolded. Near significant correlations are in italics. FFNI_G = FFNI_Grandiose; FFNI_V = FFNI_Vulnerable.

Prediction of Attributions for Success and Failure from Narcissism

Through Pearson correlations we examined if narcissism was associated to specific attributions for performance, with a focus on attributions related to the initial success condition and attributions for ability in particular. Table 7 summarizes the correlations between narcissism and attributions for performance. Composite scores were calculated to aggregate information from Ability-Presence and Effort-Presence attributions that were highly correlated within the Success condition ($r = .66$). The RIM Narcissism and Grandiosity Factor positively correlated with first test results (success) being due to lack of ability ($r = 0.25$, $p = 0.011$) and with degree of effort in the Failure condition ($r = 0.19$, $p = 0.05$). The largest correlation was with the degree of test difficulty being a factor in failure ($r = 0.27$, $p = 0.006$) and the next largest correlate was with the propensity to externalize on success ($r = 0.25$, $p = 0.011$). The latter correlation might mean that the people high on the Rorschach Narcissism and Grandiosity factor get defensive when even two items are wrong (in the Success condition participants were told that they had chosen the correct option for 8 of the 10 items presented in the cognitive testing). Furthermore, NG-Factor was also correlated with the composite scores for Degree of Ability/Effort on Failure ($r = 0.20$, $p = 0.044$).

The FFNI scales had no associations with attributions for success.

However, FFNI Grandiose scale had some significant correlations with variables in the Failure condition. Precisely, it was negatively correlated with degree of ability a factor in Failure ($r = -.29$, $p = 0.003$) and with the composite variable for Degree of Ability/Effort ($r = -.29$, $p = 0.002$). In this context, the negative correlation with degree of ability in Failure might represent a disavowal of responsibility.

Table 7. Correlations between Narcissism and Attributions for performance.

Attributions for Performance	r			p		
	NG Factor	FFNI_G	FFNI_V	NG Factor	FFNI_G	FFNI_V
<i>AttNarcAggrand</i>	0.00	0.01	0.02	0.993	0.927	0.866
<i>AttExternalizationS</i>	0.25	0.05	-0.02	0.011	0.646	0.828
<i>AttExternalizationF</i>	0.12	-0.06	-0.03	0.218	0.555	0.781
<i>Success - by Ability P or L</i>	0.25	-0.15	0.04	0.011	0.134	0.67
<i>Success - Degree Ability</i>	0.04	0.06	-0.17	0.707	0.56	0.081
<i>Success - by Effort P or L</i>	0.08	0.04	0.05	0.402	0.671	0.649
<i>Success - Degree Effort</i>	0.05	-0.05	-0.17	0.586	0.594	0.093
<i>Success - Test Easy or Hard</i>	0.12	0.04	0.02	0.221	0.711	0.855
<i>Success - Degree Difficulty</i>	0.16	-0.06	0.08	0.095	0.514	0.446
<i>MeanDegreeOfAbilityEffortS</i>	0.05	0.00	-0.19	0.6	0.982	0.054
<i>MeanAbilityEffortSR</i>	-0.17	0.05	-0.05	0.075	0.615	0.628
<i>MeanAbilityEffortByDegreeS</i>	-0.14	0.06	-0.12	0.152	0.543	0.241
<i>Failure - by Ability P or L</i>	-0.04	0.07	0.01	0.679	0.482	0.956
<i>Failure - Degree Ability</i>	0.13	-0.29	-0.05	0.187	0.003	0.589
<i>Failure - by Effort P or L</i>	-0.07	0.11	0.07	0.46	0.27	0.45
<i>Failure - Degree Effort</i>	0.19	-0.19	-0.15	0.047	0.058	0.121
<i>Failure - Test Easy or Hard</i>	-0.07	0.05	0.13	0.494	0.604	0.19
<i>Failure - Degree Difficulty</i>	0.27	-0.10	0.09	0.006	0.321	0.347
<i>MeanDegreeOfAbilityEffortF</i>	0.20	-0.29	-0.12	0.044	0.002	0.209
<i>MeanAbilityEffortFR</i>	0.07	-0.11	-0.05	0.482	0.271	0.619
<i>MeanAbilityEffortByDegreeF</i>	0.08	-0.14	-0.02	0.422	0.157	0.868

N = 105. Significant correlations are bolded. Near significant correlations are in italics. FFNI_G = FFNI_Grandiose; FFNI_V = FFNI_Vulnerable; Success - by Ability P or L = Success - Determined by Ability Presence or Lack (where 1 = presence, 2 = lack); Success - Degree Ability = Success - Degree Ability a Factor; Success - by Effort P or L = Determined by Effort Presence or Lack; Success - Degree Effort = Success - Degree of Effort a Factor; Success - Degree Difficulty = Success - Degree Test Difficulty a Factor (the same analogous notation was used for the Failure condition).

Attributions as Potential Mediators in the Associations between Narcissism and Mood and Self-esteem Differences

Once we discovered the significant associations between narcissism and the attributions that participants made for their performance in the cognitive tests, we explored mediation effects of such attributions in the associations between narcissism and the mood/self-esteem variations from Baseline to Failure. Regarding this, Rhodewalt and Morf (1998) tested a contextual hypothesis in which attributions for the first test would mediate affect on the second test. Furthermore, they tested what they called a “concurrent” hypothesis that attributions on the test just completed (either the success or the failure condition in this case) would mediate affect on that test. Therefore we focused on the potential role of attributions for success and failure mediating associations of narcissism with mood and self-esteem differences from T1 to T3. To this end we used multiple regression analyses with narcissism measured through the Rorschach Test and the FFNI as predictors, the affects as dependent variables and the attributions as mediators. We focused on relationships between narcissism and affects that could have been meaningfully modeled on the context of a mediational relationship, and focused on affects (dependent variables) that had an at least near significant relationship with the predictor. As such, although in the classic Baron and Kenny (1986) approach to testing mediation, the Independent Variable (IV) predictor must correlate with the criterion and the potential mediator, and the potential mediator must correlate with the criterion when entered in a regression with the IV, MacKinnon, Fairchild and Fritz (2007) and MacKinnon and Fairchild (2009) point out how it is not necessary to require the IV to be correlated with the dependent variable for mediation to operate on the IV relative to the dependent variable. For this reason we tested also the near significant correlation for *HostilityT3T1Diff* and *MeanAnyOpenAnger*.

Preliminary, we evaluated if gender was associated to any of the predictors and this was not the case: NG-Factor from the Rorschach Test, FFNI_Grandiose and FFNI_Vulnerable did not have significant relationships with the gender of the participants (all p values were > .19). Starting with the Rorschach NG-Factor, a first mediation analysis shown that externalized responses (*AttExternalizationS* beta = -0.14, p = 0.89) to the initial testing did not mediate the self-reported change in Hostility (*HostilityT3T1Diff*) from baseline to Failure ($R^2 = .00$, p = 0.89). However, when predicting anger expressed verbally on the free text responses (*MeanAnyOpenAnger*) we found that externalized responses to the initial testing fully mediated the association between *NG-Factor* and *MeanAnyOpenAnger*. The *AttExternalizationS* beta was in fact 0.36 (p = .000) and the beta for NG-Factor went from 0.17 (p = 0.079) to 0.08 (p = 0.375) when the mediator *AttExternalizationS* was entered in the equation, and the R^2 went from 0.03 to 0.15 (p = .000). We then tested further mediation possibilities for the relation between NG-Factor and different indicators of anger and hostility using as potential mediators the variables that the largest correlations with the factor (e.g. the composite score for the degree of ability and effort being factors in the failure condition) but none of them brought significant results (p values of the R^2 change variation > .137). This indicates overall that the information obtained by the free text responses about attributions were more effective mediators of the relationship between RIM narcissism and affective responses.

Finally mediation analyses were carried out for the attribution variables that were correlated to *FFNI_Grandiose* as possible mediators of the relations between self-reported grandiose narcissism and the difference between T1 and T3 for Self-Assurance (r = -.22, p = 0.027). This link could be mediated by the grandiose individual's defensive propensity to say that degree of ability (r = -.29, p = 0.003) or degree of ability and effort (r = -.29, p = 0.002) on Failure were not factors in performance. Results of the two regression analyses did not

prove this possible mediation effect. The betas for the two potential moderators were in fact not significant (*Failure - Degree Ability a Factor*: beta = -0.15, p = .147; *MeanDegreeOfAbilityEffortF* beta = -0.07, p = 0.519) and so was the variation of the R² caused by their addition in the equation (R² change for *Failure - Degree Ability a Factor* = 0.02, p = 0.147; for *MeanDegreeOfAbilityEffortF* R² change 0.00 = and p = 0.519).

FFNI_Vulnerable was a predictor or near-predictor of several mood and self-esteem targets, including *HostilityT3T1Diff* (0.17, p = .078), *GuiltT3T1Diff* (r = 0.18, p = .068), and *AppearanceSelf-EsteemT3T1Diff* (r = -0.21, p = 0.03). However, vulnerability was not significantly correlated with any of the attributional variables and therefore no mediational analyses were carried out.

Overall, the main finding was that the *NG-Factor* prediction of verbally expressed anger following failure was fully mediated by the propensity of people elevated in the factor to externalize responsibility for getting two items incorrect in the Success condition.

Relationships between Self-reported Vulnerability and Variability in Self-Reported Mood and Self-Esteem Across Assessments

Finally, we tested the hypothesis for which self-reported narcissistic vulnerability would have been associated to general higher emotional reactivity across T1, T2 and T3. As Table 8 shows, narcissistic vulnerability assessed through the FFNI was positively and significantly correlated to general emotional variability in self-reported Hostility, Fear, Guilt, Sadness and both Performance and Social Self-Esteem.

Table 8. Correlations between Self-reported Vulnerable Narcissism and Affect and Self-Esteem Variability Across Conditions.

	FFNI_Vulnerable	
	r	p
<i>HostilitySD</i>	0.33	0.001
<i>JovialitySD</i>	0.11	0.271
<i>SelfAssuranceSD</i>	0.05	0.59
<i>FearSD</i>	0.31	0.001
<i>GuiltSD</i>	0.43	0
<i>SadnessSD</i>	0.23	0.018
<i>PerformanceSD</i>	0.26	0.008
<i>SocialSD</i>	0.24	0.014
<i>AppearanceSD</i>	0.00	0.995

N = 105. Significant correlations are bolded.

Discussions

The present study had the dual aim of empirically further investigating the validity of the GNVs to assess narcissism on the one hand and to explore the patterns between narcissism and affective reactions in response to a self-esteem manipulation.

Overall, this work confirmed the utility of a number of the GNVs, and their use as a cohesive measure, in the effort of more thoroughly conceptualize and measure narcissism through the Rorschach Test. Moreover, through an experimental manipulation that resulted to be effective in the participants included in the study, our findings identified several mechanisms implied in narcissistic reactions to self-esteem insults. More specifically, about the narcissistic reactions to self-esteem insults and negative performance, our study confirmed what

Rhodewalt and Morf (1998) had found with a similar methodology and that is an increase in hostility for individuals with narcissistic traits when a failure followed a success.

In regard to the first point, this experimental study largely replicated results we obtained for a part of the GNVs with previous works on different ages (see Chapter II and III), providing additional foundation specifically for Expanded personal Reference, Personal Knowledge Justification, Idealization and Omnipotence. In fact, in the nonclinical group of the present study relevant GNVs defined a single component, strongly defined by EPR, PER, IDL and more moderately by EXH, EMS, NDF and OMP. This argues in favor of the ability of the RIM to capture core narcissistic dimensions which have been thermalized very early from in the history of the construct and which are still part of the most common conceptualizations of narcissism. In fact, aspects such as self-referencing and egocentrism, inflated self-image, sense of entitlement and superiority, with underlying conflicts and vulnerability in self-esteem, can be found in a variegated corpus of knowledge on the topic that goes from Kernberg (1970, 1975) and Kohut's (1968, 1971) portraits of narcissistic individuals to the current most up-to-date clinical descriptions (APA, 2013) to the contributions of various empirical researchers (see for example Miller, Campbell, & Pilkonis, 2007; Pincus et al., 2009; Ronningstam, 2011).

Furthermore, the validity and utility of the Rorschach Narcissism and Grandiosity Factor obtained from the GNVs data was confirmed when the factor was used together with the FFNI Grandiose and Vulnerable scales to study the relationships between narcissism and affective reactions to insults to self-esteem. In fact, the Rorschach Narcissism and Grandiosity Factor proved to be a more valid predictor of self-reported hostility and *expressed and observed* anger and irritation in comparison to self-reported narcissistic grandiosity. The latter, in turn, was not associated to changes in hostility and anger after participants with narcissistic traits were confronted with failure. Individuals describing

themselves as more grandiose would in fact bear the consequences of the self-esteem offence more in the area of performance self-esteem, probably feeling their abilities questioned and being disturbed by this. Still in regard to the relations between self-reported narcissism and affective reactions to a negative performance, self-reported vulnerable narcissism was associated with increased self-reported hostility and guilt and with a decline in appearance self-esteem.

Two points seem especially worth of note from an examination of the relationships that RIM narcissism on the one hand and self-reported narcissistic vulnerability on the other have with increased hostility and anger after failure.

Firstly, the relationship that RIM narcissism holds with expressed and observed anger might be relevant in relation to its connections to real-life behavior and socially dangerous correlates of narcissism. Secondly, our findings confirm the recently hypothesized bond that would link narcissistic vulnerability, rather than grandiosity per se, to rage and hostility (Krizar and Johar, 2014).

The role of RIM narcissism in predicting verbally *expressed* and *observed* anger – along with self-reported hostility – might imply that, coherently to the evidences (see Mihura et al., 2013) that Rorschach scores correspond better with externally assessed qualities (i.e. informant ratings and observed behaviors) than with self-reported qualities, inferences made about narcissistic anger through the RIM might be tight to more *everyday expressed* and *observed* anger. The link between implicit/behaviorally assessed constructs – such are in the present study narcissism measured through the GNVs and anger rated from the participants' responses to open-ended questions – and observable everyday behavior can be meaningfully interpreted in the light of the conceptualization of “implicit motives” and “self-attributed motives” by McClelland, Koestner and Weinberger (1989). In what is a cornerstone of current personality assessment theories, the authors drew a line between implicit motives

designated as the information obtained from “imaginative thought from stories written to pictures” (p. 690) and self-attributed motives that are usually derived from self-report methods. If this last class of motives would be more likely associated to more rationally elaborated contracts and behaviors taking place in rather structured situations, *implicit motives* would be connected to “a more primitive motivational system” (p. 690) which is closer to affective experiences and thus more likely to predict spontaneous behaviors observed in less structured contexts. Building on this, we can speculate that the RIM-assessed narcissism in our study is able to predict not only levels of irritation acknowledged and rationally disclosed by the person, but also of more spontaneously exhibited and therefore ecologically valid experiences of anger. Consequently, such observations might be associated to hostile and possible violent behavior enacted in everyday unstructured situations by narcissists especially in response to self-esteem affronts.

Secondly, the relationships between self-reported narcissistic vulnerability and self-rated hostility in response to an experience of failure provide further elements to understand the triggers of the so called “narcissistic rage” (Kohut, 1972). In a slightly different light from previous works that focused primarily on the contribution of grandiose narcissism and overly positive self-image in eliciting deep feelings of resentment and irritation after an ego-threat (Baumeister, Smart, & Boden, 1996; Rhodewalt & Morf, 1998; Stucke & Sporer, 2002), our findings suggest an important role played by the more *covert* and vulnerable facet of narcissism in determining reactions to self-esteem insults. This seems coherent with recent evidences (Krizan & Johar, 2014) obtained with an experimental design that describe self-reported vulnerable narcissism, and not grandiosity, as a predictor of both reacted (i.e. directed to the provider of an unpleasant stimulus) and displaced (i.e. addressed to a third target not responsible for the unpleasant stimulus) aggression in response to a provocation. Furthermore, our findings are coherent with those of Krizan and Johar in that point out other

covert correlates such as depression and shame in the affective reactions of individuals higher in vulnerable narcissism after an insult. As such, self-reported vulnerability in our study was associated also with feelings of guilt and decreased appearance self-esteem after the experimental manipulation. Additionally, it might be noted how FFNI-Vulnerability had several significant positive correlations not only with the aforementioned changes of mood and self-esteem after the manipulation, but also with general variability across the three assessments in most of the target self-reported affects such as hostility, fear, guilt, sadness and both performance and social self-esteem. Beyond replicating the results found in latest studies from the Five-Factor domain that see narcissistic vulnerability as associated to neuroticism (Miller, Gentile, & Campbell, 2012), our results on the matter might suggest that the general augmented emotional susceptibility of vulnerable narcissists could have connections with their higher propensity to experience anger and hostility after the self-esteem insult.

Finally, our result contribute to the understanding of narcissistic reactions to ego-threats by showing specific attributional styles that individuals higher on narcissistic traits use to cope with the disappointment and frustration deriving from failure but also their tendency to feel responsible for good outcomes. In particular, RIM Narcissism and Grandiosity Factor positively correlated with a tendency to attribute the results obtained in the positive feedback condition to lack of ability and with degree of effort put in solving the cognitive matrices in the Failure condition. We interpreted the first evidence as the propensity of people high on the Rorschach Narcissism and Grandiosity Factor to experience even just two items wrong in the success condition as a poor performance, and defensively externalizing responsibility for this. Such an interpretation for this quite unexpected finding was also backed up by the fact that two participants responded to the manipulation checks administered after Success that they had scored below average compared to other students and eleven declared to be

dissatisfied with their performance. Further support for this came also from the free text responses on attributions for the positive feedback condition. Taken to the extreme, these findings might mean that narcissistic individuals, due to their perfectionism and high expectancies about themselves, are not even willing to take responsibility for “two items wrong”. On a related note, and supporting the possible tendency of RIM narcissistic individuals to externalize responsibility placing it “outside the self”, can be viewed the even higher relationship between the RIM factor and test difficulty being a factor in failure and with the composite scores for Degree of Ability/Effort on Failure.

Conversely, Self-reported grandiosity did not combine with any of the attributional mechanisms for success, while it significantly and negatively correlated with degree of ability being a determinant factor in Failure and with the composite variable for Degree of Ability/Effort. In this context, the fact of negating the importance of ability in determining a bad outcome might represent a disavowal of responsibility. As a whole, such divergences between the attributions made for performance by people high on RIM narcissism or in FFNI narcissism indicate that individuals who self-report grandiosity deny ability and effort are responsible for their failure, whereas those high on the Rorschach grandiosity factor externalize by recurring to test difficulty, despite still saying their ability and effort are important.

Furthermore, the fact of externalizing personal responsibility for a suboptimal performance in the success condition perceived as a failure in individuals higher on the RIM Narcissism and Grandiosity strongly mediated the relationship between the level of RIM narcissism itself and verbally expressed anger following failure. This last finding partially support Rhodewalt and Morf’s (1998) contextual hypothesis for which the attributions made on a test mediate the affective reactions on the following test, and draw further attention to the complexity that

characterizes narcissistic functioning and its relationships with self-esteem and associated emotions.

In conclusion, the present study confirms the validity of a Rorschach assessment of narcissism through selected and combined GNVs, and furthermore provide insight on affective and self-esteem dynamics related to narcissism that can be observed when an ego-threat occurs and that might be associated to more everyday expressed anger. One reason our effects may be slightly smaller than those obtained by Rhodewalt and Morf (1998) is that we did not use an extreme groups design selecting participants with high self-reported narcissism scores. However, the fact of not restricting the people included in the study to a predetermined specific range of scores on an a measure might at the same time allow to extend inferences to wider populations and to individuals with “subclinical” levels of narcissism, ultimately increasing the external generalizability of the findings.

Chapter V

Summary, General Discussions and Final Considerations

The present investigation studied the construct of narcissism on a variety of contexts and ages and with a multi-method approach, as an effort to develop a coherent, meaningful and validated system to assess narcissistic functioning through the Rorschach Test. At the same time, our findings contribute to disentangle a series of interrogatives recurring in the literature on narcissism and NPD which also connects to some of the most socially important narcissistic correlates such as predominantly aggression (Bushman & Baumeister, 1998; Krizan & Johar, 2014), psychopathy (Schlesinger, 1998; Stone, 2001); suicide (Blasco-Fontecilla et al., 2009; Kernberg, 2001; Ronningstam, Weinberg, & Maltzberger, 2008). Furthermore, extending our investigation to children and adolescents, we explored the possibility to identify distinct markers of narcissism in developmental age, addressing a somewhat neglected and contested topic in empirical research (Washburn et al., 2004; Kernberg, Weiner, & Bardenstein, 2000; Bleiberg, 2001).

As illustrated in the Literature Review Section (Ch. I) the construct of narcissism has been discussed in a rich array of scientific scenarios, which goes from psychodynamic approaches (e.g. Kernberg, 1978, 1984; Kohut, 1971, 1977; Ronningstam, 2009, 2011, 2012), to more recent social-psychological experimental studies (Rhodewalt & Morf, 1998; Morf & Rhodewalt, 2001), to trait models (Miller & Campbell, 2010; Miller et al., 2011; Samuel & Widiger, 2008) and to contemporary personality researchers and theorists (Baumeister, Bushman, & Campbell, 2000; Campbell, 1999; Dickinson & Pincus, 2003; Emmons, 1981, 1984, 1987, 1989; John & Robins, 1994; Raskin & Hall, 1979; Raskin, Novacek). In the multifaceted and at times bewildering corpus of conceptualizations on narcissism, the term

has been used with rather different meanings, sometimes conceived as a continuous personality trait and in other contexts presented as a psychopathological personality configuration, contributing to increase the theoretical confusion. More specific and essential conceptual issues involve diverging ideas about the definition of narcissism itself. In fact, whereas the most accepted diagnostic systems overly focus on the high self-esteem dimension in their description of narcissism, influential clinical theories and studies from personality psychology emphasize also the continuous and painful oscillations between high and low self-esteem states that characterize narcissistic individuals (Rhodewalt, Madrian & Cheney, 1998). In this view, grandiose behaviors could be interpreted as a defensive reaction towards inadequacy feelings, and this conceptualization permeates also the assessment of narcissism through the RIM that we proposed.

The development of a reliable and comprehensive measure of narcissism through the RIM seems warranted also in relation to methodological and assessment issues associated to narcissism and NPD. In fact, research shows how narcissism is in fact particularly sensitive to the diagnostic method used (Oltmanns et al., 2002) substantially due to the potential difficulty of narcissistic individuals to report about themselves and to envision their own psychological qualities with insight (Miller, Widiger, & Campbell, 2010; Pincus & Lukowitsky, 2010), with evident limitations connected to an assessment relying on self-report measures only (Huprich & Ganellen, 2006).

For the purpose of overcoming some of the difficulties still surrounding the assessment of narcissism and at the same time disentangling specific aspects of the aforementioned conceptual points which as still unclear, we tested a set of 11 Rorschach variables as indicators of narcissistic functioning and grandiosity along with related psychological constructs. Rorschach protocols from Italian and American clinical and nonclinical groups of different ages were scored for variables connected to narcissistic

functioning, some of which we modified from previous literature: Omnipotence and Idealization (Cooper and Arnow, 1988); Reflection (Exner, 2003), Personal Knowledge Justification (Meyer et al., 2011), Exhibitionism (Wagner, 1965), Magic (Homann, 2013), and Elevated Mood States (Cooper and Arnow, 1986); and some of which we developed: Expanded Personal Reference, Narcissistic Devaluation, Narcissistic Deflation, Narcissistic Denial. Additionally, we analyzed the contribution of different types of Reflection, starting from the regular type involving an object and its symmetrically identified mirror image, to determine if the addition of more “human”, “egocentric” or “narcissistic” qualities to it and specific orientations of the object perceived would have contributed to a better link of the variable to narcissistic criteria (see Horn, Meyer, & Mihura, 2009 and Mihura, Meyer, Dumitrascu, & Bombel, 2013).

The validity of the 11 single GNVs was tested on a series of studies in different settings (clinical, nonclinical, and experimental), age groups (children, adolescents, young adults and adults) and using a multimethod assessment to obtain external criteria of narcissism.

The relationships between the 11 GNVs and their factorial structure have been examined with the same methodology (Principal Component Analysis and Parallel Analyses) across all the different studies. Once one or more narcissism and grandiosity factors were identified in the data, their validity was tested in relation to external criteria. A synthetic summary of the principal findings along with a general discussion is presented below, along with the unresolved issues and new interrogatives generated by our studies

Chapter II represents, with its two composing studies, the foundations of the present investigation, examining the structural factor of the GNVs first in a nonclinical sample (N = 145) and then test it further on a clinical group, assessing the criterion validity of the narcissism factor obtained against external criteria. Analyses on the nonclinical sample

(Study 1) led to extract a single factor from the data, with four of the GNVs (EPR, PER, OMP, & IDL) loading highly ($>.60$) onto it; NDN and EMS both having a modest loading (see Table 2 Chapter II).

In Study 2 on outpatients ($N = 100$), we expected to replicate the factorial structure found with nonclinical protocols at least for the variables that had the highest factor loadings in Study 1 (EPR, PER, OMP, IDL). Further, we sought to validate the factor(s) obtained assessing its correspondence with clinician ratings. Results did not fully overlap with Study 1. In fact, two components were found on the data from the clinical protocols. However, the variables included in the first component substantially overlapped with the four variables having the highest loadings on the factor found in Study 1 (EPR, PER, OMP and IDL), attesting their meaningful interrelationships. On the other hand, the remaining variables (EXH, EMS, r, NDV, MAG, NDF and NDN) defined a distinct dimension. Since this second Component was not significantly associated to the clinical external criteria we used in Study 2, and neither were its defining variables, its meaning is still unclear, and further investigation should verify if the two components represent two different psychological instances or if they are rather due to specificity of this particular sample. Inferences about Component 1 and its variables, conversely, were more definite in that they were backed up by significant correlations with the Q-Sort method rated by clinicians (SWAP-200). In particular, the more strongly supported narcissism indicators were EPR and PER followed by OMP and IDL. Furthermore, the negligible associations that Reflection (and its subtypes) had with the most empirically supported GNVs in both studies, along with its lack of correlations with the criteria, further demonstrated its debatable contribution to the assessment of narcissistic tendencies. Finally, Study 2 provided evidence of the incremental validity of the Rorschach Inkblot Method over a more readily obtainable and popular self-report measure to predict clinicians-ratings of narcissistic and grandiosity traits.

Once acquired first evidences about the underlying relationships between the GNVs and test their validity and utility to assess narcissism through the Rorschach, we studied them on clinical developmental samples, also in an effort to fill in a gap of the literature about markers of narcissism in developmental age and related possible specific features. In *Chapter III* data from a sample of children 9-12 years of age and adolescents (13-16 years of age) from an inpatient American facility (Four Winds Hospital, Katonah, NY). For each group, 120 RIM protocols were considered, along with external measures available in the psychological assessment clinical material (informant-reports and self-reports) in order to test, as done in the adults sample, the criterion validity of the narcissism factor(s) identified. Analyses on the preadolescent group shown the presence of a single factor in the data, defined by IDL, OMP, EPR, EXH, NDV, EMS, NDF and PER. The Rorschach Narcissism and Grandiosity factor and its constituting variables were then correlated with external criteria represented by aggregated composite measure of informant-ratings (DSMD and PIC) and self-reported narcissism (M-PACI and PIC). The RIM factor was not significantly associated with the criteria and neither were its variables, whereas Idealization was positively and significantly connected to the combined self- and informant-ratings. Furthermore, coherently to the expected patterns of correspondence between implicitly assessed psychological qualities and explicitly Vs. observed criteria (Mihura et al., 2013; McClelland, Koestner, & Weinberger, 1989), it was the significant correlation of the RIM-assessed IDL with the *informant-ratings* ($r = 0.31, p < 0.01$) of narcissism and grandiosity and not the one with self-reports ($r = 0.05, p = .67$) that contributed to its relationships with the composite scores.

Findings from the clinical adolescents sample (Study 2) partially supported those of Study 1 and, more in general, those of the precedent investigation on adults. In fact, there was not a single dimension organizing the relationships between the variables, but rather two.

Moreover, although the composition of the first component further shown the close associations between OMP, EPR and PER, such component was not defined by IDL as it happened in the previous studies but on the contrary it had an important loading by NDF (.55). This might suggest a unique feature of narcissism in adolescents where deflation of self-esteem would be more relevant than idealization, but it should be corroborated by future studies. On the other hand, the second component was defined by EXH, NDV and EMS. Finally, only EPR was found to be a significant predictor of introspectively assessed narcissism through the MACI ($r = .20, p < .05$). Although these differences, it might be worth nothing that Studies 1 and 2 of Chapter III were able to provide evidences for a coherent pattern of early narcissistic indicators in developmental age. The recurrent and joint occurrence of OMP, EPR, NDF and PER and the relations shown by some of the variables with external measures of narcissism, suggest the possibility of identifying young patients with narcissistic traits and who could be described as self-centered, with a sense of superiority and use of defensive self-referencing, as well as characterized by an inner deflated image of oneself which seemed particularly predominant in the clinical adolescents and that needs more empirical foundation.

To the aim of further corroborating findings obtained for the variables that were more strongly supported by the studies illustrated in Chapter II and III, and in order to more precisely investigate the relationships of narcissism with other key aspects connected to the construct (i.e. self-esteem, emotional reactivity, aggression) we examined the topic in an experimental setting. As such, in the study presented in Chapter IV levels of narcissism and investment toward the self, measured both via the Rorschach GNVs and self-reports, have been studied in relation to the participants' reactions to a transient manipulation of self-esteem. Reactions to the self-esteem insult have been studied along the dimensions of emotional reactivity and state self-esteem and have been measured both via self-reports and

via ratings of spontaneous behavior (i.e. the participants' verbalizations about their performance). In this way, it was possible to obtain an *in vivo* measurement of variables central in the constructs of self-esteem and narcissism.

In synthesis, the quite vast amount of information provided by this experimental study argued in favor of the ability of the RIM assessment of narcissism through selected and combined GNVs (namely EPR, PER, IDL, EXH, EMS, NDF and OMP) to predict *self-reported* and *verbally-behaviorally expressed* narcissistic reactions to a self-esteem affront, such as anger and irritation, in comparison to self-reported narcissistic grandiosity. Furthermore, the RIM Narcissism Factor was meaningfully associated to specific narcissistic ways of coping, first with what narcissistic individuals perceived as a suboptimal outcome and also with an explicit failure such as externalization and disavowal of responsibility. Importantly, it was just this externalization of responsibility in the success condition that generated the augmented verbally expressed anger for failure occurred in the second test.

The results of this experimental study also evidenced the relevance of the *vulnerable* introspectively assessed (i.e. rated by the person herself) narcissistic component in accounting for elevated self-reported affective instability among individuals with narcissistic traits (Miller, Gentile, & Campbell, 2012), and with hostility and oscillations in state self-esteem in particular (Krizan & Johar, 2014).

To sum up, this investigation provided a multimethod and multi-instrumental validation of a core set of variables to assess narcissism and grandiosity through the Rorschach Test. In particular, strongest evidences have been found across different contexts and age groups for Personal Knowledge Justification, Expanded Personal Reference, Omnipotence and Idealization. These variables and their combined use resulted to be useful in assessing narcissism in clinical settings as well as research fields, validly complementing the information gathered by externally rated and self-report methods. In a context of

integration and combination of different perspectives and sources of information this can increase the validity and utility of an assessment (Kubiszyn et al., 2000; Meyer et al., 2001) and reveal essential information about personality. Such contributions appear particularly appealing for the purposes of studying narcissism which is widely recognized as a multicomponent and complex construct (Miller & Campbell, 2011) and difficult to study through self-reports only also for the possible defensive reactions elicited by direct and explicit questions (Gunderson, Ronningstam, & Bodkin, 1990).

We believe that the benefits of using RIM-based indicators of narcissism might extend to research settings as well (Bornstein, 2012), where inferences made from performance based personality tests can meaningfully enlighten relationships between different constructs. As such, in the present investigation Rorschach data could be meaningfully combined not only with self-reported information but also with observed and verbally expressed psychological qualities in order to obtain, in an experimental setting, a series of *in vivo* indicators of psychological dimensions that are difficult to validly assess through direct questions only. In particular, this enabled us to uncover pathways connecting narcissism to one of its main relational correlates such as anger (Twenge & Campbell, 2003), passing through oscillations on self-esteem and mediated by specific attributional styles for one's own performance.

Future research directions on the matter of assessing narcissism through the Rorschach Test could explore the new interrogatives generated by our findings. In particular, studies on clinical populations (e.g. forensic, inpatients etc.) could examine the actual meaning of some of the GNVs such as Narcissistic Deflation and Exhibitionism that, although theoretically connected to narcissism, did not repeatedly shown notable relations with the other most validated GNVs (i.e. EPR, PER, OMP, IDL). Moreover, future efforts could explore the role of Narcissistic Deflation and Idealization in children and adolescents,

to verify if the differences found in the studies presented in Chapter III reflect authentic age-specific psychological differences or not.

To conclude, the present investigation provided a useful and validated resource to assess through the Rorschach Test a complex yet important construct such as narcissism, allowing the *observer* to get closer to the narcissistic grandiose fantasies and needs to admiration instead of asking the *protagonist* to recount them.

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