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## The Linguistic Patterns of the Grateful and Envious Disposition: Cognitive and Emotional Processes Underlying Narratives

### Schemi Linguistici della Disposizione alla Gratitudine e all'Invidia: Processi Cognitivi ed Emotivi Sottostanti alle Narrazioni

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## Abstract

The present study aimed at exploring the association between specific linguistic patterns characterising narrative accounts of feeling grateful and envious, and levels of dispositional gratitude and envy, respectively. A convenience and purposive sample of 56 Italian participants was recruited (50% female;  $M_{age} = 44,16$  years,  $SD = 16,07$ ). A structured interview was used to collect narratives about the experience of gratitude and envy; as well, measures of dispositional gratitude (GQ-6) and envy (DES) were administered. Specificity analyses were performed through T-Lab software to compare the vocabularies referring to high and low levels of dispositional gratitude and envy, in both gratitude- and envy-related narratives. The results highlight three distinctive elements across narratives, which shed light on the potential diverse nature of grateful and envious disposition in terms of mentalisation processes, perception of social comparison and coping strategies. Limitations and potential implications for future research are discussed.

**Keywords:** gratitude; envy; narrative; specificity analysis; emotion.

## Riassunto

Il presente studio ha inteso esplorare l'associazione tra specifici schemi linguistici che caratterizzano il racconto di sentimenti di gratitudine e invidia e i livelli di gratitudine e invidia disposizionale, rispettivamente. È stato reclutato un campione di convenienza di tipo propositivo di 56 partecipanti italiani (50% femminile;  $Età\ media = 44,16$  anni,  $DS = 16,07$ ). Un'intervista strutturata è stata utilizzata per raccogliere narrazioni sull'esperienza di gratitudine e invidia; inoltre, sono state somministrate misure di gratitudine (GQ-6) e invidia (DES) disposizionale. Sono state eseguite analisi di specificità attraverso il software T-Lab per confrontare i vocabolari riferiti ad alti e bassi livelli di gratitudine e invidia disposizionale, sia nelle narrazioni riguardanti la gratitudine che in quelle riguardanti l'invidia. I risultati evidenziano tre elementi distintivi comuni alle narrazioni, che fanno luce sulla possibile diversa natura della disposizione alla gratitudine e all'invidia in termini di processi di mentalizzazione, percezione del confronto sociale e strategie di coping. Vengono discussi i principali limiti dello studio e le potenziali implicazioni per la ricerca futura.

**Parole chiave:** gratitudine; invidia; narrazione; analisi di specificità; emozione.

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## Introduction

Gratitude and envy are considered as very common feelings across different ages and cultural contexts, which are embedded in daily life and have received a lot of attention from psychological research in several domains. Specifically, the constructs of dispositional gratitude and envy have been largely used in the clinical and social psychological literature about personality and emotions, providing a great amount of empirical evidence on their relevant role for psychological functioning and adjustment at the individual, interpersonal and organisational level.

Dispositional gratitude can be defined as a «generalised tendency to recognise and respond with grateful emotion to the roles of other people's benevolence in the positive experiences and outcomes that one obtains» (McCullough, Emmons, and Tsang, 2002, p. 112). This involves a series of complex subjective feelings, such as a sense of appreciation for life, awareness of good things that happen, wonder, thankfulness, goodwill, and reciprocity, thus making gratitude a character strength that can be developed through practice (DeSteno et al., 2019; McCullough, Emmons, and Tsang, 2002; Peterson and Seligman, 2004; Wood, Froh, and Geraghty, 2010). In contrast, dispositional envy is described in terms of «an unpleasant, often painful emotion characterised by feelings of inferiority, hostility, and resentment produced by an awareness of another person or groups of persons who enjoy a desired possession, object, social possession, attribute or quality of being» (Smith and Kim, 2007, p. 47). Despite different conceptualisations of envy emerging from scientific knowledge (Caputo, 2014), such as the distinction between malicious and benign envy respectively oriented to other-derogation or self-development (Behler et al., 2020; Lange and Crusius, 2015; Smith and Kim, 2007), dispositional envy seems to be rooted in two affective components (Nannini et al., 2019). On the one hand, depressive feelings including frustration and inferiority due to an unfavourable social comparison; on the other one, hostile feelings including anger and ill will due to subjective injustice beliefs.

Given the different nature of these dispositions on a theoretical basis, gratitude and envy have been historically considered as opposite (Klein, 1957), as also confirmed by the moderate negative correlation found between such constructs in empirical investigation (Froh et al., 2011; Langher et al., 2016; McCullough, Emmons, and Tsang, 2002; McCullough, Tsang, and Emmons, 2004; Nannini et al., 2019; Solom et al., 2017; Xiang, Chao, and Ye, 2018). Indeed, envy represents a negative and unpleasant emotion, whereas gratitude is an overall positive experience. This is confirmed by the associations between envy and lower self-esteem, life satisfaction, happiness, and well-being (Ng, Cheung, and Lau, 2019; Smith et al., 1999), and higher neuroticism, depression, irritability and anxiety (Daniels and Holtfreter, 2019; Smith et al., 1999). In contrast, gratitude is found to correlate with higher optimism, happiness, life satisfaction, subjective wellbeing, and reduced anxiety and depression (Salces-Cubero, Ramírez-Fernández, and Ortega-Martínez, 2019; Watkins et al., 2003; Wood, Froh, and Geraghty, 2010).

In this regard, some components of the grateful and envious dispositions make these emotions mostly incompatible

(Klein, 1957; McCullough, Emmons, and Tsang, 2002; Poelker et al., 2016). While grateful people tend to appreciate and savour positive experiences, envious ones focus on what they lack (Chaplin et al., 2019; McCullough, Emmons, and Tsang, 2002; Roberts, 2004). Consequently, the former devote less attention to acquiring possessions and wealth, whereas the latter show higher materialism and compare their outcomes situations with those of other people (Froh et al., 2011; Solom et al., 2017). As well, gratitude leads to higher willingness to share one's wealth and is thus associated with openness, extraversion and altruism (Emmons, Froh, and Rose, 2019; McCullough, Emmons, and Tsang, 2002; McCullough, Tsang, and Emmons, 2004; Wood et al., 2008), differently from envy that motivates to acquire others' possessions and compete with others (Fiske et al., 2002; González-Navarro et al., 2018). Consistently, the tendency to repay others' kindness in grateful people enhances interpersonal bonds and prosocial behaviour, thus inhibiting negative and disruptive attitude (Bartlett and Arpin, 2019; Buote, 2014; Caputo, 2015; Ma, Tunney, and Ferguson, 2017). Instead, envious people show reduced social capital and helping behaviour (Behler et al., 2020), because they are opposed to feeling indebted or inferior, and tend to enact harmful and hostile behaviours to a greater extent (Poelker et al., 2017; Smith and Kim, 2007).

Despite gratitude and envy being deemed opposite ends of the same spectrum, such a relation has been scarcely supported by empirical evidence directly giving voice to people themselves (Poelker et al., 2016). In this regard, a narrative approach would be particularly suited to the study of these emotions for several reasons. First, it may allow the formulation of data-driven hypotheses by emphasising participants' sense-making processes, without assuming a normative and well-defined perspective (Caputo, 2013). Indeed, narratives can provide interesting details that generally are not addressed by correlational and intervention studies, regarding the antecedents and consequences of gratitude and envy (Poelker et al., 2016). Besides, narrative-based research may ensure good ecological validity because it «has something to say about what people do in real, culturally significant situations» (Neisser, 1976, p. 2). Narratives allow the researcher to access cultural meanings that are assigned to experienced emotions through processes of socialisation in specific social contexts (Kleres, 2011). This is of particular importance since gratitude and envy are deeply informed by culture (Poelker et al., 2017). For instance, in individualistic and achievement-oriented cultures, forms of connective gratitude taking into account the benefactor's wishes are found to a lesser extent (Wang, Wang, and Tudge, 2015). On the other side, expression of envy may be quite uncommon, because such cultures stress the importance of superiority that contrasts envy as an indirect admission of inferiority (Poelker et al., 2016). Instead, in those cultures that are oriented to cooperation and interpersonal harmony, other's success triggers greater positive emotions, whereas being envied is associated with lower enjoyment (Rodríguez Mosquera, Parrott, and Hurtado de Mendoza, 2010). As well, the collectivistic orientation and sense of obligation of some Eastern cultures may lead people to experience gratitude negatively, because it may engender feelings of indebtedness and guilt (Washizu and Naito, 2015). Then, the relevance of

narratives can be advocated also in the light of the criticisms about the pervasive use of scales in social and personality psychology research, especially in terms of related validity and reliability (Flake, Pek, and Hehman, 2017). Specifically, the problem of self-report measures is particularly relevant when examining social emotions, such as gratitude and envy, which are well-known to be affected by desirability bias (Caputo, 2017). Indeed, gratitude tends to be overvalued, because it is intertwined with prosocial and altruistic dispositions that are culturally agreeable (Caputo, 2015); instead, envy is generally under-reported since it is connoted as undesirable for self and others (Smith et al., 1999).

This notwithstanding, in the current literature only a very few studies exist that adopt a narrative-based perspective to inspect gratitude and envy (e.g., Poelker et al., 2016, 2017; Poelker, Gibbons, and Maxwell, 2019). Overall, these studies identified some differences between such emotions, considered as poles of the same spectrum. The first difference refers to the related expressed feelings, with gratitude being associated with positive affect and life satisfaction, and with envy being connected to anger and inferiority. Besides, material possessions were found to play a relevant role in eliciting both gratitude and envy, respectively characterised by mutuality and payback as common reciprocal actions (Poelker et al., 2016, 2017). Then, research findings also highlighted potential perfunctory responses when recalling such experiences, in terms of conventional and normative reactions (e.g., Poelker et al., 2016, 2017; Poelker, Gibbons, and Maxwell, 2019). However, these narrative-based studies show some inherent limitations in the proper understanding of the relationship between gratitude and envy. For instance, they were exclusively conducted in adolescent samples, thus leading to a potential age-related bias, because young people tend to report a reduced number of life circumstances for which they feel grateful (Froh et al., 2011; Langher et al., 2016) and are more likely to feel envy and competition (Caputo, Fregonese, and Langher, 2019; Langher et al., 2016). Besides this, previous research did not take into consideration the potential role of individual dispositions which may affect narrative accounts of gratitude and envy. Indeed, in recalling grateful experiences, people higher in trait gratitude make more positive benefit appraisals, and report more state gratitude as an emotional response to a beneficial experience (Ma, Tunney, and Ferguson, 2017; Wood et al., 2008); as well, dispositional envy is demonstrated to promote episodic envy when recalling a past episode of deprivation/unfavourable comparison (Neufeld and Johnson, 2016).

The present study aims at addressing these gaps in the literature to enhance the understanding of gratitude and envy in the lived experiences reported by participants of different ages. Through a mixed-method design, this study explored the association between specific linguistic patterns characterising narrative accounts of feeling grateful and envious, and levels of dispositional gratitude and envy, respectively. To our knowledge, no previous study simultaneously examined well-defined measures of gratitude and envy, along with qualitative data derived from narratives about such feelings. It is hypothesised that people with high grateful or envious disposition may have a different recall of their past grateful and envious experiences, compared to their counterpart,

thus revealing diverse mentalisation processes as manifested in language. As well, assuming that gratitude and envy do represent opposite ends of the same spectrum, we expect that what characterises narratives of individuals higher in trait gratitude should be consistent with what emerges in individuals lower in trait envy, and vice-versa. From this perspective, this study may contribute to identifying possible differences and similarities, to grasp the core cognitive and emotional components underlying such feelings.

## Method

### *Participants*

A convenience sample of 56 Italian participants was recruited through a snowball sampling procedure via social networks of the research team. Participants met study inclusion criteria if they (1) had at least 18 years old, (2) had sufficient language skills to complete the consenting, questionnaire, and interview processes, and (3) did not report a diagnosis of cognitive impairment or mental disorder. The sample was purposive (Patton, 1987) and adequate in sample size for interview-based studies (Vasileiou et al., 2018), in line with the principle of thematic saturation (Corbin and Strauss, 2008) and information power (Malterud, Siersman, and Guassora, 2016). Besides, consistently with the strategy of maximum variation in purposive sampling, it included participants of different ages and gender so to get heterogeneous perspectives. The participants were balanced by gender (50% female) and age class (ages 18-35, 36-55, >55 years), ranging from 18 to 87 years old ( $M_{age} = 44,16$  years,  $SD = 16,07$ ). The participants had 14,60 years of education on average ( $SD = 2,90$ ). About employment status, 69,60% were employed; whereas concerning marital/relationship status, 44,6% were married-cohabitant, 17,90% were in a relationship and 37,50% were single.

### *Materials*

*Demographic questionnaire.* Participants provided basic demographic information including age, gender, education, employment status, and marital/relationship status.

*Structured interview.* A structured interview was used to collect narratives about the experience of gratitude and envy. The interview comprised two sections, each with three open-ended questions that addressed gratitude and envy respectively, so to facilitate related associative thinking. The interview aimed at grasping perceptions and interpretations of one's own and others' feelings, because mentalisation refers to the ability to reflect upon and to understand one's own and others' state of mind (Allen, Fonagy, and Bateman, 2008). The first question was 'Tell me the first three words coming to your mind to describe gratitude/envy'. For each word, the interviewers then asked further clarifications about what the interviewee meant and why chose it. The second question was 'Tell me an episode where you have experienced gratitude/envy'. If the interviewee did not ask the question because nothing came to his/her mind,

the question was reworded as follows ‘Describe a situation where you might experience gratitude/envy’. The third question was ‘Tell me an episode where you think that another person experienced gratitude/envy towards you’. If the interviewee did not ask the question because nothing came to his/her mind, the question was reworded as follows ‘Describe a situation where someone might experience gratitude/envy towards you’. The open-ended questions were just considered as prompts overall aimed at exploring participants’ symbolisations regarding the experience of gratitude and envy, without representing well-established areas of investigation to be specifically addressed. Therefore, all the responses provided to each interview section (regarding gratitude and envy, respectively) were considered as a whole, independently from the potential presence of reworded questions. Indeed, reworded questions still grasped participants’ mentalising processes (Fonagy, Bateman, and Bateman, 2012), allowing them to imagine and give meaning to potential situations where they might be the subject or the object of gratitude/envy.

*Gratitude Questionnaire (GQ-6).* The GQ-6 (McCullough, Emmons, and Tsang, 2002) is a six-item scale measuring dispositional gratitude on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The total score is the sum of all items, and the score ranges from 6 to 42. The GQ-6 evaluates four facets of gratitude: (1) intensity, in terms of feeling more intensely grateful than would someone less disposed toward gratitude, (2) frequency, in terms of feeling grateful many times each day, (3) span, in terms of the number of life situations for which a person feels grateful during a given time, and (4) density, in terms of the number of persons to whom one feels grateful for a single positive outcome. The Italian version of the GQ-6 was used (Caputo, 2016) and in the present study showed fair internal consistency, with a Cronbach’s alpha of 0,66.

*Dispositional Envy Scale (DES).* The DES (Smith et al., 1999) is an eight-item scale assessing dispositional envy, with responses ranging from 1 (strongly disagree) to 5 (strongly agree). The total score is the sum of all items and the score ranges from 8 to 40. It includes four items explicitly measuring frequency and intensity of envy (e.g., I feel envy every day), and four items implicitly assessing envy-related reactions, respectively referring to inferiority, sense of injustice, frustration, and resentment (e.g., It somehow does not seem fair that some people have all the talent) so to reduce social desirability bias (Smith and Kim, 2007). The Italian version of the DES was used (Langher et al., 2016; Nannini et al., 2019) and in the present study showed satisfactory internal consistency, with a Cronbach’s alpha of 0,78.

### *Procedure*

Participants provided written informed consent before participating in the study. Then they completed a brief questionnaire including basic demographics and were administered the structured interview. To avoid recency effects, the order of the sections was reversed in two different versions of the interview and participants were randomly assigned one of them. To reduce potential social desirability, the

interviewees were only provided a brief overview of the study, which was presented as aimed at exploring some common emotions. Besides, the instructions stated that there were no right or wrong answers and encouraged interviewees to support their personal views. The interviews were administered by experienced psychologists (with a minimum of 5 years of post-training clinical experience), who received specific training on how to conduct the interview. The training had a psychodynamic orientation and aimed at promoting research skills in open-ended interviewing, by providing free-associative techniques to focus on the respondents’ symbolisation processes. The one-on-one interviewees took place in a quiet room at a time and place convenient for participants. The interviews were audio-recorded and verbatim transcribed; they lasted about 11 min on average ranging in length from 6 to 22 min. After the interview, the participants completed the GQ-6 and DES measures. Consistently with the specific version of the interview, the order of the questionnaires was counterbalanced such that half of the participants completed the GQ-6 first, while the other half began with the DES. All research procedures were in accordance with the Declaration of Helsinki and its later amendments and followed ethical standards. Indeed, the study involved voluntary and informed participation, without exposure to harm, and ensured the protection of participants’ rights to privacy and to withdraw from the study at any time.

### *Coding of the interview transcripts*

All the interview transcripts across 56 participants were collected to form two different textual corpora, respectively including narratives of gratitude and envy. The textual corpora were independently processed by using T-Lab software, which consented automatic coding of used vocabulary in both gratitude- and envy-related narratives (Lancia, 2004). For each textual corpus, preliminary preparation of the text was performed consisting of the following steps. First, the examination of multiple words that stand for only one meaning, such as compound words (e.g., occupation level), phrasal verbs (e.g., to take away) and idioms (e.g., with respect of). Second, disambiguation of words to resolve semantic ambiguity in homographic words, for example distinguishing “present” as gift and “present” as time. Third, lemmatisation involving the reduction of the corpus words to their respective headwords (i.e. lemmas), which entails that verbal forms are taken back to the base form (e.g., “speaks” and “speaking” are brought back to the same lemma “speak”), nouns to the singular form (e.g., “child” and “children” are brought back to the same lemma “child”), and so on. The final step was the identification of the keyword list based on the automatically computed frequency threshold (quantitative criterion) and the relevance to the specific research field (qualitative criterion) (Lancia, 2004). Specifically, the quantitative criterion relied on a threshold value that, according to corpus size, corresponds to the minimum value in the second range decile, between 10% and 20% of the word frequency distribution (in our case the minimum threshold was automatically fixed to “4” for both the gratitude- and envy-related textual corpus). Whereas, the



qualitative criterion referred to the exclusion of some “empty words” that didn’t have any significant or specific content for the present research purposes (e.g., indefinite adjectives, articles, adverbs, interjections, prepositions, pronouns, auxiliary verbs, modal verbs). In the present study, the final keyword lists overall included 226 lemmas in the gratitude-related textual corpus, and 237 lemmas in the envy-related textual corpus, with a frequency equal to or higher than 4 in both cases. These keywords (i.e. lemmas) were thus considered as lexical variables characterising the vocabularies of gratitude and envy to be used in subsequent analyses.

### Statistical Analyses

At first, descriptive and correlation analyses were calculated for the GQ-6 and DES through SPSS 24. Then for each textual corpus (regarding gratitude and envy, respectively), specificity analyses were performed through T-Lab software to check which lemmas were typical in a corpus subset defined by a categorical partitioning variable. In the present study, the used partitioning variables were “level of dispositional gratitude” and “level of dispositional envy”, each with two modalities (“low” and “high”) that were identified for each participant from the median values of the GQ-6 and DES scores. Therefore, this method allowed the identification of the typical lemmas that were over- or under-used by participants with higher dispositional envy or gratitude (compared to their counterpart), in both the gratitude and envy-related vocabularies (composed of 226 and 237 keywords, respectively). The typical words were detected through the chi-square test ( $\chi^2$ ) with  $p < 0,05$  (one degree of freedom). The chi-square test was computed for each keyword from a (2 x 2) contingency table reporting its frequency distribution, with

two rows (corpus subset and entire corpus) and two columns (presence and absence of every single word).

## Results

Preliminary analyses showed a moderate negative correlation ( $r = -0,43$ ,  $p < 0,01$ ) between the measure of dispositional gratitude ( $M = 31,54$ ,  $SD = 5,89$ ) and envy ( $M = 13,18$ ,  $SD = 5,02$ ).

With regard to participants showing a higher level of dispositional gratitude (Table 1), envy-related narratives are featured by the overuse of the words *negative* and *bad* overall suggesting the awareness of the negative impact of such an emotion on individual and relational domains (e.g., «Envy is a completely negative emotion, it just takes you to hurt yourself»; «Envy creates negative consequences for those who feel it and those who arouse it»; «Envy is a bad thing, wearing people down from within and making them bad persons»). This seems confirmed by the presence of *to accept* among the specificities for defect, indicating general disapproval towards envious feelings, perceived as unacceptable. Besides, the word *to help* suggests the concern that envy may inhibit prosocial behaviours due to its malevolent and destructive nature, as also supported by the underuse of *anger* revealing hostility towards others (e.g., «I feel contempt for envious people because I think they are not able to help others»). The term *to recognise* indicates the relevance of being aware of one’s weaknesses when faced with an unfavourable social comparison (e.g., «Who is envious is a mediocre person because s/he does not recognise her/his qualities, s/he is not able to look inside him/herself»; «The envious person does not recognise one’s limitations»), instead of focusing on the sense of lack and entitlement (as

Tab. 1. Specificity analysis for high grateful disposition in envy- and gratitude-related narratives

Lemmas	Envy-related narratives				Gratitude-related narratives				
	$\chi^2$	Subtotal	Total	d (95% CI)	Lemmas	$\chi^2$	Subtotal	Total	d (95% CI)
Negative	21,85	28	33	2,65 (1,51, 3,78)	Honesty	11,91	11	12	6,63 (2,71, 10,55)
Bad	10,98	15	18	2,24 (0,85, 3,62)	Trust	8,67	12	15	2,14 (0,66, 3,62)
To succeed	6,22	31	50	0,74 (0,15, 1,33)	Joy	4,53	10	11	1,51 (0,03, 2,99)
To help	5,97	7	8	3,43 (0,68, 6,18)	Positive	3,89	8	11	1,22 (-0,16, 2,61)
To recognise	5,97	7	8	3,43 (0,68, 6,18)	To thank	3,89	16	26	0,72 (-0,09, 1,54)
To obtain (-)	7,87	18	21	1,41 (0,37, 2,46)	Kindness (-)	8,63	15	16	2 (0,61, 3,39)
To lack (-)	7,46	15	17	1,67 (0,43, 2,91)	Goodness (-)	4,72	14	17	1,11 (0,02, 2,20)
Anger (-)	7,44	43	59	0,73 (0,19, 1,22)	Generosity (-)	4,72	14	17	1,11 (0,02, 2,20)
To satisfy (-)	5,64	10	11	1,83 (0,23, 3,43)	Affect (-)	4,16	16	20	1 (0,02, 1,98)
To accept (-)	5,23	12	14	1,43 (0,18, 2,80)	Close (-)	4,16	16	20	2 (0,02, 1,98)

Note. All  $\chi^2$  values are significant,  $p < 0,05$ . The sign (-) reported in brackets indicates under-used lemmas

suggested by the low presence of the verb *to lack*). As well, the characteristic verb *to succeed* highlights a greater focus on personal effort and commitment rather than on the desired possession or advantage one is lacking, as suggested by the underuse of words such as *to obtain* and *to satisfy* (e.g., «I may envy someone who succeeds to do something, but maybe I can succeed too if I commit myself»; «A person feels envy when s/he does not succeed to reach an ambitious goal, when s/he does not measure up»).

About gratitude-related narratives, *honesty* appears as a central component of grateful disposition, involving a sense of psychological coherence and authenticity of the self in terms of character strength and conscientiousness-based virtue (e.g., «If a person is honest with oneself and others, s/he can be thankful for what s/he has and can give»; «I think that honesty is intertwined with gratitude because it refers to something clear and transparent»). The concepts of *trust* (e.g., «Gratitude represents an exchange between two people who trust each other»; «Trust is the starting point for appreciating the qualities of others») and *thankfulness* (e.g., «Every morning when I open my eyes I thank God for what I have in my life»; «It is like an aesthetic experience, in saying thanks we can perceive the beauty of this feeling») suggest the relevance of reciprocity, rather than just benevolence and care for others (confirmed by the underused of *affect* and *close*). Besides, the terms *joy* and *positive* seem to shift the focus from the benefactor's attributes such as *kindness*, *goodness*, and *generosity* (present among the specificities for defect) to the positive contributions of gratitude to beneficiary's emotional well-being (e.g., «When you are grateful you feel joyful, happy, you feel better about yourself and others»; «It is a joy because being grateful towards something or someone makes you feel happy, gives you a sense of wellbeing»; «Gratitude is a positive emotion»). Therefore, gratitude seems to represent a wider life orientation, characterised by the appreciation for what one does have, rather than exclusively a response to potential help or benefits offered by others.

Overall, participants high in dispositional gratitude look at envy as an unacceptable emotion because it inhibits mutuality and prosocial behaviour. As well, they show a greater personal effort for coping with unfavourable social comparison. On the other hand, they experience gratitude as a character strength, focusing on its positive contributions to one's emotional well-being, and propose a connective (rather than materialistic) vision of gratitude based on mutuality and reciprocity.

As shown in Table 2 regarding the participants with a higher level of dispositional envy, envy-related narratives are characterised by reporting feelings of *jealousy* to a greater extent (e.g., «It's like a sense of jealousy because someone succeeds to have something you cannot have»; «When you are jealous you feel angry because the other person can obtain more»), whereas the word *envy* is present among the specificities for defect. This may suggest a greater difficulty to recognise the emotion of envy, which tends to be named as jealousy so to reduce its potential negative meanings (as shown by the underuse of the word *negative*). Besides, the overuse of the words *to lack* and *to satisfy* suggest that envy involves unpleasant feelings of dissatisfaction and lack concerning a desired possession (e.g., «Who is satisfied with oneself does not envy others because s/he

does not lack anything»; «I feel such an emotion when I desire something that others have but I lack»; «It is related to desires one is not able to satisfy»). The overuse of the word *capable* (e.g., «Since I'm more capable than them, I notice that they look at me with a strange eye») identifies ability as a potential trigger of envy, intended as an internal and stable attribution for attainment, as supported by the underreporting of *luck* that is instead an external and unstable factor. Consistently, other's success seems to be explained in terms of perceived superiority in certain dispositional attributes, thus evoking an unchangeable social comparison. This is confirmed by the presence of the verbs *to help* and *to hope* among the specificities for defect, overall evoking a sense of powerlessness, and by the reference to hostile feelings, as highlighted by the word *anger* involving resentment and destructive urges (e.g., «I feel angry because it is not fair, you don't deserve what you have and I should have»; «Anger comes to my mind because you feel the urge to damage the other person»). As well, it is interesting to note that a sort of confusion about the direction of anger is reported, highlighting a potential difficulty to identify the source of such an intense emotional state, which may suggest a deficit processing of depressive feelings to some extent (e.g., «I don't know if you feel angry towards yourself or others»; «You experience a great amount of anger towards yourself that then you project on the other person»).

About gratitude-related narratives, individuals with a higher level of dispositional envy tend to overuse the words *to feel*, *sincere* and *heart*, which seem to indicate a greater focus on getting in touch with gratitude, as if it could not be deeply felt or it could be simulated without an authentic affective experience (e.g., «To feel grateful, one must first be sincere with oneself»; «True gratitude requires fatigue to experience a sincere feeling in your heart»; «When you thank someone, you have to be sincere and say it with your heart»). The presence of *to respect* and *appreciation* among the specificities for defect may, therefore, suggest a reduced capacity to recognise and value positive outcomes or interactions, in turn preventing grateful experiences. This is also confirmed by the underuse of *benevolence*, *mutual* and *generosity*, which refer to a scarce disposition to altruism and reciprocity. It is interesting to note the focus on the temporal dimension, evoked by the words *year* and *time*, which suggest the tendency to require more time for processing grateful feelings and locate gratitude-related episodes in a distant past, thus revealing a potential difficulty to access current life experiences (e.g., «An episode of gratitude that I remember happened some years ago»; «Initially I didn't realise how much she was doing for me, I thanked her after a long time»; «Honestly, nothing comes to my mind about gratitude, in such a short time it's complicated»).

Overall, participants high in dispositional envy are less likely to admit envy, which is censured and confused with jealousy. They tend to express anger and hostility because they focus on what they lack and attribute the other's favourable condition to stable and internal qualities (e.g., ability). On the other hand, they show a difficulty to recognise and authentically feel gratitude; as well, they express lower mutuality and appreciation of others and life.

Tab. 2. Specificity analysis for high envious disposition in envy- and gratitude-related narratives

Envy-related narratives					Gratitude-related narratives				
Lemmas	$\chi^2$	Subtotal	Total	d (95% CI)	Lemmas	$\chi^2$	Subtotal	Total	d (95% CI)
Jealousy	6,85	19	22	1,22 (0,25, 2,20)	To feel	12,58	27	36	1,47 (0,66, 2,28)
Anger	6,02	44	59	0,67 (0,13, 1,21)	Year	7,53	27	33	1,09 (0,31, 1,86)
To satisfy	4,64	10	11	1,51 (0,03, 2,99)	Sincere	6,87	13	14	1,96 (0,50, 3,43)
Capable	3,98	9	10	1,31 (-0,17, 2,79)	Time	5,24	16	19	1,23 (0,18, 2,29)
To lack	3,85	14	17	0,93 (-0,12, 1,97)	Heart	4,32	12	14	1,34 (0,08, 2,60)
Negative (-)	13,88	24	33	1,61 (0,74, 2,49)	To respect (-)	20,53	28	36	2,24 (1,26, 3,22)
To help (-)	7,17	7	8	5,29 (1,37, 9,21)	Appreciation (-)	6,59	11	15	1,77 (0,42, 3,12)
Luck (-)	5,80	6	7	3,16 (0,39, 5,93)	Benevolence (-)	4,49	5	6	3,45 (0,26, 6,64)
Envy (-)	5,20	188	407	0,22 (0,03, 0,42)	Mutual (-)	4,49	5	6	3,45 (0,26, 6,64)
To hope (-)	4,45	5	6	3,39 (0,24, 6,54)	Generosity (-)	4,03	11	17	1,11 (0,03, 2,20)

Note. All  $\chi^2$  values are significant,  $p < 0,05$ . The sign (-) reported in brackets indicates under-used lemmas.

## Discussion

Overall, three distinctive elements can be derived from the present study across gratitude- and envy-related narratives, which may allow the differentiation of participants with higher dispositional gratitude and envy in terms of wider cognitive and emotional processes.

A first element refers to a different degree of emotional awareness and recognition. Indeed, more grateful participants have a higher awareness of the negative consequences of envy as inhibiting prosocial behaviour (Buote, 2014; Yu, Hao, and Shi, 2018) and look at gratitude as a character strength ensuring greater self-coherence (DeSteno et al., 2019; Peterson and Seligman, 2004). Instead, more envious participants show a deficit in the recognition of envy, which tends to be misrepresented through a mechanism of denial (Casu, 2015), mostly because of its self-threatening nature. Indeed, as found in our study, envy involves a confusion between the self and the other in terms of direction of anger expression (Poelker et al., 2016), as well as an indirect admission of inferiority (Berke, 2018), thus raising a form of persecutory guilt that is handled by defensive projection into others (Caputo, Fregonese, and Langher, 2019). Besides, more envious participants show a difficulty to get in touch with gratitude in a lived authentic manner, probably because of their reduced tendency to repair, intended as the capacity to appreciate goodness in others and mourn a sense of dependence on the desired object, which is instead strongly intertwined with gratitude (Caprara et al., 2001; Caputo, Fregonese, and Langher, 2019). Therefore, grateful people seem to access their lived experience more authentically, whereas envious ones show an inadequate tuning with their affective states and a more

externally oriented style of thinking. Future research could be thus developed to further deepen mentalisation processes, as suggested by the existing research evidence about both the impact of gratitude promotion on emotional awareness (Bartlett and Arpin, 2019; Chaplin et al., 2019; Seligman et al., 2005) and the positive association between dispositional envy and alexithymia (Casu, 2015).

Another key finding refers to a different perception of social comparison situations, with grateful participants being more prone to value positive outcomes and maintaining a mutual perspective, and envious ones showing a reduced propensity to appreciate goodness, in turn inhibiting altruism and prosocial behaviour. In this regard, for grateful people, social comparison represents an opportunity to focus on positive contributions of others to their well-being (Salces-Cubero, Ramírez-Fernández, and Ortega-Martínez, 2019; Xiang, Chao, and Ye, 2018), in line with the broaden-and-build theory looking at gratitude as an adaptive evolutionary mechanism (Fredrickson, 2001). Instead, for envious people, social comparison tends to emphasise self-deprecating outcomes (e.g., sense of exclusion, inferiority, and shame) (Alicke and Zell, 2008; Tsay-Vogel and Krakowiak, 2019). This occurs even in favourable situations because the giver's benevolence strengthens the perception of lacking goodness in envious people (Behler et al., 2020; Caputo, Fregonese, and Langher, 2019). A potential explanation relies on the reported tendency to direct envy at others' uncontrollable qualities, such as aptitude, intelligence, or beauty (Rudolph and Tscharktschiew, 2014), that in turn triggers depressive feelings and generalised negative thinking about oneself (Caputo, Fregonese, and Langher, 2018, 2019;

Daniels and Holtfreter, 2019; Ng, Cheung, and Lau, 2019). Therefore, the concept of mutuality seems to be crucial to differentiate grateful and envious people in facing social comparison situations, also in the light of research findings about the role of perspective-taking to the understanding of gratitude and envy (Bono and Froh, 2009; Poelker, Gibbons, and Maxwell, 2019). In this regard, perspective-taking, meant as “the process in which one individual attempts to imagine the world of another” (Davis, 1996, p. 17) is found to correlate negatively with envy and positively with gratitude, because it represents a personal resource fostering compassion and caring for others (Bono and Froh, 2009; Poelker, Gibbons, and Maxwell, 2019).

Then, different coping strategies emerge in grateful and envious participants. The former rely on personal resources to a greater extent in both grateful (e.g., benefit-findings) and envious (e.g., effort) experiences, consistently with the definition of gratitude as a moral effort-linked emotion (Rudolph and Tschakarschiew, 2014). This is confirmed by previous findings reporting higher flexibility, challenge-orientation, and active coping strategies in grateful people (Emmons, Froh, and Rose, 2019; Lin, 2015; Langher et al., 2016). Instead, the latter are characterised by a reduced propensity to resort to self-improvement strategies when confronted both with superior others (e.g., withdrawal) and benefactors (e.g., denial of dependence). This is in line with the definition of envy as an ability-linked emotion (Rudolph and Tschakarschiew, 2014), associated with self-handicapping strategies and disengagement from concrete goals (Caputo, Fregonese, and Langher, 2019; Lange and Crusius, 2015; Langher et al., 2016). Therefore, the use of active coping and planning seems to represent a relevant psychological resource that could foster the stress-management capacity to deal with potentially negative outcomes and reinterpret critical situations positively (Langher et al., 2016; Lin, 2015).

The present study shows some limitations referring to the convenience nature of the sample and the reduced generalisability of the results, despite being common to other qualitative studies. In this regard, future research could be conducted to provide further empirical evidence about these preliminary findings, and to test their transcultural validity in other countries, given the relevance of cultural context for the understanding of the examined emotions. As well, it should be acknowledged that the used measures of dispositional gratitude and envy are self-reported and thus could be biased by participants' levels of social desirability and conscious awareness about such feelings. However, the GQ-6 and DES are the most commonly utilised questionnaires about dispositional gratitude and envy and no specific projective techniques have been currently developed to measure these constructs. Besides, we should note that dispositional envy is not considered as a unitary construct in current research and that the DES is indicative of malicious, rather than benign envy. This notwithstanding, the analysis of benign envy was out of the scope of the present study, which instead focused on the diverse nature of gratitude and envy as opposite ends of the same spectrum. As well, given its preliminary and exploratory nature, the present study used a purposive sample with a broad range of ages, without providing subgroup analyses controlling

for potential age- or gender-related effects. Therefore, future research studies should test whether the distinctive elements identified across gratitude- and envy-related narratives may vary depending on age and gender.

Overall, the strengths of this study refer to its mixed-method design, aimed at exploring the experience of gratitude and envy from participants' narrative accounts about such feelings, thus giving relevance to what was meaningful and salient to them. Besides, this study represents the first attempt to grasp specific linguistic patterns referring to grateful and envious experiences, which may provide content-related evidence of validity for the existing dispositional measures. In conclusion, the study results shed light on the potential diverse nature of grateful and envious disposition in terms of mentalisation processes, perception of social comparison and coping strategies that could orient future investigation in the field. This may have relevant implications for psychological assessment because reduced emotional awareness, negative perception of social comparison, and scarce reliance on active coping strategies may represent indicators of an envious disposition when processing related experiences through narrative. Besides, fostering the client's capacities to identify and describe feelings of envy/gratitude, positively reinterpret disadvantageous comparison situations, and focus on personal effort and positive contributions of others to one's well-being may indicate useful intervention strategies for gratitude promotion.

### Compliance with Ethical Standards

#### Conflict of interest

The authors declare that they have no competing interests.

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#### Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

#### Informed Consent

Each participant dealt with the process of informed consent.

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