

The Expression of Gratitude and Envy: The Relationship between Referential Activity and Self-Reported Measures

Andrea Caputo 

Department of Dynamic and Clinical Psychology, and Health Studies, "Sapienza" University of Rome, Italy

The present study aims at testing whether: higher connection between subsymbolic and symbolic systems in expressing gratitude or envy may account for greater proneness to experience such feelings (1); differential effects exist when considering the (dis)connection among systems in expressing the opposite feelings (2). A convenience sample of 56 Italian participants was recruited (50% female; $M_{\text{age}} = 44.16$ years, $SD = 16.07$). A structured interview was used to compute some referential activity (RA) measures regarding the expression of gratitude and envy; in addition, dispositional gratitude (GQ-6) and envy (DES) scales were administered. Multiple regression analyses were used to test the role of RA measures in explaining dispositional gratitude and envy, controlling for gender and age, whereas subgroup analyses for participants with low/high RA levels in envy and gratitude examined potential differential effect estimates. The results showed that envy-related RA may allow disclosing envious feelings, especially when there is a greater difficulty to get in touch with gratitude. Instead, gratitude-related RA does not necessarily result in greater grateful disposition, also because affect integration about envy can confound the relationship between emotional awareness and self-reported levels of gratitude. Limitations, suggestions for future research, and clinical implications are briefly discussed.

Key words: gratitude, envy, referential activity, symbolization, multiple code theory

Gratitude and envy represent very common feelings, historically considered as opposite ends of the same spectrum. Indeed, whereas gratitude generally involves awareness of good things that happen, a sense of appreciation for life and thankfulness for other people's benevolence (McCullough, Emmons, &

Tsang, 2002), envy is featured by unpleasant feelings of inferiority, hostility, and resentment triggered by the awareness of other people who enjoy a desired possession or attribute (Smith & Kim, 2007).

Past research has emphasized the cognitive appraisals of gratitude and envy, claim-

Correspondence concerning this article should be addressed to Andrea Caputo, Department of Dynamic and Clinical Psychology, and Health Studies, "Sapienza" University of Rome, Via degli Apuli 1 – 00185 Rome, Italy. E-mail: andrea.caputo@uniroma1.it

Received March 21, 2021



ing that they cannot be experienced without some awareness of the circumstances that occasioned them (Caputo, 2014; van de Ven, Zeelenberg, & Pieters, 2002). Indeed, disclosing envious feelings requires an admission of inferiority and conscious appraisals of another's better fortune (Berke, 2018; Smith & Kim, 2007), whereas gratitude involves acknowledging the goodness in one's life and benevolence received from others (Caputo, 2020; Poelker, Gibbons, & Maxwell, 2019). In this regard, dispositional gratitude and envy – which represent the most commonly utilized measures to assess individual proneness to experience such feelings in daily life (McCullough, Emmons, & Tsang, 2002; Smith & Kim, 2007) – have been demonstrated to correlate with more positive/negative appraisals when recalling past beneficial/unfavorable experiences, respectively (Ma, Tunney, & Ferguson, 2017; Neufeld & Johnson, 2016). However, they are conceptualized as incompatible conscious tendencies (Langher, Caputo, Nannini, & Sturiale, 2016; McCullough et al., 2002; Xiang, Chao, & Ye, 2018) and are well-known to be biased by socially desirable responding leading to problems of over- and underreporting (Smith, Parrott, Diener, Hoyle, & Kim, 1999). The stable proneness to feel grateful in daily life has been found to be negatively associated with dispositional envy (Solom, Watkins, McCurrach, & Scheibe, 2017). Indeed, gratitude features are overwhelmingly perceived as positive compared to envy ones (Lambert, Graham, & Fincham, 2009) since grateful people are more able to appreciate and savor positive experiences, whereas envious people tend to focus on what they lack (Roberts, 2004).

Knowing the extent to which the experiences of gratitude and envy are subjectively felt and consciously expressed in language thus represents a relevant question. In this regard, the multiple code theory (Bucci, 1997), based

on the integration between psychoanalysis and cognitive science, provides a view of emotional processing as encompassing different systems of codes (nonverbal subsymbolic, nonverbal symbolic, and verbal symbolic modalities). Accordingly, the concept of “referential process” (Bucci, 2000) can be particularly useful to understand how nonverbal material, existing both outside of and within awareness, can be brought into a form that can be translated into language. Indeed, “the transformation of the meanings represented in the non-verbal components is necessary for self-reflection and for the verbal communication of subjective experience” (Luminet, Bagby, & Taylor, 2018, p. 7). Connections among symbolic and subsymbolic systems in the emotion schemas can be assessed through the Referential Activity (RA), a measure providing the basis for affect integration expressed through the narrator's linguistic style. From an operational view, RA can be derived from two aspects of speech, which are different despite being intercorrelated, and include sensory (e.g., evocative/visceral and concrete qualities) and formal (e.g., articulation, focus and communicative quality) characteristics of language (Bucci, 1997). Consistently, high RA language is vivid, specific, full of imagery, and evocative; whereas, low levels of RA may indicate a potential dissociation in emotional processing and alexithymic traits (Di Trani, Mariani, Renzi, Greenman, & Solano, 2018; Taylor, 2003).

Theoretical Framework and Study Aims

The present study adopts an object relations framework to inspect the expression of gratitude and envy, assuming that such emotions refer to inner representations of the self as experienced in relation to others (Klein, 1957). When confronted with others' goodness, destructive urges may emerge that engender the attack of the good qualities that one is lacking.

Instead, developing gratitude allows empathic identification and modulates envious feelings by making loss more tolerable (Klein, 1957). From a psychoanalytic perspective, gratitude and envy are thus considered as primary and pan-human coexisting emotions. Therefore, the authentic experience of gratitude subjectively implies acknowledging envious feelings to some extent; otherwise, gratitude expression may be the result of defensive operations to enhance self-presentation. In addition, envy expression may become excessive only when the person lacks the capacity for appreciating others' goodness and regulate destructive impulses. This may explain why gratitude and envy measures are generally biased, since the former are affected by socially desirable responding and the latter tend to be underreported.

Based on these premises, the present study aims at testing two hypotheses. First, a higher connection between subsymbolic and symbolic systems in recalling past experiences of gratitude and envy is expected to account for greater proneness to experience such feelings because of enhanced awareness and affect integration. Second, differential effects are hypothesized when considering the degree of (dis)connection among systems in expressing the opposite feelings. Specifically, in the participants with lower connection about envy, RA about gratitude could lead to overestimating one's grateful tendency as the result of self-deception and defensive operations; whereas, in those with lower connection about gratitude, RA about envy could increase the intensity and frequency of envy due to a deficit in regulating its painful destructive components.

Method

Participants and Procedures

Fifty-six Italian individuals, balanced by gender (50% female) and age class ($M_{age} = 44.16$,

$SD = 16.07$; range 18-87 years), were recruited through a snowball sampling procedure. After obtaining written informed consent, participants were administered a structured interview exploring their experience of gratitude and envy, based on recalling past episodes. Indeed, detailed memory of an episode potentially holds within itself rich reservoirs of emotional experience, representing an exemplar of an emotion schema in a specific situational context (Bucci, Maskit, & Murphy, 2016). Two-open ended questions were asked, respectively focusing on being the subject and object of gratitude/envy. If nothing came to the interviewees' minds, the questions were reworded so that they could imagine potential situations where they might be the subject/object of such feelings. Indeed, the structure of the emotion schema can be represented in language also through autobiographical memories with varying degrees of veridicality, including fantasies or dreams (Bucci et al., 2016). The interviews were conducted in silent space and audio-recorded, and had an average duration of nine minutes. Then, measures of dispositional gratitude and envy were administered. To avoid recency effects, the order of both the interview questions and the used scales was counterbalanced, so that half of participants began with gratitude and the other half with envy.

Measures

Referential activity. The RA method was used (Bucci & McKay, 2014; De Coro & Caviglia, 2000) to assess the qualities of language based on four scales: concreteness (perceptual and sensory quality), specificity (degree of detail and information), clarity (organization and focus), and imagery (vividness and effectiveness). These scales were rated from 0 to 10 points by three competent judges, using the four recalled episodes as scoring units

(with a total of 224 coded texts). Consistently, high RA scores reflect a vivid, specific, clear and full of imagery language; whereas, low RA scores indicate abstract, general, vague, and diffuse utterances. The judges were experienced psychologists (with a minimum of 5 years of post-training clinical experience) and received specific training on the RA method. The intraclass correlation coefficient (ICC, 95% CI; Model: Two-way random, average measure; Type: Consistency) to evaluate interrater agreement on the four scales was 0.93 [0.88, 0.98] for concreteness, 0.81 [0.77, 0.85] for specificity, 0.87 [0.83, 0.91] for clarity, and 0.72 for imagery [0.69, 0.75]. For each participant the scores of the two related episodes of gratitude and envy were respectively averaged and then three indicators were computed for each emotion as follows: RA (average of the four scales), CONIM (average of the concreteness and imagery scales) reflecting the level of “sensory imagery” expressed in language, and CLASP (average of the clarity and specificity scales) reflecting the “organization qualities of discourse” (Bucci & McKay, 2014, p. 25).

Gratitude Questionnaire (GQ-6). The GQ-6 (McCullough et al., 2002) evaluates dispositional gratitude, in terms of intensity, frequency, span, and density. It consists of six items assessed on a 7-point Likert agreement scale and has a total score ranging from 6 to 42. The Italian version of the GQ-6 was used (Caputo, 2016) and in the present study showed fair internal consistency ($\alpha = .66$).

Dispositional Envy Scale (DES). The DES (Smith et al., 1999) evaluates dispositional envy in terms of frequency and intensity of explicit envious feelings and implicit envy-related reactions, referring to inferiority, sense of injustice, frustration, and resentment. It consists of eight items assessed on a 5-point Likert agreement scale and has a total score ranging from 8 to 40. The Italian version of

the DES was used (Nannini, Caputo, Marchini, Martino, & Langher, 2019) and in the present study showed satisfactory internal consistency ($\alpha = .78$).

Statistical Analyses

Some preliminary analyses were performed through one-way repeated measures ANOVAs to examine whether RA measures varied based on the order of the interview questions and the presence of imagined episodes of gratitude and envy (reported in at least one of the subject-object episodes). Then, independent *t*-test analyses were performed to examine differences in dispositional gratitude and envy between those reporting and not reporting imagined episodes. Indeed, those failing to recall real autobiographical memories could have greater difficulties in becoming aware of such emotional experiences and disclose them to a lesser extent.

To test our hypotheses, multiple regression analyses were conducted for explaining variance in dispositional gratitude (GQ-6) or envy (DES) based on RA measures about grateful or envious feelings (using CONIM and CLASP values as independent variables). Then, the analyses were repeated for the two subgroups of participants with low and high levels of RA in envy- or gratitude-related utterances (based on their median values) to examine potential differential effect estimates. The enter method was used, controlling for gender and age as covariates, and only the predictors with *p* values $<.05$ were retained. To compute the statistical power of our hypothesis tests, G*power was used with *t*-test, linear multiple regression: fixed model, single regression coefficient (Faul, Erdfelder, Buchner, & Lang, 2009). Accordingly, for our first hypothesis tests, the achieved power was 0.81 to detect a medium-sized effect with α set to $.05$ (two-tailed). Instead, for the secondary subgroup

analyses, due to the reduced sample size, the statistical power was adequate only to detect a large-sized effect. Therefore, effect sizes (and relative CIs) should be primarily considered apart from the statistical significance, adopting the cutoffs of .1, .3, and .5 for standardized regression coefficients, respectively indicating small, medium and high associations (Cohen, 1988).

Results

The descriptive statistics of the study measures are presented in Table 1.

The preliminary analyses showed no effect of the order of the interview questions across gratitude- and envy-related utterances on RA measures. Overall, imagined episodes about being the subject and/or the object of gratitude and envy were reported by ten and twenty participants, respectively. Whereas there were no effects of reporting imagined episodes of gratitude, statistically significant effects were found for envy on RA, $F(1, 54) = 8.980, p = .004$; CONIM, $F(1, 54) = 7.208, p = .010$; and CLASP, $F(1, 54) = 8.883, p = .004$. Post hoc tests using the Bonferroni correction

revealed that imagining episodes of envy elicited a reduction of all RA measures related to both gratitude and envy (Table 2). Moreover, people who narrated imagined episodes overall had lower dispositional envy ($M = 10.55, SD = 2.91$) than their counterparts ($M = 14.64, SD = 5.37$), $t(54) = 3.15, p < .01$, Cohen's $d = -0.88$, 95% CI [-0.45, -0.30].

Multiple regression analyses showed that higher levels of CLASP in gratitude-related utterances accounted for lower proneness to experience gratitude, $\beta = -0.62, p < .05$, 95% CI [-1.20, -0.04], whereas CONIM does not seem to have a role. However, repeating the analyses for subgroups with low/high levels of RA concerning envy, such a predictor was no longer statistically significant in either group (Table 3). Therefore, RA about envy seemed to act as a potential confounder because people with higher RA values in envy were found to report lower dispositional gratitude ($M = 30.18, SD = 6.39$) than their counterparts ($M = 32.89, SD = 5.09$), albeit not to a statistically significant extent, $t(54) = -1.76, p = .085$, Cohen's $d = 0.47$, 95% CI [-0.06, 1.00].

Instead, higher levels of CLASP in envy-related utterances accounted for greater prone-

Table 1 Descriptive statistics of the study measures ($N = 56$)

		<i>M</i>	<i>SD</i>
RA	Gratitude	3.60	2.44
	Envy	3.10	2.69
CONIM	Gratitude	3.34	2.41
	Envy	3.01	2.68
CLASP	Gratitude	3.69	2.56
	Envy	3.20	2.81
GQ-6 (Dispositional Gratitude)		31.54	5.89
DES (Dispositional Envy)		13.18	5.02

Table 2 Post hoc tests using the Bonferroni correction examining differences in referential activity (RA) measures based on the reporting of real or imagined episodes of envy

	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>t</i>	<i>p</i>	Cohen's <i>d</i> [95% CI]
RA (Gratitude)						
Real episodes (n = 36)	4.07	2.68	0.45	2.37	.021	0.66 [0.10, 1.22]
Imagined episodes (n = 20)	2.52	1.52	0.34			
CONIM (Gratitude)						
Real episodes (n = 36)	3.82	2.68	0.45	2.05	.046	0.57 [0.01, 1.12]
Imagined episodes (n = 20)	2.48	1.54	0.35			
CLASP (Gratitude)						
Real episodes (n = 36)	4.31	2.79	0.47	2.57	.013	0.72 [0.15, 1.28]
Imagined episodes (n = 20)	2.56	1.61	0.36			
RA (Envy)						
Real episodes (n = 36)	4.12	2.82	0.47	4.38	<.001	1.22 [0.62, 1.81]
Imagined episodes (n = 20)	1.27	0.91	0.20			
CONIM (Envy)						
Real episodes (n = 36)	3.92	2.90	0.48	3.83	<.001	1.07 [0.48, 1.64]
Imagined episodes (n = 20)	1.36	0.90	0.20			
CLASP (Envy)						
Real episodes (n = 36)	4.32	2.86	0.48	4.74	<.001	1.32 [0.72, 1.92]
Imagined episodes (n = 20)	1.17	1.01	0.23			

ness to experience envy, $\beta = 0.83$, $p < .05$, 95% CI [0.13, 1.54], whereas CONIM was not a statistically significant predictor. Repeating the analyses for subgroups with low/high levels of RA concerning gratitude, CLASP remained statistically significant only for the participants with lower RA in gratitude-related utterances, $\beta = 0.65$, $p < .05$, 95% CI [0.09, 2.61] (Table 4).

Discussion

Our hypotheses about gratitude were not confirmed. Surprisingly, higher levels of CLASP accounted for lower proneness to gratitude, indicating that the greater the connection among systems, the smaller the reported tendency to experience gratitude in daily life. Some potential explanations can be suggested. First, more grateful people tend

to underestimate the true positive impact of their gratitude on others, as well as how warm and competent the recipients perceive them to be (Kumar & Epley, 2018). Indeed, since gratitude involves reparation, grateful people are more realistic, effort-oriented, and guilt-prone because of their empathic failures in responding to others (Caputo, Fregonese, & Langher, 2020), which potentially lead to more cautious self-perceptions. Indeed, gratitude exercises have been found to promote mixed emotional experiences including guilt (Layous et al., 2017). In this regard, a lot of research suggests that gratitude should be conceptualized as a moral emotion (McCullough et al., 2001; Tangney et al., 2007), also given the strong link between social evaluations and the intensities with which gratitude and other social emotions are activated (Sznycer & Lukaszewski, 2019).

Table 3 Results of the multiple regression analyses examining the role of gratitude-related RA measures in explaining dispositional gratitude

Overall (N = 56)							
$R^2 = .29, p = .001$							
	Unstandardized	Standard Error	Standardized	t	p	95% CI	
						Lower	Upper
Age	0.01	0.04	0.04	0.34	0.734	-0.07	0.11
Gender (Male)	-4.75	1.40	-0.41	-3.40	0.001	-7.56	-1.95
CONIM (Gratitude)	0.91	0.71	0.37	1.28	0.207	-0.52	2.34
CLASP (Gratitude)	-1.42	0.66	-0.62	-2.14	0.037	-2.74	-0.09
Low AR in envy-related utterances (n = 28)							
$R^2 = .30, p = .070$							
	Unstandardized	Standard Error	Standardized	t	p	95% CI	
						Lower	Upper
Age	-0.05	0.05	-0.17	-0.96	0.346	-0.16	0.06
Gender (Male)	-5.22	1.78	-0.52	-2.94	0.007	-8.89	-1.54
CONIM (Gratitude)	0.80	1.27	0.19	0.63	0.537	-1.84	3.43
CLASP (Gratitude)	-1.35	1.12	-0.37	-1.20	0.242	-3.68	0.98
High AR in envy-related utterances (n = 28)							
$R^2 = .31, p = .062$							
	Unstandardized	Standard Error	Standardized	t	p	95% CI	
						Lower	Upper
Age	0.14	0.08	0.31	1.60	0.123	-0.04	0.31
Gender (Male)	-4.37	2.22	-0.35	-1.96	0.062	-8.97	0.23
CONIM (Gratitude)	1.51	1.00	0.64	1.51	0.144	-0.55	3.57
CLASP (Gratitude)	-1.70	0.97	-0.70	-1.75	0.093	-3.72	0.31

Second, gratitude is intertwined with culturally agreeable attitudes and partially overlaps with social desirability traits, often resulting in conventional and normative responses (Poelker et al., 2019).

Accordingly, people with poor capacity to symbolize gratitude may rely on self-deception enhancement to a greater extent, as an unconscious tendency to exaggerate one's positive qualities and protect self-esteem (Gulliford, Morgan, Hemming, & Abbott, 2019). Anyway, subsequent subgroup analyses revealed that this association was no longer relevant, if the degree of affect integration in envy-related ut-

terances is considered, suggesting that it may account for part of the effect initially found.

Instead, the study results confirmed our hypotheses about envy, showing that higher CLASP scores succeeded to account for greater envious disposition. Accordingly, the greater capacity to connect systems, expressed in terms of clarity and specificity of language, was associated with greater proneness to experience envy frequently and intensely. This appears consistent with previous research about conscious appraisals of disadvantageous social comparisons and circumstances triggering envy (Berke, 2018; Smith & Kim,

Table 4 Results of the multiple regression analyses examining the role of envy-related RA measures in explaining dispositional envy

Overall (N = 56)							
	Unstandardized	Standard Error	Standardized	t	p	95% CI	
						Lower	Upper
<i>R</i> ² = .17, <i>p</i> = .043							
Age	-0.06	0.04	-0.20	-1.52	0.135	-0.14	0.02
Gender (Male)	-0.30	1.29	-0.03	-0.23	0.819	-2.89	2.30
CONIM (Envy)	-1.12	0.65	-0.60	-1.70	0.094	-2.43	0.20
CLASP (Envy)	1.48	0.62	0.83	2.37	0.021	0.23	2.73
Low AR in gratitude-related utterances (n = 28)							
<i>R</i> ² = .25, <i>p</i> = .133							
	Unstandardized	Standard Error	Standardized	t	p	Lower	Upper
Age	-0.05	0.05	-0.16	-0.87	0.391	-0.16	0.06
Gender (Male)	-1.76	1.98	-0.17	-0.89	0.383	-5.85	2.33
CONIM (Envy)	-1.69	1.07	-0.46	-1.59	0.126	-3.90	0.51
CLASP (Envy)	2.39	1.08	0.65	2.21	0.037	0.16	4.62
High AR in gratitude-related utterances (n = 28)							
<i>R</i> ² = .20, <i>p</i> = .261							
	Unstandardized	Standard Error	Standardized	t	p	Lower	Upper
Age	-0.09	0.07	-0.25	-1.25	0.223	-0.24	0.06
Gender (Male)	1.64	1.77	0.18	0.93	0.363	-2.02	5.30
CONIM (Envy)	-0.72	0.89	-0.47	-0.81	0.424	-2.56	1.12
CLASP (Envy)	1.02	0.83	0.69	1.23	0.233	-0.70	2.74

2007), as reflected in the present study by the greater awareness of the communicative intent of discourse and its level of detail and articulation. Conversely, a disconnection among systems may result in underreporting of envy, since it is connoted as a socially undesirable emotion for self and others (Smith et al., 1999) and tends to be denied because of its self-threatening nature (Casu, 2015), thus involving repression and other defensive operations. This is supported by the fact that those telling imagined episodes of envy overall had lower measures of RA and reported being envious to a lesser extent, highlighting impaired access to and recognition of such a painful

emotion (Smith & Kim, 2007). Consequently, the difficulties in integrating conflicting aspects associated with envy may result in an anxiety-ridden discourse as revealed by the worsening of the quality of language (Halfon & Weinstein, 2013). Besides, such a relationship in the expression of envy remains statistically significant only for the participants with lower RA in gratitude-related utterances. Following Klein's framework, the less the individual has the capacity for empathic identification and appreciation of goodness, the more s/he is plunged into an unbearable sense of painful helplessness that can, in turn, exacerbate angry feelings. Instead, getting in touch with

grateful feelings as well can make the sense of loss and inferiority more tolerable and promote greater awareness of one's destructive urges, without necessarily being plunged into enduring envy (Klein, 1957).

Then, it should be acknowledged that only CLASP is confirmed to be a statistically significant predictor of both gratitude and envy expression, whereas CONIM values were not found to have a role. In this regard, since gratitude and envy reporting is generally affected by social desirability bias, we can hypothesize that the formal aspects of speech may prevail over the level of sensory imagery expressed in language. Indeed, values of CLASP are generally associated with the tendency to control emotions and potential defensive styles (e.g., rationalization, intellectualization) (Buonarivivo et al., 2000; Rocco, Montorsi, & Zanelli, 2012). Indeed, the overall RA measures of our sample tend to be lower than the median values, potentially suggesting that the expression of socially valued emotions, such as gratitude and envy, may be partially inhibited, especially in non-clinical settings.

Overall, the present study suggests that the capacity to connect symbolic and subsymbolic systems in the experience of envy may allow disclosing envious feelings, especially when there is a greater difficulty to get in touch with gratitude, thus making envy overwhelming and unbearable. Instead, this capacity in the gratitude expression does not necessarily result in greater grateful disposition but, in some cases, could lead to underestimating it, probably because of more honest and unbiased reports. However, affect integration about envy can confound the relationship between emotional awareness and self-reported levels of gratitude.

Several study limitations should be acknowledged, such as the convenience nature of the sample, the reduced generalizability of the results (especially to clinical settings), and

the use of self-reported and short measures to assess gratitude and envy, despite GQ-6 and DES being the most commonly utilized. In this regard, future studies could adopt novel measures which vary conceptually and methodologically from these, for instance, developing specific projective techniques that are more apt to assess gratitude and envy from a psychodynamic perspective.

Recommendations for future research include the use of controls for social desirability, computerized linguistic measures of RA to avoid biased ratings, and replications to make the present study's conclusions more robust. In addition, based on our findings, the diverse role of real or imagined situations of gratitude and envy in emotional expression needs to be further investigated.

This notwithstanding, the present study provides interesting insights suggesting that envious feelings may be verbalized and disclosed if there is enough affect integration, especially when the individual lacks the symbolizing capacity for gratitude. From this perspective, clinical work could benefit from a greater connection among symbolic and subsymbolic systems to make clients more aware of the less elaborated, painful and destructive components of envy. Instead, reports of gratitude are more likely to be overestimated due to social desirability bias and self-deception; therefore, more reflection should be promoted on how clients appreciate the goodness in oneself and others to mobilize authentic feelings of love and mutuality.

Author's ORCID

Andrea Caputo

<https://orcid.org/0000-0003-3516-8332>

References

- Berke, J. H. (2018). *Why I hate you and you hate me: The interplay of envy, greed, jealousy and narciss-*

- sism in everyday life* (3rd ed.). London, UK: Karnac. <https://doi.org/10.4324/9780429485022>
- Buonarrivo, L., Lingiardi, V., Ortu, F., Palombo, L., De Coro, A., & Dazzi, N. (2000). Transfert, stile difensivo, attività referenziale: Un'ipotesi di lettura single case [Transfert, defensive style, referential activity: A single case reading hypothesis]. *Ricerca in Psicoterapia*, 3(2-3), 169–189.
- Bucci, W. (1997). *Psychoanalysis and cognitive science*. New York, NY: Guilford.
- Bucci, W. (2000). The need for a “psychoanalytic psychology” in the cognitive science field. *Psychoanalytic Psychology*, 17(2), 203–224. <https://doi.org/10.1037/0736-9735.17.2.203>
- Bucci, W., & McKay, R. K. (2014). *Manual for Scoring RA Scales*. (Original publication, 1992) <https://doi.org/10.6084/m9.figshare.962956>
- Bucci, W., Maskit, B., & Murphy, S. (2016). Connecting emotions and words: The referential process. *Phenomenology and the Cognitive Sciences*, 15(3), 359–383. <https://doi.org/10.1007/s11097-015-9417-z>
- Caputo, A. (2014). The social construction of envy in scientific community: An analysis of scholarly psychological publications. *Studia Psychologica*, 56(2), 109–125. <https://doi.org/10.21909/sp.2014.02.654>
- Caputo, A. (2016). Italian translation and validation of the Gratitude Questionnaire (GQ-6). *International Journal of Wellbeing*, 6(2), 80–92. <https://doi.org/10.5502/ijw.v6i2.492>
- Caputo, A. (2020). The linguistic patterns of the grateful and envious disposition: Cognitive and emotional processes underlying narratives. *Rassegna di Psicologia*, 37(1), 23–34. <https://doi.org/10.13133/1974-4854/16721>
- Caputo, A., Fregonese, C., & Langher, V. (2020). Development and validation of the Dynamic Career Scale (DCS): A psychodynamic conceptualization of career adjustment. *International Journal for Educational and Vocational Guidance*, 20, 263–292. <https://doi.org/10.1007/s10775-019-09403-5>
- Casu, G. (2015). *Envy: A psychometric refinement of the construct* (Doctoral Dissertation). Retrieved from <http://amsdottorato.unibo.it/6861/>
- De Coro, A., & Caviglia, G. (2000). *La valutazione dell'attività referenziale* [The assessment of referential activity]. Rome, Italy: Edizioni Kappa.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Di Trani, M., Mariani, R., Renzi, A., Greenman, P. S., & Solano, L. (2018). Alexithymia according to Bucci's multiple code theory: A preliminary investigation with healthy and hypertensive individuals. *Psychology and Psychotherapy: Theory, Research and Practice*, 91(2), 232–247. <https://doi.org/10.1111/papt.12158>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Gulliford, L., Morgan, B., Hemming, E., & Abbott, J. (2019). Gratitude, self-monitoring and social intelligence: A prosocial relationship? *Current Psychology*, 38(4), 1021–1032. <https://doi.org/10.1007/s12144-019-00330-w>
- Halfon, S., & Weinstein, L. (2013). From compulsion to structure: An empirical model to study invariant repetition and representation. *Psychoanalytic Psychology*, 30(3), 394–422. <https://doi.org/10.1037/a0033618>
- Klein, M. (1957). *Envy and gratitude: A study of unconscious forces*. New York, NY: Basic Books.
- Kumar, A., & Epley, N. (2018). Undervaluing gratitude: Expressers misunderstand the consequences of showing appreciation. *Psychological Science*, 29(9), 1423–1435. <https://doi.org/10.1177/0956797618772506>
- Lambert, N. M., Graham, S. M., & Fincham, F. D. (2009). A prototype analysis of gratitude: Varieties of gratitude experiences. *Personality and Social Psychology Bulletin*, 35(9), 1193–1207. <https://doi.org/10.1177/0146167209338071>
- Langher, V., Caputo, A., Nannini, V., & Sturiale, M. (2016). Gratitude and envy: Implication for career development. In A. R. Howard (Ed.), *Psychology of gratitude: New research* (pp. 75–96). New York, NY: Nova Science Publishers.
- Layous, K., Sweeny, K., Armenta, C., Na, S., Choi, I., & Lyubomirsky, S. (2017). The proximal experience of gratitude. *PLoS One*, 12(7), e0179123. <https://doi.org/10.1371/journal.pone.0179123>
- Luminet, O., Bagby, R. M., & Taylor, G. J. (Eds.). (2018). *Alexithymia: Advances in research, theory, and clinical practice*. Cambridge, UK: Cambridge University Press.
- Ma, L. K., Tunney, R. J., & Ferguson, E. (2017). Does gratitude enhance prosociality?: A meta-analytic

- review. *Psychological Bulletin*, 143(6), 601–635. <https://doi.org/10.1037/bul0000103>
- McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality & Social Psychology*, 82(1), 112–127. <https://doi.org/10.1037/0022-3514.82.1.112>
- McCullough, M. E., Kilpatrick, S. D., Emmons, R. A., & Larson, D. B. (2001). Is gratitude a moral affect? *Psychological Bulletin*, 127(2), 249–266. <https://doi.org/10.1037/0033-2909.127.2.249>
- Nannini, V., Caputo, A., Marchini, F., Martino, G., & Langher, V. (2019). Italian adaptation and validation of the Dispositional Envy Scale. *Rassegna di Psicologia*, 36(3), 73–91. <https://doi.org/10.4458/2733-06>
- Neufeld, D. C., & Johnson, E. A. (2016). Burning with envy? Dispositional and situational influences on envy in grandiose and vulnerable narcissism. *Journal of Personality*, 84(5), 685–696. <https://doi.org/10.1111/jopy.12192>
- Poelker, K. E., Gibbons, J. L., & Maxwell, C. A. (2019). The relation of perspective-taking to gratitude and envy among Guatemalan adolescents. *International Perspectives in Psychology: Research, Practice, Consultation*, 8(1), 20–37. <https://doi.org/10.1037/ipp0000103>
- Roberts, R. C. (2004). The blessings of gratitude: A conceptual analysis. In R. A. Emmons & M. E. McCullough (Eds.), *The psychology of gratitude* (pp. 58–78). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195150100.003.0004>
- Rocco D., Montorsi A., & Zanelli D. (2012). Referential process analysis and evaluation of psychological structure: An empirical analysis of psychodynamic psychotherapies. In A. L. Comunian, A. O’Roark, & L. F. Lowenstein (Eds.), *Psychological values around the world, Proceedings of the 68th Convention Melbourne World Peace Summit Padua Regional Meeting* (pp. 457–467). Padua: Cleup.
- Smith, R. H., & Kim, S. H. (2007). Comprehending envy. *Psychological Bulletin*, 133(1), 46–64. <https://doi.org/10.1037/0033-2909.133.1.46>
- Smith, R. H., Parrott, W. G., Diener, E. F., Hoyle, R. H., & Kim, S. H. (1999). Dispositional envy. *Personality and Social Psychology Bulletin*, 25, 1007–1020. <https://doi.org/10.1177/01461672992511008>
- Solom, R., Watkins, P. C., McCurrach, D., & Scheibe, D. (2017). Thieves of thankfulness: Traits that inhibit gratitude. *The Journal of Positive Psychology*, 12(2), 120–129. <https://doi.org/10.1080/17439760.2016.1163408>
- Szycer, D., & Lukaszewski, A. W. (2019). The emotion–valuation constellation: Multiple emotions are governed by a common grammar of social valuation. *Evolution and Human Behavior*, 40(4), 395–404. <https://doi.org/10.1016/j.evolhumbehav.2019.05.002>
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, 58, 345–372. <https://doi.org/10.1146/annurev.psych.56.091103.070145>
- Taylor, G. J. (2003). Somatization and conversion: Distinct or overlapping constructs? *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry*, 31, 487–508. <https://doi.org/10.1521/jaap.31.3.487.22136>
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2012). Appraisal patterns of envy and related emotions. *Motivation and Emotion*, 36(2), 195–204. <https://doi.org/10.1007/s11031-011-9235-8>
- Xiang, Y., Chao, X., & Ye, Y. (2018). Effect of gratitude on benign and malicious envy: The mediating role of social support. *Frontiers in Psychiatry*, 9, 139. <https://doi.org/10.3389/fpsyg.2018.00139>