

# Reliability and Validity of the Interpersonal Guilt Rating Scale-15: A New Clinician-Reporting Tool for Assessing Interpersonal Guilt According to Control-Mastery Theory

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*Abstract:* This article introduces the Interpersonal Guilt Rating Scale-15 (IGRS-15), a brief clinician-rated tool for the clinical assessment of interpersonal guilt as conceived in Control-Mastery Theory (CMT; Silberschatz, 2015; Weiss, 1993), and its psychometric proprieties. The items of the IGRS-15 were derived from the CMT clinical and empirical literature about guilt, and from the authors' clinical experiences. Twenty-eight clinicians assessed 154 patients with the IGRS-15, the patient self-reported Interpersonal Guilt Questionnaire-67 (IGQ-67; O'Connor, Berry, Weiss, Bush, & Sampson, 1997), and the Clinical Data Form (CDF; Westen & Shedler, 1999).

A semi-exploratory factor analysis pointed to a four-factor solution in line with the kinds of guilt described in CMT: *Survivor guilt*, *Separation/disloyalty guilt*, *Omnipotent responsibility guilt*, and *Self-hate*. The test-retest reliability of the IGRS-15 was good. Moreover, the IGRS-15 showed good concurrent and discriminant validity with the IGQ-67.

IGRS-15 represents a first step in the direction of supporting the clinical judgment about interpersonal guilt with an empirically sound and easy-to-use tool.

*Keywords:* assessment, guilt, Control-Mastery Theory, clinician report, factor analysis

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Guilt is a complex and distressing emotion with multiple determinants that can be experienced in a variety of different situations. It may be chronic or transitory as well as conscious or unconscious, and it occurs when a person has done or feels to have done something wrong or when a person feels wrong and dangerous for being how she or he is (Albertsen, O'Connor, & Berry, 2006; Bush, 2005). The majority of psychoanalytic authors focused primarily on the *intrapsychic* origins of guilt. For example, Freud (1923, 1924, 1930) and Klein (1935, 1946) thought that guilt arises when the superego attacks the ego or when the ego, itself, feels a need to be punished for perverse or aggressive impulses. According to this view, guilt is often connected to self-punishments for impulses considered unacceptable or destructive, but can also motivate individuals to make reparations for the harm they imagine themselves to have caused to loved ones (Betensky, 2010; Carni, Petrocchi, Del Miglio, Mancini, & Couyoumdjian, 2013; Lewis, 1971). Therefore, in the traditional psychoanalytic view, guilt derives primarily from unconscious wishes to hurt others and it stems from motives such as revenge, envy, jealousy, and hatred. This view suggests that people feel guilty because they have *antisocial* unconscious drives and wishes in conflict with their loving impulses and inner moral values.

By contrast, recent developments in biological, psychological, and social sciences, influenced, among others, by Bowlby's (1969, 1973, 1980) attachment theory and by the sociobiological framework proposed for the first time by Wilson (1975), led to a redefinition of *conscious guilt* as an *interpersonal* emotion based on the need to maintain attachment relationships, care relationships, and group bonds (Baumeister, Stillwell, & Heatherton, 1994; Haidt, 2012; O'Connor, Berry, & Weiss, 1999; Wilson, 2015). Now, many researchers (Hoffman, 2000; Zahn-Waxler, & Robinson, 1995) claim that guilt is an *adaptive, pro-social* emotion that inhibits aggression and drives people to take reparative actions aimed to rectify the wrongdoing. Within this theoretical frame, guilt is rooted in *empathic distress* for another person's suffering and in feelings of *responsibility* for having caused that suffering (Bush, 2005).

However, these findings do not take into account the fundamental role of *unconscious* and *irrational* guilt based on a person's *fear of harming or having harmed other people* in the pursuit of developmental, healthy, and adaptive goals. According to Control-Mastery Theory

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1. Control-Mastery Theory is a cognitive-psychodynamic-relational theory (Silberschatz, 2005) of mind, psychopathology, and therapy developed by Joseph Weiss (1993) and Harold Sampson, and empirically studied by the Mount Zion (now San Francisco) Psychotherapy Research Group (Weiss, Sampson, & The Mount Zion Psychotherapy Research Group, 1986).

(CMT),<sup>1</sup> guilt is interpersonal in its origin, its aim is pro-social, and its function is adaptive, but CMT also stresses how guilt may be unconscious, excessive, irrational, and problematic, especially when based on *pathogenic beliefs*, generalized and repeatedly linked to shame or when it is not possible to alleviate it through reparative actions. Therefore, interpersonal guilt can become *maladaptive* and lead to distress, inhibitions, and symptoms (Locke, Shilkret, Everett, & Petry, 2013; O'Connor, Berry, Weiss, Bush, & Sampson, 1997). In fact, irrational guilt stems from and, at the same time, upholds pathogenic beliefs. Like unconscious pathogenic beliefs, it has its origins in infancy within the traumatic relationships of the child with parents and other family members. The pathogenic beliefs supporting irrational guilt are influenced by the children's egocentric, omnipotent, and magical thinking that frequently supports false causal connections between one's own normal behavior and anything bad that happens to the self or to family members. Guilt ensures that people are compliant with traumatic parents, whether by identifying with them or by rebelling in dysfunctional ways to their messages. Therefore, according to CMT, guilt may play a relevant role in psychopathology.

CMT focuses on four kinds of interpersonal guilt: *survivor guilt*, *separation/disloyalty guilt*, *omnipotent responsibility guilt*, and *self-hate*. *Survivor guilt* (see also Lifton, 1968; Niederland, 1981) refers to a painful emotion that people may experience when they are surpassing important others, believing that they are hurting them by being more successful, happy, fortunate, etc. In other words, people may assume, irrationally, that the attainment of the good things in life is unjust to those who have not gained them, or was at the expense of those who have not obtained them. *Separation guilt* stems from the fear of harming others via one's own physical distance or psychological separateness, while *disloyalty guilt* stems from the belief that having different values, appreciating a different way of life, supporting different political ideas or religious beliefs will be hurtful to loved ones. Separation and disloyalty guilt may be considered as two aspects of the same construct, that is, emotional expression of the fear of hurting important others by being separate and different from them (Asch, 1976; Modell, 1965). *Omnipotent responsibility guilt* involves an exaggerated sense of responsibility and concern for the happiness and well being of other people. It is based on the belief that one has the duty and power to save loved ones in trouble. Several other authors (see, e.g., Boehm, 1993, 1997; O'Connor, 2000) have also stressed how these three types of guilt, *per se*, may have had an adaptive value promoting group cohesion and inhibiting in-group competition, and how they may be associated with the levelling tendency in hunter-gatherer groups.

The last kind of interpersonal guilt, *self-hate*, arises when an individual complies with severely critical, abusive, or neglecting attitudes of important others, often a parent, who felt or showed indifference, hatred, or contempt toward the person. Self-hate describes the feeling of being inherently wrong, bad, inadequate, and not deserving of acceptance, protection, love, and happiness.

It is worth noting that these four kinds of guilt are substantially compatible with four of the six moral foundations of intuitive ethics identified by Jonathan Haidt (2012), the evolutionary moral psychologist. Survivor guilt can be easily connected to the “fairness versus cheating” foundation, which makes people feel wronged if someone receives more goods than other people of the same group and in the same circumstances; this foundation is related to the evolutionary process of reciprocal altruism. Separation/Disloyalty guilt can be connected to the “loyalty versus betrayal” foundation, which underlies the attribution of value to fidelity, conformity, and self-sacrifice for the group. Omnipotent responsibility guilt can be connected to the “care/harm” foundation, which makes people feel intuitively that it is morally right to protect and take care of people who are weak and in need of help. Finally, self-hate can be related to the “authority versus submission” foundation, given that the child cannot and does not feel entitled to question her/his parent’s messages, behaviors, and attitudes, and for this reason has to comply also with their negative messages.

From this perspective, these kinds of guilt may become pathogenic when supported by traumatic events and relationships that give rise to pathogenic beliefs, which give to them an excessive relevance in the mental life of a person.

A large body of theoretical and empirical studies show the relationship between excessive interpersonal guilt, self-sabotaging behaviors, and psychological problems, stressing the clinical relevance of a sound empirical assessment of interpersonal guilt in everyday clinical practice (Berghold & Locke, 2002; Bruno, Lutwak, & Agin, 2009; Giammarco & Vernon, 2015; Locke et al., 2013; Meehan, O’Connor et al., 1996; O’Connor, Berry, & Weiss, 1999; O’Connor, Berry, Weiss, & Gilbert, 2002; O’Connor, Berry, Weiss, Schweitzer, & Sevier, 2000; Tilghman-Osborne, Cole, & Felton, 2010). So far, the only existing empirical tool for assessing guilt from a CMT perspective is the self-report named Interpersonal Guilt Questionnaire-67 (IGQ-67; O’Connor et al., 1997). It assesses survivor guilt (22 items), separation guilt (15 items), omnipotent guilt (14 items), and self-hate (16 items). However, apart from some limitations specific to this tool that we will discuss later, self-reports alone may be questionable for a thorough assessment of psychological variables not accessible to introspective awareness,

namely, unconscious (Block, 1995; McAdams, 1992; Westen, 1998). In fact, self-report instruments are subject to defensive and self-presentational biases; moreover, a deeper understanding of personality and psychopathology generally requires professional training and experience-based inferences. Finally, as research has demonstrated that a great deal of human behavior reflects unconscious/implicit rather than conscious/explicit processes (Wilson, Lindsey, & Schooler, 2000), it is difficult to imagine that questionnaire items designed to minimize intellectual and literacy requirements are sufficient for making diagnostic and predictive judgments, particularly about unconscious and implicit processes and contents. A plausible strategy for overcoming these limitations of self-report tools is to provide clinicians with empirically sound and clinician-friendly tools to help them convey their knowledge, expertise, and intuition using a rigorous methodology, a standardized pool of items, and a precise metric (Westen & Shedler, 1999; Westen & Weinberger, 2004).

The aim of this study is to introduce the reader to a brief clinician-rated tool for the ipsative<sup>2</sup> assessment of the senses of guilt described by CMT prevalent in each specific patient, the *Interpersonal Guilt Rating Scale-15* (IGRS-15). We will describe its factor structure, its test-retest reliability, and its concurrent and discriminant validity.

## METHOD

### The Development of the Tool

The first and third author of this article developed a first pool of 50 items describing relevant manifestations of Survivor guilt, Separation guilt, Disloyalty guilt, Omnipotent responsibility guilt, and Self-hate. In this way, we initially had ten items for each kind of guilt. This first pool of items, named the *Guilt Rating Scale*, derived from the CMT literature, from the clinical experience of the authors, and from the IGQ-67, and was used by 10 clinicians for assessing their patients. These clinicians each had 18 hours of training in CMT with the first author of this article and were asked to report the items that they found unclear, not pertinent enough, redundant, too narrowly focused, or too difficult

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2. An ipsative measure is a measure whose aim is not to compare one person with other people or with a normative sample, but to compare a dimension of that person's psychology with other psychological dimensions of the same person assessed with the same tool, or with the same dimension of the same person assessed in different moments of time.

to be assessed. The feedback from these clinicians enabled the authors to refine the pool of items in order to have a tool which was short, precise, and easy to use in the everyday clinical practice for assessing the aspects of guilt in each specific patient. We decided to delete or modify an item when six or more of our 10 clinicians found it problematic. Below are several examples about how we proceeded.

We deleted three items assessing to what degree the person worries constantly about other people, blames her/himself for the relatives' unhappiness, and worries about the possibility of hurting important others because we had other items assessing to what degree the patient feels it is his/her responsibility to fix other people's problems; feels overly responsible for other people and feels selfish and uncaring if he or she is not the person who takes care of other people. We deleted three items assessing to what degree the patient would have been available to notify the police or to reveal to other people a crime committed by a relative, or shameful family secrets, because they were considered too narrowly focused and difficult to assess by most of our clinicians; one item assessing to what degree the patient would feel guilty if he or she skipped one of her/his relatives' party in order to go on a date with a very attractive person was deleted because it was too narrowly focused and so difficult to assess; and we merged in a single item four items assessing to what degree the patient would feel guilty in having political, religious, and moral ideas and values different from those of the parent for avoiding redundancies. For the same reason, we deleted another, more generic item assessing to what degree the patient would feel guilty in having ideas and opinions different from those of the parents. We deleted an item assessing if the patient seems dependent on others to make decisions for him/her and another item assessing the patient being unable to enjoy his/her accomplishments because they did not assess precisely any specific kind of guilt, and one item assessing the patient having had difficulty moving away from home because this kind of difficulty may stem from financial and work difficulties. Moreover, we deleted an item describing a patient feeling relieved when important others are successful because its link with guilt was considered ambiguous by seven of our raters. We proceeded in a similar way with ten other items.

Then, we performed an exploratory factor analysis<sup>3</sup> (Principal Axis Analysis with Promax rotation and Kaiser normalization). We chose the

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3. Factor analysis is a statistical approach that examines the pattern of intercorrelations among measures and attempts to reduce the data pattern to a few underlying factors or "components," or "dimensions."

number of factors to be extracted on the basis of the Cattell's scree plot procedure and factors with eigenvalues  $> 1$  and checked the resulting factor structure of the remaining 26 items on the assessments of the 114 patients evaluated by these 10 clinicians. The KMO test of the sampling adequacy gave a result of 0.70.

Our 10 clinicians were 4 males and 6 females. All were Italian and worked in two different Italian cities. They were all psychodynamically oriented. All the clinicians had attended an 18-hour training in Control-Mastery Theory held by the first author before being involved in this research. All of them treated their patients in outpatient settings or in private practice. They had more than 5 years of clinical experience. On average, our clinicians had 11.5 years of clinical experience after licensing ( $SD = 3.8$ ), and their practice experience ranged from 7 to 33 years. They had treated the patients assessed in this study for an average of 28.4 months ( $SD = 16.27$ ), ranging from 3 weeks to 1 year. On average, each therapist assessed 15.4 patients, ranging from 4 to 30. The patient sample was composed of 114 subjects. On average, our patients were 33.31 years old ( $SD = 11.39$ ; ranging from 18 to 67); 80 (70.2%) were female and 34 (29.8%) were male. Their average number of sessions per week was 1.72 (ranging from 1 to 5 times a week;  $SD = 0.93$ ). The distribution of the educational level of our sample was: 16 (13.55%) completed high school; 17 (14.9%) started but did not complete college; 28 (24.6%) completed college; 53 (46.5%) were graduated. Their socioeconomic status was: 36 (22.8%) were working class people; 49 (43%) middle class; 31 (27.2%) upper middle class; 8 (7%) upper class. The most frequent *DSM-IV-TR* Axis I diagnoses in our sample, as assessed by the treating clinicians with the CDF (see below), were: generalized anxiety disorder (8); major depressive disorder (8); panic disorder (7); social anxiety disorder (6); eating disorder not otherwise specified (5); adjustment disorder (5); somatic symptom disorders and related (5). The most frequent Axis II diagnoses were: borderline personality disorder (8); narcissistic personality disorder (7); personality disorder not otherwise specified (7); dependent personality disorder (5). The Global Assessment of Functioning (GAF) scale of our patients showed an average level of functioning of 72.74, ranging from 10 to 90 ( $SD = 16.88$ ).

The exploratory factor analysis conducted on this sample gave a six-factor solution explaining 59.51% of the variance. The first four factors were in line with the kinds of guilt we wanted to assess (survivor, omnipotence, self-hate, and separation/disloyalty), while the last two factors were described by items that were not coherent among each other if considered through the lenses of CMT, or which assessed too specific situations that may stir up guilt. Based on these data, we deleted the

items which saturated mainly on the last two factors, the items whose presence lowered the alpha level of a scale below .80, and the items with loadings  $\geq .3$  on more than one factor. The items deleted at this step were: the patient blames himself/herself for the unhappiness of other family members; the patient worries constantly about the people he/she loves, even when they seem to be fine; there are times when the patient's mind is filled with self-loathing; the patient is unable to accept or admire him/herself; the patient, at times, feels that he/she does not deserve to live; the patient feels strongly obligated to have the kind of wedding his/her parents want him/her to have; the patient begins to doubt him/herself when his/her parents express disapproval of his/her choices and opinions; the patient would feel like a traitor if he/she became close friends with a person disapproved by his/her family; the patient would feel he/she had done something terribly wrong if he/she did not follow her/his family/friends' advice; the patient feeling very badly having political ideas contrasting those held by her/his family members; the patient feels guilty when proud of her/himself.

At the end of these preliminary analyses the authors had the pool of 15 items<sup>4</sup> that compose the present version of the tool, the *Interpersonal Guilt Rating Scale-15* (IGRS-15; Gazzillo, Bush, De Luca, Faccini, & Mellone, 2015). The authors then asked 28 clinicians, who had been trained in a 16-hour seminar on CMT by the first author, to assess all their patients with this tool, with the *Interpersonal Guilt Questionnaire-67* (IGQ-67; O'Connor et al., 1997; see below), and with a *Clinical Data Form* (CDF; Westen & Shedler, 1999; see below). Those patients who were less than 18 years old, and those with psychotic syndromes or with brain damage, were excluded from the analyses.

## Participants

Our sample was collected by 28 clinicians (7 males and 21 females). The 10 clinicians involved in the first step of this study were also involved in this second step. All the clinicians were Italian and worked in three different Italian cities, and all but one were members of the Control-Mastery Theory Italian Group (CMT-IG; [www.cmt-ig.org](http://www.cmt-ig.org)). Twenty-six were psychodynamically oriented psychologists and two were eclectic but primarily dynamically oriented. Eighteen clinicians treated their patients in outpatient settings or in private practice, while

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4. Three items of the IGRS-15 (i.e., 2, 12, and 15) are quite similar to three items of the IGQ-67 (i.e., 45, 1, and 5), which was one of the sources we consulted for developing the items; all of these items assess survivor guilt.

10 worked in inpatient settings. Fourteen clinicians had less than 5 years of clinical experience after licensing, while the other 14 had more than 5 years of clinical experience. On average, our clinicians had 5.7 years of clinical experience after licensing ( $SD = 7.1$ ; the data about 9 clinicians are missing), and their practice experience ranged from 1 to 33 years. They had treated the patients assessed in this study for an average of 18.04 months ( $SD = 15.89$ ), ranging from 4 weeks to 10 years. On average, each therapist assessed 5.5 patients, ranging from 1 to 20. The patient sample was composed of 154 subjects, with the patients involved in the refinement of the tool excluded. On average, our patients were 34.3 years old ( $SD = 13.05$ ; ranging from 18 to 71); 101 were female (65.6%) and 53 were male (34.4%). Their average number of sessions per week was 1.71 (ranging from 1 to 5 times a week;  $SD = 0.92$ ). The distribution of the educational level of our sample was: 4 (2.6%) patients started but did not complete high school; 19 (12.3%) completed high school; 21 (13.6%) started but did not complete college; 33 (21.4%) completed college; 76 (49.4%) were graduated; the data about one patient was missing. Their socioeconomic status was: 3 patients (2%) were poor; 33 (21.6%) were working class people; 71 (46.6%) middle class; 39 (25.5%) upper middle class; 7 (4.6%) upper class. The data for one patient was missing. The most frequent *DSM-IV-TR* Axis I diagnoses in our sample, as assessed by the treating clinicians with the CDF (see below), were: generalized anxiety disorder (13); panic disorder (11); eating disorder not otherwise specified (10); social anxiety disorder (8); anxiety disorder not otherwise specified (8); depressive disorder not otherwise specified (7); adjustment disorder (7); somatic symptom disorders and related (7); major depressive disorder (5); and substance-related disorders (5). The most frequent Axis II diagnoses were: narcissistic personality disorder (15); borderline personality disorder (12); dependent personality disorder (12); personality disorder not otherwise specified (12); avoidant personality disorder (8); obsessive-compulsive personality disorder (5). The Global Assessment of Functioning scale of our patients showed an average level of functioning of 74.84, ranging from 10 to 90 ( $SD = 16.11$ ). All of these data were collected by our clinicians with the Clinical Data Form (see below).

## Measures

*The Interpersonal Guilt Rating Scale-15.* The IGRS-15 (see Appendix) is the empirical tool to be validated: it is a 15-item clinician-report rating scale assessing interpersonal guilt as conceived in CMT. Each item is assessed on a 5-point rating scale, from 1 = *not representative at all of the patient*, to 5 = *completely representative of the patient*.

*The Interpersonal Guilt Questionnaire-67.* The IGQ-67 inventory (O'Connor et al., 1997) is a 67-item paper-and-pencil self-report for the assessment of the four kinds of interpersonal guilt conceptualized by CMT: *Survivor guilt* (22 items), *Separation guilt* (15 items), *Omnipotence Responsibility* guilt (14 items), and *Self-hate* (14 items). Each item is assessed on a 5-point Likert scale, from 1 (very untrue of me) to 5 (very true of me). The item set was generated by a pool of senior clinicians and was based on their clinical observations and theoretical hypotheses. The sorting of the items into the four subscales is based on a top-down procedure and was not confirmed by factor analysis, which gave a two-factor solution: *self-hate* and *composite guilt (survivor, separation, and omnipotent responsibility guilt)*. All subscale scores are symmetrically distributed and their Cronbach's alpha values ranged from .82 to .87 in a sample of 111 subjects. The correlation between the scores of the subscales of the IGQ-67 and those of the Guilt Inventory (GI; Kugler & Jones, 1992) support the concurrent validity of the measure. The IGQ-67 correlates with previously published measures of guilt and shame assessed with the Test of Self-Conscious Affect (TOSCA; Tangney, Wagner, & Gramzow, 1989), with depression measures such as the Beck Depression Inventory (BDI; Beck, 1972), and with the Attributional Style Questionnaire (ASQ; Seligman, Abramson, Semmel, & Von Baeyer, 1979).

*The Clinical Data Form.* The CDF (Westen & Shedler, 1999) is useful for collecting data on clinicians and patients. To gather information about the clinician, it asks about age, gender, theoretical orientation, work setting, and years of experience. The rater is asked to assess each patient's socio-demographic information, developmental and family history, psychopathologies and psychiatric history of the family, and nature and effectiveness of the treatments received in the past. Several studies have supported the validity of the data collected with this tool (e.g., Thompson-Brenner & Westen, 2005).

The clinicians who participated in the study assessed all their patients with the IGRS-15 and the CDF, and asked their patients to complete the IGQ-67 during the same week when the clinicians assessed them. They did not have any feedback about the results of the assessment by us prior to the end of this research study.

## Procedure

In order to assess the factor structure of IGRS-15 we performed a semi-confirmatory factor analysis on the full sample ( $N = 154$ ) and then

further explored the stability of factor solution with multiple-group confirmatory factor analysis. In order to assess the retest reliability of our tool, we calculated the Pearson  $r$  between two assessments of the same patients completed by our clinicians two months apart. Finally, in order to assess its concurrent and discriminant validity, we performed several Generalized Estimating Equations analyses (GEE; Liang & Zeger, 1995) using the IGQ-67 as criterion measure. Notwithstanding the limitations of this tool and its self-report nature, we chose to use the IGQ-67 as a criterion measure because it is *the only existing tool* for assessing interpersonal guilt according to CMT. Several of our clinicians assessed more than one patient. Therefore, our clinician-report data were nested within the clinicians and observations within therapists were likely to be dependent. Therefore, we chose an exchangeable working correlation matrix in our GEE analyses for controlling for therapist effects.

Our analyses were performed with SPSS, Version 20. The semi-confirmatory factor analysis was performed using the FACTOR 9.2 program (Lorenzo-Seva & Ferrando, 2013). Confirmatory Factor Analyses were performed with the *R*-package, *lavaan* (Rosseel, 2012).

## RESULTS

### Factor Analyses

In order to see if our items assessed the kinds of interpersonal guilt we wanted to assess (*Survivor guilt, Separation/Disloyalty guilt, Omnipotent Responsibility guilt, and Self-hate*), we performed a semi-confirmatory factor analysis on the full sample ( $N = 154$ ). A semi-confirmatory approach performs an exploratory factor analysis but calculates bootstrap confidence interval estimates of all factor loadings and intercorrelations among factors. The most common confirmatory factor methods employ maximum likelihood fits. However, such fits are valid only when the data are multivariate normal (Finch & French, 2015). In order to examine whether the assumption of multivariate normality held, the data were subjected to Mardia's tests of multivariate normality (Mardia, 1974). The results of this test indicated that the data departed significantly from multivariate normality (multivariate skew = 978.34,  $p < .0001$ , and multivariate kurtosis = 3.96,  $p < .0001$ ). Therefore, subsequent analyses employed diagonally weighted least squares (DWLS), an asymptotic distribution free approach (ADF) solution (Browne, 1984). We applied a robust diagonally weighted principal axis analysis with promax rota-

**Table 1. Item Correlations for Semi-Exploratory Factor Analysis**

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1														
2	.27**	1													
3	0.08	.40**	1												
4	.28**	.64**	.28**	1											
5	.25**	.44**	.73**	.38**	1										
6	.83**	.21**	-.03	.28**	.18*	1									
7	0.16	.51**	.19*	.44**	.24**	0.16	1								
8	0.05	0.14	.31**	0.11	.36**	0.02	0.11	1							
9	0.11	.48**	.71**	.35**	.65**	0.03	.30**	.31**	1						
10	.22**	.26**	.37**	.24**	.39**	0.15	0.05	.62**	.31**	1					
11	.62**	.19*	.19*	.31**	.31**	.49**	0	0.06	.17*	.27**	1				
12	0.06	.50**	.25**	.65**	.35**	0.11	.52**	0.1	.27**	0.1	0.1	1			
13	0.08	0.01	0.14	0.09	0.15	0.12	0.02	.36**	0.07	.44**	0	0.09	1		
14	0.11	.28**	.28**	.27**	.30**	0.04	0.05	.47**	.34**	.52**	.17*	.17*	.31**	1	
15	0.11	.58**	.23**	.58**	.35**	0.14	.49**	0.16	.26**	.20*	0	.61**	0.04	.17*	1

Note.  $N = 154$ ; \* $p < .05$ ; \*\* $p < .01$ .

tion (DiStefano & Morgan, 2014) because this method works well with ordinal data. As we expected the factors to be moderately correlated, we chose a promax (oblique) rotation. The KMO test of the sampling adequacy gave a result of 0.80 with BC bootstrap 95% confidence interval of  $KMO = (0.79 \text{ to } 0.84)$  showing that the dimension of the sample was adequate. We hypothesized four factors and Cattell's scree plot procedure (point of inflection of the curve), factors with eigenvalues  $> 1$  criterion, Velicer's (1976) Minimum Average Partial index (MAP), Parallel Analysis (PA; Timmerman & Lorenzo-Seva, 2011), and Revelle and Rocklin's (1979) Very Simple Structure (VSS) procedure all indicated that a four-factor solution was optimal. The four-factor solution explained 70% of the common variance. The first unrotated factor had an eigenvalue of 4.95 and explained 33% of the common variance; the second factor had an eigenvalue of 2.17 and explained 14% of the common variance; the third factor had an eigenvalue of 2.11 and explained 14% of the variance, while the fourth and last factor had an eigenvalue of 1.33 and explained 9% of the variance. Table 1 presents the item inter-correlations and Table 2 presents the promax-rotated robust diagonally weighted factor pattern loadings of this semi-exploratory factor analysis. The overall fit of the model was good, chi-square (51) = 121.24,  $p < .01$ ,  $gfi = 1.00$  and the root mean square of residuals (RMSR) = 0.08, with

**Table 2. Semi-Exploratory Robust Diagonally-Weighted Least Squares Pattern Loadings after Promax Rotation\*\***

		Factors			
Item	Item Wording	Survivor	Omnipotence	Self-Hate	Separation/ Disloyalty
12	Conceals or minimizes his/her successes out of concern for making less successful people feel bad	0.86			
15	Feels uncomfortable when s/he receives better treatment than others	0.83			
4	Uncomfortable about becoming more successful than people who are important to her/him	0.76			
7	Being envied makes the patient acutely uncomfortable	0.68			
2	Is uncomfortable about feeling better off than other people	0.63			
3	Responsibility to fix other people's problems		1.05		
9	Overly responsible for other people's well-being		0.78		
5	S/he feels selfish and uncaring if s/he is not the person who takes care of other people		0.70		
1	That if other people really knew her/him, they would want nothing to do with her/him			1.05	
6	S/he has tricked other people into liking her/him			0.77	
11	Feels that s/he does not deserve to be happy			0.68	
13	Would feel very badly if s/he renounced his/her family's religion and took on a different religion or became atheist				0.60
8	S/he should visit her/his parents as often as they wish				0.74
10	S/he should put his/her parents' wishes ahead of his/her own				0.84
14	Should not separate from loved ones because this would be hurtful, disloyal, or make them feel abandoned				0.59

Note.  $N = 154$ . Loadings are sorted by magnitude. Loadings Below  $|.30|$  are suppressed for clarity. All displayed loadings were significant at  $1 < .05$ .

**Table 3. Factor Intercorrelations after Promax Rotation\***

Factor	Omnipotence	Separation/ Disloyalty	Self-hate	Survivor
F1: Omnipotence	1.00			
F2: Separation/Disloyalty	0.53***	1.00		
F3: Self-hate	0.33***	0.27***	1.00	
F4: Survivor	0.52***	0.31***	0.38***	1.00

Note.  $N = 154$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

BC bootstrap 95% confidence interval of RMSR = (0.06 to 0.09). Table 3 presents the intercorrelations among the factors.

Based on the factor pattern loadings, Factor 1 can be labeled as *Survivor Guilt*; Factor 2 as *Omnipotence Responsibility Guilt*; Factor 3 as *Self-hate*; and Factor 4 as *Separation/Disloyalty Guilt*. As can be seen in Table 3, Factors 1 (*Survivor*), 2 (*Omnipotence/Responsibility*), and 4 (*Separation/Disloyalty*) were strongly correlated. If one wished to do so, a two-factor higher order hierarchical factor analysis could combine *Disloyalty*, *Survivor*, and *Omnipotence Guilt* into one factor (Cronbach's alpha = .85) and *Self-hate* into its own factor (Cronbach's alpha = .85). These two factors would be similar to the empirical factors of the IGQ-67 and to the differentiation between altruistic and ontological guilt proposed by Mancini and Gangemi (2015).

In order to further check on the stability of our solution, we randomly split our sample, in two parts of 77 cases each. We then fit our factor model in each sample and performed multiple-group confirmatory factor analysis using the *lavaan* structural equation modeling package in *R* (Rosseel, 2012) to compute diagonally weighted least squares in each. The overall fit of the two-group model was excellent, *chi-square* (168) = 98.67,  $p = 1.00$ , *gfi* = .98, and *rmsea* = 0.00. We then performed tests of measurement invariance using the *semTools* package (2015) in *R*. The results of these tests indicated that the solutions for each sample were not significantly different; with tests of differences in loadings, differences in means, and differences in intercepts all greater than  $p = .05$ .

## Internal Consistency

Given that several clinicians assessed more than one patient and in order not to artificially inflate the internal coherence of our tool, we calculated the alpha values of each factor by selecting only one patient

from each clinician ( $N = 28$ ), that is, the patient whose identification code had the first letter in alphabetical order. The Cronbach alpha of the *Survival Guilt* scale was .80, the alpha of *Omnipotent Responsibility Guilt* was .87, the alpha of *Self-hate* was .84, and that of *Separation/Disloyalty Guilt* was .85. Considering all the patients of our sample, the Cronbach alphas of these kinds of guilt are, respectively: .86, .87, .85, and .82.

### Test-Retest Reliability

After two months from the first assessment, we asked our clinicians to reassess with the IGRS-15 the first patient that they saw in the week. Given that we hypothesized that the kinds of interpersonal guilt assessed by our tool are relatively stable but can be modified in their relative importance by effective psychotherapy, we expected a moderate level of test-retest reliability. As predicted, the Pearson  $r$  between the first and second assessment was: .58 for the Survivor Guilt scale, .52 for the Omnipotent Responsibility Guilt scale, .69 for the Self-hate scale, and .66 for the Separation/Disloyalty scale.

### Concurrent and Discriminant Validity

The IGRS-15 is a clinician-rated scale and the IGQ-67 is a patient-rated scale. We choose to use the IGQ-67 as criterion measure because it is the only existing tool that assesses interpersonal guilt according to the CMT model, the theoretical model at the basis of our scale. Given also the different format of these two tools (clinician-report vs. self-report) we expected low to moderate levels of correlation among the corresponding scales of the two instruments.<sup>5</sup> Ordinary least-squares correlation and regression models assume independence of observations. Given that several clinicians assessed more than one patient, we cannot assume independence. Therefore, we used Generalized Estimating Equations (Liang & Zeger, 1995) with exchangeable working correlation matrices in order to control for clinician effects while assessing

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5. Evidence supporting the construct validity of the IGRS-15 should include concurrent validity, that is, the degree to which patient self-reports of guilt correlated with purportedly similar clinician-reported guilt scales. It should also assess divergent validity, the degree to which scales did not correlate with scales that were not supposed to be correlated.

**Table 4. GEE Analyses of Correspondence between IGQ-67 Self-Report Scales and IGRS-15 Clinician-rated Scales**

IGQ-67 Criterion	IGRS-15 Predictors	Wald Chi-Square	df	p	r
<b>Survivor</b>	<b>Survivor</b>	<b>6.175</b>	<b>1</b>	<b>0.013</b>	<b>0.37</b>
	Separation	0.000	1	0.997	0.18
	Omnipotence	2.725	1	0.99	0.17
	Self-hate	1.867	1	0.172	0.22
<b>Omnipotent</b>	Survivor	2.196	1	0.138	0.27
<b>Responsibility</b>	Separation	16.702	1	<.001	0.37
	<b>Omnipotence</b>	<b>7.186</b>	<b>1</b>	<b>0.007</b>	<b>0.38</b>
	Self-hate	0.15	1	0.902	0.10
<b>Self-hate</b>	Survivor	0.318	1	0.573	0.17
	Separation	1.659	1	0.198	0.22
	Omnipotence	0.394	1	0.530	0.20
	<b>Self-hate</b>	<b>23.098</b>	<b>1</b>	<b>&lt;.001</b>	<b>0.44</b>
<b>Separation/ Disloyalty</b>	Survivor	2.8004	1	0.94	-0.34
	<b>Separation/ disloyalty</b>	<b>64.472</b>	<b>1</b>	<b>&lt;.001</b>	<b>0.44</b>
	Omnipotence	1.228	1	0.268	0.11
	Self-hate	0.92	1	0.762	0.09

Note. *r* is the GEE effect size as discussed by Natarajan, Lipsitz, Parzen, and Lipshultz (2007). Boldface entries indicate IGRS scales hypothesized to correlate with corresponding IGQ scales.

the relationship between the four interpersonal kinds of guilt assessed by our clinicians with the IGRS-15 (put together as covariates in the model), and the same sense of guilt assessed by the patients themselves with the IGQ-67 (considered as the dependent variable). As can be seen in Table 4, three of the four kinds of guilt assessed with the IGRS-15 correlated positively and significantly *only* with the same kind of guilt assessed with the IGQ-67 (Survivor *beta* = .12 and *r* = .35; Self-hate *beta* = .35 and *r* = .50; Separation/Disloyalty guilt *beta* = .33 and *r* = .46). IGRS-15 Omnipotent Responsibility guilt, however, correlated positively and significantly with IGQ-67 Omnipotent Responsibility guilt but also with the IGQ-67 Separation guilt (respectively, *B* = .14 and *r* = .37; and *B* = .12 and *r* = .20).

The average beta between an IGRS-15 kind of interpersonal guilt and the same kind of guilt assessed with IGQ-67 is .23 (average *r* = .42), while the average beta between an IGRS-15 kind of guilt and the other

kinds of interpersonal guilt assessed with IGQ-67 was only .03 (average  $r = .23$ ). On this basis, it can be said that there was sufficient concurrent validity because IGRS-15 scales had their strongest relationships to their corresponding IGQ-67 scales. They demonstrated divergent validity to the degree to which they correlated to lesser degrees with non-corresponding scales.

### **Correlations Between Interpersonal Guilt, Ages, and Gender Differences**

We found no significant correlations among any of the four kinds of guilt assessed with the IGRS-15 and the age of our patients. As for gender differences, there was no difference in the levels of three (*Omnipotent Responsibility guilt*, *Separation/Disloyalty guilt* and *Self-hate*) of the four kinds of guilt between male and female patients. However, Survivor guilt was higher in female than in male patients (mean = 3.08;  $SD = .87$  vs. mean = 2.53;  $SD = .88$ ),  $t = 3.45$ ,  $p = .001$ . This was also found when assessed with the self-report IGQ-67 (3.22 vs. 2.94;  $t = 3.59$ ,  $p < .001$ ).

### **DISCUSSION**

The data presented in this article support the factor structure, the test-retest reliability, and the concurrent and discriminant validity of the IGRS-15 compared with the IGQ-67. Other than having good psychometric properties, the IGRS-15 is short enough to be easily used by clinicians in routine clinical practice and its clinician-report format may help to identify also those kinds of guilt that patients are not fully aware of and, for this reason, could not be easily identified with self-report measures. However, the main limitations of this study are the limited number of clinicians (28) and patients (154) assessed and the fact that all the rater/clinicians were previously trained in CMT. Additionally, the test-retest reliability data, even if positive and statistically significant, might have been higher if the patients assessed would have not been in treatment and if we had asked to our clinicians to reassess them after a period shorter than 60 days. Moreover, inter-rater reliabil-

ity of the IGRS-15 needs to be checked. Finally, we are quite cautious about the interpretation of the higher level of survivor guilt found in the women patients of our sample because our sample was a convenience one, but we tend to think that this data could be explained by the possibility that, only a few decades ago, Italian women were not supposed to fight for success and personal affirmation, and for this reason they may be less at ease when achieving personal success ([https://en.wikipedia.org/wiki/Feminism\\_in\\_Italy](https://en.wikipedia.org/wiki/Feminism_in_Italy)).

Beyond the empirical soundness and research utility of IGRS-15, we think that a tool for the empirical assessment of the relative relevance of the different kinds of interpersonal guilt conceptualized in CMT in each specific patient and in different moments of a treatment may have clinical value. More than 40 years of CMT research (Silberschatz, 2005; Weiss, 1993; Weiss, Sampson, & The Mount Zion Psychotherapy Research Group, 1986) shows the relevance of understanding these kinds of feelings for effectively interpreting and responding to patients' communications actions and attitudes. As an example, let us consider the case of a patient who asks his clinician to reschedule a session because he does not want to lose the session but cannot come that day at that hour. The correct interpretation of such a request, and the optimal way to respond to it, is very different if the patient suffers with strong separation guilt or suffers with strong self-hate. In fact, in the first case, the patient's request of rescheduling could easily express the intention not to hurt the clinician. However, in the second case, it could be an expression of the anxiety of not deserving the clinician's help. An agreement to reschedule would probably be against the best interests of the patient in the first case, but not in the second one. In the first case, the decision of the clinician to reschedule the session could be interpreted by the patient as a confirmation of their pathogenic belief of hurting the clinician by missing the session. In the second case, however, rescheduling the session the clinician would disconfirm the patient's pathogenic belief of not deserving help. So, being able to identify which are the prevalent kinds of interpersonal guilt in a patient can be very important for understanding and treating a patient more effectively, in a case-specific way (Silberschatz, 2015). The IGRS-15 presented in this article is a first step in the direction of supporting clinical judgements about interpersonal guilt with an empirically sound and easy-to-use tool.

## APPENDIX

## The Interpersonal Guilt Rating Scale-15 (IGRS-15)

		0	1	2	3	4	
	Totally Uncharacteristic		Not very characteristic	Characteristic enough	Very characteristic		Totally Characteristic
1	The patient believes that if other people really knew her/him, they would want nothing to do with her/him.	0	1	2	3	4	
2	The patient is uncomfortable feeling better off than other people.	0	1	2	3	4	
3	The patient feels it is his/her responsibility to fix other people's problems.	0	1	2	3	4	
4	The patient feels uncomfortable about becoming more successful than people who are important to her/him.	0	1	2	3	4	
5	The patient thinks that s/he is selfish and uncaring if s/he is not the person who takes care of other people.	0	1	2	3	4	
6	The patient believes s/he has tricked other people into liking her/him.	0	1	2	3	4	
7	The idea of being envied makes the patient acutely uncomfortable.	0	1	2	3	4	
8	The patient feels s/he should visit her/his parents as often as the parents wish.	0	1	2	3	4	
9	The patient feels overly responsible for other people's well-being.	0	1	2	3	4	
10	The patient feels s/he should put his/her parents' wishes ahead of his/her own.	0	1	2	3	4	
11	The patient feels that s/he does not deserve to be happy.	0	1	2	3	4	
12	The patient conceals or minimizes his/her successes out of concern for making less successful people feel bad.	0	1	2	3	4	
13	The patient would feel badly if s/he renounced his/her family's fundamental values/religious beliefs and took on different values/beliefs.	0	1	2	3	4	
14	The patient thinks s/he should not separate from loved ones because this would be hurtful, disloyal, or make them feel abandoned.	0	1	2	3	4	
15	The patient feels uncomfortable when s/he receives better treatment than others.	0	1	2	3	4	

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