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DEVELOPMENT OF THE ITALIAN VERSION OF THE TEST
OF OBJECT RELATIONS-SHORT FORM

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Abstract

Objective: The aim of this study was to develop a short form of the Test of Object Relations (TOR-SF), a self-report instrument that assesses object relations.

Method: Two separate studies were undertaken to accomplish this purpose. Study 1 aimed to select a reduced number of the items included in the Test of Object Relations, in order to develop a short form of the original instrument. Furthermore, the reliability and criterion validity of the instrument were examined. The primary purpose of Study 2 was to test, in a different sample, the factor structure of the TOR-SF and to examine the internal consistency, reliability, and concurrent validity using measures of attachment to mother, father, and friends.

Results: The TOR-SF showed a good six-factor structure which represents the six subscales of the theoretical framework model (symbiotic merging, separation anxiety, narcissism, egocentricity, social isolation, and fear of engulfment). The six factors showed very good internal reliability and good criterion and concurrent validity. Results also supported the hierarchical three-factor model which, besides six sub-dimensions of object relations, includes three main dimensions (dependence, self-absorption, and alienation).

Conclusions: The short version of the TOR includes 18 items and is economical to use. Practical implications for object relations psychology are discussed.

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The term 'object relation' is used to indicate the way in which the individual relates to others, who are referred to in the psychoanalytic lexicon with the term 'object' (Žvelc, 2010a). The word 'relation' is used to indicate the two-way link between subject and object: the individual, in relating with the others, modifies the relationship itself in some way, but is in turn modified by it at the same time (Greenberg & Mitchell, 1983).

Kernberg (1992) highlighted how the psychic structure of the individual consists of basic dyadic units which consist of representation of the self, representation of the object, and the affective state that binds them. Within the analytic relationship, the representation of the patient's unconscious infantile self and the unconscious infantile representation of the patient's parental objects are both reactivated (Kernberg, 1992). Internalized object relations are the basis of our psychological structures and serve as organizers of motivation and behaviour (Clarkin et al., 2006). Summers (2014) posited that the common psychological underpinning of all object relations theories lies in the idea that the purpose of human motivation is to create a bond with the object rather than to discharge one's impulses.

The Theory of Žvelc – An Integrative Model of Interpersonal Relationships

Some authors (Fishler, Sperling, & Carr, 1990) have highlighted how object relations and attachment theory share, with due differences, the same focus of attention: i.e., the importance of interpersonal relationships. Žvelc (2010a) proposed an integrative model of these two theoretical frameworks. Starting from the study of the literature on object relations (Balint, 1969; Fairbairn, 1952; Kohut, 1977; Kernberg, 1984; Mahler et al., 1975) and attachment theory (Bowlby, 1969; Main, 1996; Scharfe & Bartholomew, 1994), Žvelc (2010a) identified three bipolar dimensions of interpersonal relationships. The first dimension was independence–dependence and this refers to the process of separation and individuation proposed by Mahler (Mahler et al., 1975). The second dimension was connectedness–alienation, which refers to the individual's ability to establish and maintain relationships (Bowlby, 1969; Stern, 1985). Žvelc (2010b) highlighted how the independence–dependence and connectedness–alienation dimensions respectively correspond to the concept of dependency and avoidance of Scharfe and Bartholomew (1994). Finally, the third dimension

was defined by Žvelc (2010a) as reciprocity–self-absorption and refers to the process that the child faces when moving from the phase of primary narcissism to greater reciprocity in the relationship. This dimension is fundamental because it is the basis of intersubjectivity (Aron, 2000).

Žvelc (2010a) argued that each relationship is characterized by different levels of these three dimensions. The author challenged the psychoanalytic practice of using the term 'object relationship' to describe the meaningful relationships that individuals maintain with others because the word 'object' refers to the idea of the other as an 'object' necessary to satisfy one's own instincts. For this reason, Žvelc (2010a) proposed using the term 'subject relation' to indicate a relationship in which the other is not seen as a tool to satisfy one's needs; rather the other is recognized as an individual with their own desires and aspirations. Each of the two recognizes the other as a separate person, thereby leaving independence, connection, and reciprocity to emerge freely. At the same time, Žvelc (2010a) proposed using the expression 'object relation' to indicate those relationships mainly characterized by dependence, alienation, and self-absorption. The dimension of dependence includes two sub-dimensions: symbiotic merging and separation anxiety; the dimension of alienation includes the sub-dimensions of social isolation and fear of engulfment; and the dimension of self-absorption includes the sub-dimensions of narcissism and egocentricity.

The Development of The Test of Object Relations (TOR)

Based on the above theoretical premises, Žvelc (1998, 2007, 2008) developed a self-report to evaluate object relations called the Test of Object Relations (TOR; Žvelc, 1998). Specifically, the TOR measures the quality of object relations in adulthood. The instrument consists of 95 items rated on a 5-point scale, with six subscales each containing 15 items measuring: symbiotic merging (SM), separation anxiety (SA), narcissism (Na), egocentricity (Eg), fear of engulfment (FE), and social isolation (SI). The remaining five items assess the social desirability of answers and random answering. The test was created on the basis of Jackson's (Jackson, 1970, 1971) sequential system of construction. In the theoretical/substantive development of the TOR, an integrative model of an interpersonal relationship was developed (Žvelc, 2007, 2010a, 2011). In the theoretical/substantive phase of development, 300 items reflecting six sub-dimensions of object relations were written (Žvelc, 1998). Items were evaluated in terms of their clarity, simplicity, and intelligibility of content. In internal/structural validation, the goal was to select items that would satisfy both theoretical and psychometric criteria (Žvelc, 1998), which resulted in the final 95-item version of the TOR. The test takes 20–25 minutes to administer. It has satisfactory internal consistency and construct validity (Žvelc, 2007, 2008, 2011; Žvelc & Berlafa, 2015). The test has been used in several studies in different countries (Barkhuizen, 2005; Dajčman, 2014; Kobal, 2002, 2008; Nettmann, 2013; Pahole, 2006; Pavšič Mrevlje, 2006; Restek-Petrović et al., 2012; Rogič Ožek, 2004; Štirn, 2002; Uršič, 2014; Žvelc, 2007, 2010b, 2011; Žvelc & Berlafa, 2015). It has been used on both non-clinical and clinical populations (Žvelc, 2011).

It was found that the Croatian version of the TOR in its present form included some items with low factor loadings and loadings on more than one dimension and, at the same time, it was not very economical, because it was composed of 95 items (Žvelc & Berlafa, 2015). For the above reasons, Žvelc and Berlafa (2015) proposed a shorter form of the Croatian version of the instrument (44-item version); however, the short form does not include the symbiotic merging scale.

The Present Study

Based on the above considerations, the goal of this study was to obtain a shortened version of the TOR – an instrument that it is easy to use and allows the assessment of object relations in adulthood. In fact, one of the main goals of psychodynamic psychotherapy is the development of an adequate ability for subject relations (Žvelc, 2010a). The use of a validated instrument based on a six key sub-dimension model of interpersonal relationships may allow a functional assessment of every patient, thus leading to a better understanding of the personal level of development in specific dimensions (independence–dependence, connectedness–alienation, and reciprocity–self-absorption). For the above reasons, the first objective of this research was to evaluate the psychometric properties of TOR in a group of young Italians. Through the first study, it was possible to obtain a shortened version of the TOR. The aim of the second study was to assess the factorial structure of the shortened version of the test through a confirmatory analysis.

Study 1

The first aim of this study was to explore the psychometric characteristics of the TOR in an Italian sample. The second aim of this study was to obtain a shortened version of this instrument, derived from the items of the TOR (Žvelc, 2010a), while maintaining the six scales of the original instrument.

Method

Participants

A convenience sample that involved psychology students and students' friends was recruited. The sample consisted of 605 Italian participants, aged 18–30 years (M = 23.75 years; SD = 2.74). Sixty-two were males (10%) and 543 were females (90%). All participants were of Italian nationality and spoke Italian. Regarding civil status, most of the subjects (50%) were engaged in a relationship, 40% were single, 6% were cohabiting, 3% were married, 1% were 'other', and less than 1% were divorced or widowed. Regarding educational level, most of the participants (54%) had a degree, 40% had a diploma, 5% had a postgraduate degree, and less than 1% had a middle school degree or 'other'. Regarding professional status, the overwhelming majority (80%) were students, 8% were employed, 8% were unemployed, and 4% were freelance workers.

Measures

The TOR (Žvelc, 1998, 2008) evaluates the participant's object relations in a self-report form. The questionnaire consists of 95 items (including five control items) with six subscales, each containing 15 items measuring: symbiotic merging (e.g., item 18: 'Sometimes in relationships with others I begin to

lose my sense of self'); separation anxiety (e.g., item 16: 'If I am on a short trip, I phone the people I am close to almost every day'); narcissism (e.g., item 36: 'I am worth more than other people'); egocentricity (e.g., item 32: 'When I am in a relationship, I want to control my partner'); fear of engulfment (e.g., item 56: 'When a relationship with another person involves too much commitment, I withdraw'); social isolation (e.g., item 49: I feel that there is a barrier between myself and other people'). Items were rated on a 5-point Likert scale, from 1 (*completely disagree*) to 5 (*completely agree*).

Procedure

For the purposes of this study, the questionnaire was translated into Italian and back-translated by two independent researchers fluent in English. The protocol was created using an online survey. Subsequently, participants were recruited through social networks. All participants agreed to participate in the research. Each of them was informed about the procedure of the study, which was performed in accordance with the ethical standards described in the 1964 Declaration of Helsinki. The protocol was approved by the Ethics Committee of the Centre for Research and Psychological Intervention of the University of Messina. The number of the protocol of approval is as follows: Prot. n. 0094530 – 09/10/2019 – UOR: DIP-1112 – Classif. III/11. All measures were collected online in a single session in the months of February and March 2018. The study procedures were explained, and all questions were answered. Instructions stated that participation in the research was voluntary and responses were confidential. Participation required about 15 min.

Results

The analysis was conducted using SPSS-22 and AMOS. The number of factors was determined using Velicer's minimum average partial (MAP) test (Velicer, 1976; Velicer, Eaton, & Fava, 2000). The first MAP test indicated nine factors. To verify the factorial structure of the Italian version of the TOR, an EFA was conducted, principal axis factoring was carried out with rotation (oblimin with Kaiser normalization), and the number of factors to extract was set to nine. We selected all the items with a factor loading higher than .30, a cross loading lower than .20, and which contained at least three items as consistent with the Žvelc (2010a) theory and falling into the same factors of the original instrument.

Factor 1 is equivalent to the fear of engulfment scale of Žvelc (1998) and includes the following items: 39, 46, 31, 54, 56, 74, 78, 23, 93. Factor 2 corresponds to the symbiotic merging scale of the original instrument. Within this factor, the following items fell: 55, 18, 94, 14, 40; however, item 40 was excluded because Berlafa and Žvelc (2015) found that it falls into another factor. Factor 3 is equivalent to the narcissism scale of Žvelc (1998, 2008). This scale contains the following items: 77, 89, 36, 2, 21, 34, 29, 57, 53. Factor 4 coincides with the social isolation scale of the original version and includes the following items: 75, 68, 17, 49, 63, 51, 5, 3, 85, 62. Factor 5 is equivalent to the egocentricity scale of Žvelc (1998, 2008). Within this factor the following items fell: 90, 84, 32, 88, 43, 12, 30, 47, 73, 10, 42, 69; however, items 47 and 73 were excluded because, according to the study by Berlafa and Žvelc (2015), they fall into another factor. Factor 6 corresponds to the separation anxiety scale. In this scale, there are the following items: 79, 67,

16, 65, 27. Factor 7 was excluded because it contained only item 4, and Factor 8 was excluded because it did not contain items with a factor loading higher than .30 and a cross loading lower than .20. Factor 9, which contained items 95, 25, and 81, was excluded because it contained only three items. Furthermore, items 95 and 25 were excluded because, according to Žvelc's theory, they fall into another scale (i.e., the egocentricity scale); item 81 was excluded because it is a control item according to Žvelc's original instrument.

We repeated the MAP test with the 47 remaining items, and there were seven factors to extract. Subsequently, we conducted an EFA and principal axis factoring with rotation (oblimin with Kaiser normalization), and we set the number of factors to be extracted at seven. We selected the items with a factor loading higher than .30, a cross loading lower than .20, and which contained at least three items, as consistent with the Žvelc theory and falling into the same factors of the original instrument.

Factor 1 is related to the fear of engulfment scale and includes the following items: 56, 74, 78, 23, 93. Items 39, 46, 31, 54, which previously fell into Factor 1, are now included in Factor 7. They were excluded because, according to Žvelc's theory, they had to be in Factor 1. Factors 2, 3, 4, 5, and 6 remained unchanged.

We repeated the MAP test with the remaining 43 items, and there were six factors to extract. Subsequently, we conducted an EFA and principal axis factoring with rotation (oblimin with Kaiser normalization), and we set the number of factors to be extracted at six. For each of Žvelc's (1998) scales we selected the three items with the highest factor loading and a cross loading lower than .20. Factor 1 is equivalent to the social isolation (SI) scale of Žvelc and includes the following items: 49, 68, 75. Factor 2 corresponds to the narcissism (Na) scale of Žvelc. Within this factor the following items fell: 36, 77, 89. Factor 3 coincides with the egocentricity (Eg) scale of Žvelc. In this scale, there are the following items: 32, 84, 90. Factor 4 is equivalent to the fear of engulfment (FE) scale of Žvelc and includes the following items: 56, 74, 78. Factor 5 represents the symbiotic merging (SM) scale of Žvelc. The items included in it are 18, 55, 94. Factor 6 is equivalent to the separation anxiety scale of Žvelc and includes the following items: 16, 67, 79.

We repeated an EFA with the remaining 18 items and principal axis factoring was carried out with rotation (oblimin with Kaiser normalization); we set the number of factors to be extracted at six. Each item of the scale had a factor loading higher than .30 and a cross loading lower than .20. Factor 1 is equivalent to the social isolation (SI) scale of Žvelc and includes the following items: 49, 68, 75. Factor 2 corresponds to the narcissism (Na) scale of Žvelc. Within this factor the following items fell: 36, 77, 89. Factor 3 coincides with the fear of engulfment (FE) scale of Žvelc and includes the following items: 56, 74, 78. Factor 4 is equivalent to the separation anxiety scale of Žvelc and includes the following items: 16, 67, 79. Factor 5 represents the egocentricity (Eg) scale of Žvelc. In this scale, there are the following items: 32, 84, 90. Factor 6 is equivalent to the symbiotic merging (SM) scale of Žvelc. The items that comprise it are 18, 55, 94 (see **table 1**).

Descriptive Analyses of the Dimensions of the TOR-SF

Cronbach's alphas. Means, standard deviations, skewness, and kurtosis of the final factors are shown in **table 2**. The results clearly show that the reliability for all the variables are adequate (Cronbach's alpha range

from .70 to .81), excluding the separation anxiety scale (Cronbach's alpha is .57). Correlations were conducted between the scales of the TOR-SF, which underlined

attachment in relation to mother, father, and friends, and related to attachment avoidance and attachment anxiety.

Table 1. *Factor loadings of the last exploratory factor analysis on TOR-SF scores (Study 1)*

	Factor 1 (SI)	Factor 2 (Na)	Factor 3 (FE)	Factor 4 (SA)	Factor 5 (Eg)	Factor 6 (SM)
TOR49: I feel that there is a barrier between myself and other people.	.79	.02	.14	-.03	.04	.02
TOR68: Other people seem so distant from me.	.82	.08	-.04	.05	.02	-.11
TOR75: I don't have a lot of contacts with people.	**.65**	-.09	.01	-.01	-.04	.02
TOR36: I am worth more than other people.	.11	**.51**	.03	-.07	-.06	.04
TOR77: I believe I am truly special.	-.05	**.79**	-.06	.03	-.01	-.05
TOR89: I believe I was born to do great things.	-.09	**.69**	.01	.06	.00	-.02
TOR56: When a relationship with another person involves too much commitment, I withdraw.	.11	.00	**.69**	.01	.01	.01
TOR74: I would like to escape from a relationship that is becoming more and more intimate.	-.05	-.05	**.76**	.02	-.04	-.06
TOR78: When I'm in a relationship, I feel trapped.	-.03	.02	**.85**	-.02	-.01	.02
TOR16: If I am on a short trip, I phone the people I am close to almost every day.	-.11	-.07	-.03	**.60**	-.02	.05
TOR67: Sometimes I fear that one of the people I am close to might die.	.14	.02	.02	**.39**	-.11	-.06
TOR79: When I go on a trip, I miss my family a lot.	.03	.07	.04	**.74**	.08	-.00
TOR32: When I am in a relationship, I want to control my partner.	.08	-.04	-.02	.02	**-.63**	-.04
TOR84: I want other people to be the way I want them to be.	.02	.10	.10	-.02	**-.67**	-.08
TOR90: In a relationship I become very angry when my partner doesn't act as I want him/her to.	-.11	.05	.01	.02	**-.81**	.05
TOR18: Sometimes in relationships with others I begin to lose my sense of self.	.12	-.12	-.03	-.05	-.12	**-.64**
TOR55: Sometimes I feel so close to another person that I no longer know who I am.	-.06	-.00	-.02	.02	-.03	**-.79**
TOR94: I often feel as if though there is no clear boundary between me and other people.	.00	.12	.11	.01	.08	-.61

Note: SI = Social Isolation; Na = Narcissism; FE = Fear of Engulfment; SA = Separation Anxiety; Eg = Egocentricity; SM = Symbiotic Merging

that each scale positively correlated with each other.

Study 2

The primary purpose of Study 2 was to confirm, in a new sample, the factor structure of the TOR-SF and to examine the internal consistency, reliability, and concurrent validity of the TOR-SF. Specifically, it was tested if a hierarchical three-factor model, as provided by Žvelc's theoretical model, was maintained in the TOR-SF. In addition, a hierarchical three-factor model was compared with a six-factor model. The hierarchical three-factor model consists of six first-order factors (corresponding to the six scales of the TOR-SF) and three second-order factors, corresponding to the three main dimensions of the TOR, in particular: social isolation and fear of engulfment load on alienation, narcissism and egocentricity load on self-absorption, and symbiotic merging and separation anxiety load on dependence.

The concurrent validity was assessed by examining

Method

Participants

A convenience sample that involved psychology students and researchers' friends was enrolled. The sample consisted of 255 Italian participants, aged 18–30 years (M = 23.42 years; SD = 2.72). Twenty-five were male (10%) and 230 were female (90%). Participants were selected through social networks. All participants were of Italian nationality and spoke Italian. With reference to civil status, most participants (52%) were engaged in a relationship, 36% were single, 8% were cohabitating, 2% were married, and 2% were 'other'. Regarding educational level, most of the participants (56%) had a degree, 36% had a diploma, and 8% had a postgraduate degree. Regarding professional status, most of the participants (77%) were students, 14% were employed, 5% were unemployed, and 4% were freelance workers.

Table 2. *Descriptive Analysis and Correlations of TOR-SF scores (Study 1)*

		α	M	SD	Skew	Kurt	1	2	3	4	5
1	SM	.73	1.68	.78	1.40	1.73					
2	SA	.57	3.04	.95	.02	-.52	.09*				
3	Na	.70	2.31	.93	.44	-.37	.15**	.09*			
4	Eg	.77	2.25	.94	.63	-.28	.36**	.16**	.25**		
5	FE	.81	1.60	.84	1.71	2.64	.31**	.08	.14**	.28**	
6	SI	.81	2.18	1.05	.64	-.58	.34**	.01	.01	.22**	.40**

Note: N = 605; * p < .01; ** p < .05
Note: SM = Symbiotic Merging; SA = Separation Anxiety; Na = Narcissism; Eg = Egocentricity; FE = Fear of Engulfment; SI = Social Isolation

Measures

In this study, the short form of the TOR (TOR-SF) developed in Study 1 was used. The TOR-SF consisted of 18 items with six subscales, each containing three items measuring symbiotic merging (e.g., item 18: 'Sometimes in relationships with others I begin to lose my sense of self'), separation anxiety (e.g., item 16: 'If I am on a short trip, I phone the people I am close to almost every day'), narcissism (e.g., item 36: 'I am worth more than other people'), egocentricity (e.g., item 32: 'When I am in a relationship, I want to control my partner'), fear of engulfment (e.g., item 56: 'When a relationship with another person involves too much commitment, I withdraw'), and social isolation (e.g., item 49: I feel that there is a barrier between myself and other people'). Participants indicated how much they agreed with the statements on a 5-point Likert scale (from 1 = *completely disagree* to 5 = *completely agree*).

The Experiences in Close Relationships–Relationship Structures Questionnaire (ECR-RS; Fraley et al., 2011) consists of nine items with two subscales: 'attachment-related avoidance' and 'attachment-related anxiety'. The first scale contains six items (e.g., item 1: 'It helps to turn to people in times of need'), and the second scale includes three items (e.g., item 7: 'I often worry that other people do not really care for me'). The two dimensions were separately computed for each significant other (mother, father, friend). It is also possible to obtain global scores regarding avoidance attachment and anxiety attachment. Past research provides evidence for ECR-RS reliability. For instance, Moreira et al. (2015) and Fraley et al. (2011) highlighted that internal consistency varied between 0.75 and 0.91 for anxious attachment factors and between 0.87 and 0.92 for avoidant attachment factors, suggesting the appropriate psychometric properties of both subscales.

Procedure

The protocol was created using an online survey. Subsequently, participants were recruited through social networks, personal contacts, and newsletters. All participants agreed to participate in the research. Each of them was informed about the procedure of the survey. All measures were collected online in a single session in the months of April and May 2018. The study procedures were explained. Instructions underlined that privacy was preserved and that participation was voluntary. Participation required about 15 min.

Results

The analysis was conducted using SPSS-22 and AMOS. We conducted a confirmatory factor analysis, using the maximum likelihood method in which CFI is considered adequate if >.90, and RMSEA is adequate if <.05. The confirmatory factor analysis confirmed the factor structure of Study 1 and the indices showed that a six-factor model solution is a good fit: $\chi2(120)$ = 168.95; p <.01, CFI = .96, RMSEA = .04 (90% CI = .03 – .03). Means, standard deviations, skewness, kurtosis, and factor loading of each item are shown in **table 3**. Standardized factor loadings of each item were all significant, with values ranging from .40 to .88 (see **table 3**).

Table 3. *Descriptive Analysis of the items of each extracted factor (Study 2)*

	M	SD	Skew	Kurt	Factor Loading
SM					
Item 18	1.94	.98	.96	.38	.62
Item 55	1.58	.94	1.66	1.90	.88
Item 94	1.42	.72	1.91	3.93	.70
SA					
Item 16	2.95	1.32	.05	-1.17	.62
Item 67	3.38	1.34	-.39	-1.00	.41
Item 79	2.51	1.09	.29	-.69	.61
Na					
Item 36	2.40	1.16	.27	-.92	.50
Item 77	2.21	1.13	.41	-.87	.75
Item 89	2.40	1.10	.33	-.61	.78
Eg					
Item 32	2.05	.98	.78	.11	-.64
Item 84	2.25	1.16	.52	-.72	-.61
Item 90	2.30	1.05	.52	-.38	-.71
FE					
Item 56	1.62	1.00	1.54	1.36	-.64
Item 74	1.48	.93	2.06	3.58	-.81
Item 78	1.39	.79	2.31	5.28	-.77
SI					
Item 49	2.25	1.20	.62	-.59	.86
Item 68	2.18	1.18	.64	-.66	.80
Item 75	2.05	1.21	.86	-.45	.68

Note: SM = Symbiotic Merging; SA = Separation Anxiety; Na = Narcissism; Eg = Egocentricity; FE = Fear of Engulfment; SI = Social Isolation

Table 4. *Descriptive Analysis and Correlations between TOR-SF and ECR-RS scores (Study 2)*

	M	SD	α	Skew	Kurt	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Symbiotic Merging	2.16	1.05	.77	.36	.03																
2. Separation Anxiety	2.34	.9	.78	.25	-.09	.05															
3. Narcissism	2.2	.84	.82	.71	.57	-.04	-.04														
4. Egocentricity	1.5	.78	.87	.8	.63	.33**	.04	.16**													
5. Fear of Engulfment	1.64	.74	.89	1.1	1.24	.38**	.02	.02	.25**												
6. Social Isolation	2.95	.89	.87	.8	.23	.32**	-.01	.12	.21**	.40**											
7. Dependence	2.50	.52	.57	.16	-.51	.90**	.14*	-.01	.44**	.27**	.35**										
8. Self-Absorption	2.24	.51	.71	.77	1.05	.37**	.27**	.84**	.27**	.41**	.83**	.35**									
9. Alienation	1.86	.57	.80	.89	.36	.27**	.17**	.42**	.90**	.89**	.26**	.26**	.36**								
10. Mother Avoidance	3.66	1.71	.92	.19	-.98	.17**	-.29	-.02	.11	.13*	.29**	.26	.10	.27**							
11. Mother Anxiety	1.72	1.16	.75	1.79	2.63	.28**	.05	-.07	.16**	.22**	.22**	.25**	.12	.27**	.37**						
12. Father Avoidance	4.49	1.62	.89	-.23	-.9	.11	-.16	-.01	.16*	.02	.21**	.26	.07	.15*	.26**	-.05					
13. Father Anxiety	1.90	1.43	.80	1.66	2.06	.16**	.08	-.07	.05	.07	.10	.12	.01	.10	.13*	.48**	.26**				
14. Friend Avoidance	2.34	1.15	.86	1.12	1.51	.13*	.04	.05	.02	.15*	.24**	.10	.09	.26**	.09	.04	.10	-.10			
15. Friend Anxiety	2.89	1.92	.93	.67	-.84	.18**	.16*	-.12	.17**	.13*	.32**	.31**	.06	.32**	.26**	.34**	.12	.28**	.20**		
16. Global Avoidance	3.50	1.00	.86	.19	-.31	.20**	-.23	.01	.15*	.14*	.37**	.07	.13*	.33**	.74**	.19**	.73**	.18**	.49**	.29**	
17. Global Anxiety	2.17	1.14	.83	1.05	.66	.26**	.14*	-.12	.17**	.18**	.30**	.31**	.08	.31**	.33**	.73**	.16*	.74**	.09	.79**	.30**

Note: * $p < .05$; ** $p < .01$

We conducted the confirmatory factor analysis of a hierarchical three-factor model and the indices showed that the hierarchical three-factor model solution is a good fit: $\chi^2(126) = 176.20$; $p < .01$, CFI = .96, RMSEA = .04 (90% CI = .02 – .05). We also compared both factorial models using a χ^2 difference test (Satorra & Bentler, 2001) and the results revealed that the best fitting model was the hierarchical three-factor model ($\Delta\chi^2(6)=7.25$; $p > .05$).

Table 4 shows means, standard deviations, reliability, and correlations between the scale of TOR-SF and ECR-RS. The reliability for all the variables is adequate (Cronbach' alphas range from .71 to .93, excluding dependence which is .57). Correlations were conducted between the scales of TOR-SF and the scales of ECR. Results show that all subscales of object relations except

narcissism significantly correlate with the attachment dimensions of anxiety and avoidance. The Italian translation of the TOR-SF is presented in the Appendix.

Conclusion

The aim of the present study was to examine in an Italian sample the psychometric properties of a short form of the Test of Object Relations (Žvelc, 1998, 2008; Žvelc & Berlafa, 2015), a structured six-scale instrument that assesses object relations. This was done to provide an easy and practical object-relation-based measure that may be used in both clinical and research contexts. Moreover, this study sought to support the development of an instrument to assess object relation with verified psychometric properties, although the results of the current study should be taken in light of the limitations that potentially influence self-report questionnaires assessing object relations (Smith, 1993).

In Study 1, an exploratory analysis was conducted in order to develop an Italian short form of the TOR. Based on the results, the new version of the TOR, named TOR-SF, consists of 18 items divided into six subscales, and it retains the same subscales of the original instrument. The CFA of Study 2 also confirms the six-factor structure. Results suggest that the 18-item TOR-SF shows a good six-factor correlated structure that represents the six subscales of the theoretical framework model of the original instrument (TOR). We also confirmed the three-factor hierarchical model, which is consistent with the theoretical background of the Test of Object Relations (Žvelc, 2010a). The hierarchical three-factor model consists of six first-order factors and three second-order factors, which is in line with the three general dimensions of the TOR (dependence, self-absorption, and alienation). This finding suggests that, besides the six scales of object relations, we may use additional scales which represent the three main dimensions of object relations. Concurrent validity was examined in Study 2. The study verified the relationships between TOR-SF subscales, attachment anxiety, and attachment avoidance .

As expected, the results of the current study confirm the correlations between object relations and dimensions of attachment styles. In fact, both dimensions of experiences in close relationships (attachment anxiety and attachment avoidance) show statistically significant correlations with all TOR-SF subscales, except narcissism. In particular, attachment anxiety was strongly related to five out of six areas of object relations (symbiotic merging, separation anxiety, egocentricity, fear of engulfment, social isolation). Results also show that attachment avoidance is significantly related to four out of six areas of object relations (symbiotic merging, egocentricity, fear of engulfment, social isolation). In relation to the three main dimensions of object relations, the results underline that both dimensions of the ECR-RS (attachment anxiety and attachment avoidance) show statistically significant correlations with all three higher-order dimensions of the TOR-SF (dependence, self-absorption and alienation). In particular, attachment avoidance is significantly related to the dimensions of self-absorption and alienation, whereas attachment anxiety is significantly related to the dimensions of dependence and alienation.

With reference to the level of correlations, the dimension of avoidance shows the highest correlation with alienation, while anxiety correlates the highest with both alienation and dependence.

These results are in line with the research in this field, which highlights a significant association between

object relations dimensions and the basic dimensions of attachment styles in adulthood (Žvelc, 2010b; Žvelc & Berlafa, 2015). In particular, the dimension of dependence is strongly linked to anxiety, while the dimension of alienation is highly related to avoidance (Žvelc, 2010b; Žvelc & Berlafa, 2015). In line with these studies, as shown by Anderson and Goldman (2007), the security of attachment is markedly related to several areas of object relation impairments—in particular, alienation, insecure attachment, and egocentricity. Another quite recent study supports the results of our research, showing significant correlations between object relationships and attachment styles (Nouralizade & Ghahari, 2017). As far as separation anxiety is concerned, research supports our findings. In particular, a study by Mofrad, Abdullah, and Uba (2010) shows that separation anxiety is more strongly correlated with an ambivalent type of attachment rather than with an avoidant type of attachment. In the present study, no significant correlations were found between narcissism and attachment dimensions, which is parallel with research in this area. Pincus and Roche (2011) suggested that narcissists do not have an anxious attachment style; rather, it is the people who are closely related to narcissist individuals who have an anxious attachment style (Pincus & Roche, 2011). At the same time, avoidant attachment is not necessarily related to narcissism, even if the narcissist might have the ability to emotionally detach from the relationship, which may trigger personal attachment anxiety (Pincus & Roche, 2011). Research supports the hypothesis that the construct of narcissism is definitely multifaceted, including both vulnerable and/ or grandiose features (Ksinan & Vazsonyi, 2016). This suggests that no single attachment style can explain the construct of narcissism as a whole, whilst different patterns of attachment should be considered in order to better understand the complexity of such a construct, as well as its relations with the other dimensions (Ksinan & Vazsonyi, 2016).

While this research shows interesting results in the development of a useful, economical, Italian self-report assessing object relations, it has some limitations. First, it should be highlighted that this research consisted of a limited sample size; therefore, further research should adopt a broader sample. Second, in this study a convenience sample which involved psychology students and students' friends was used, thus potentially increasing measurement bias; for this reason, caution should be exercised with regard to the generalizability of the results. The third limitation of this study concerns the sociodemographic features of the participants. In fact, most of the participants are 18–30-year-old female students. In addition, the samples of Study 1 and Study 2 are very unbalanced with respect to gender composition and this could lead to biased results. This should be taken into account when generalizing the results and it is strongly suggested that future studies should replicate this model in different samples in order to better substantiate the present assumptions.

From a practical point of view, this study provides a short and flexible self-report measure to assess object relations. The quality of the patient's object relations affects the quality of interpersonal relationships and the patient's ability to establish a good therapeutic alliance (Horvath & Luborsky, 1993). Because these two factors predict the outcome of psychotherapeutic treatment, it is easy to understand the importance of carefully studying this construct in research, psychotherapy, and clinical practice (Luborsky et al., 1988; Moras & Strupp, 1982). All people (subjects) need to feel that they are accepted by and important to the people (objects) who, at the same time, are important to them (Gorman, 2018). A deficit or

lack of nourishing object relationships in a person's life can lead to precariousness—a form of dependency that increases an individual's vulnerability to exploitation and radicalization (Butler, 2015, 2016). The more a subject needs the nourishing experience of feeling accepted by and important to others, the more vulnerable the subject becomes to exploitation, which can be considered the general process of objectification and manipulation (Gorman, 2018). Broadly speaking, the significance of contemporary object relations theory can be considered as a relational, multi-person perspective in terms of its application to both individual and group psychotherapy, focusing, in particular, upon important constructs such as the individual and/or the group-as-a-whole, projective identification, transitional space and object, and self/self-object relations (Schermer, 2015). Thus, as far as object relations are concerned, having good assessment tools is crucial.

This study shows that the TOR-SF has good psychometric characteristics, which makes it a useful measure as far as psychotherapies are concerned. It should be taken into consideration that having good psychometric properties does not necessarily translate into having good clinimetric properties (Carrozzino et al., 2015). In fact, clinimetric analyses are as important as the traditional psychometric models (Fleck, Carrozzino, & Fava, 2019); therefore, additional studies to assess clinimetric properties on different samples and sociodemographic parameters are needed in order to provide a more holistic and comprehensive understanding of TOR-SF. In addition, continued cross-country research and longitudinal design using psychometrically and clinimetrically valid measures are needed in order to provide a different approach to object relations evaluations, which are mostly carried out using projective instruments. The TOR-SF may be useful by providing an additional tool to psychotherapy and generating new lines of research in the future.

Appendix – TOR-SF: Items description and Italian translation

Items	Component
1. Sento che c'è una barriera tra me e le altre persone [49. I feel there is a barrier between the other people and me]	Social Isolation
2. Le altre persone sembrano così lontane da me [68. The other people seem to be so far from me]	Social Isolation
3. Non ho molti contatti con le persone [75. I have not lots of contacts with people]	Social Isolation
4. Quando una relazione con un'altra persona implica un impegno troppo elevato, mi allontano [56. When a relationship with another person is too demanding, I walk away]	Fear of Engulfment
5. Vorrei scappare da una relazione che sta diventando sempre più intima [74. I would like to escape from a relationship that is becoming too intimate]	Fear of Engulfment
6. Quando sono in una relazione, mi sento in trappola [78. When I am in a relationship, I feel trapped]	Fear of Engulfment
7. Valgo più di altre persone [36. I am more important than other people]	Narcissism
8. Credo di essere veramente speciale [77. I think I am really special]	Narcissism
9. Credo di essere nato per fare grandi cose [89. I think I was born to do great things]	Narcissism
10. Quando sono in una relazione, voglio controllare il mio partner [32. When I am in a relationship, I want to control my partner]	Egocentricity
11. Desidero che le altre persone siano come io le voglio [84. I want the other people to be as I want them to]	Egocentricity
12. In una relazione mi arrabbio molto quando il mio partner non agisce come voglio io [90. In a relationship, I get really angry when my partner does not act as I want]	Egocentricity
13. A volte nelle relazioni con gli altri inizio a perdere il mio senso di sé [18. Sometimes in my relationships with others I start losing my sense of self]	Symbiotic Merging
14. A volte mi sento così vicino ad un'altra persona che non riconosco più chi sono [55. Sometimes I feel so close to another person that I cannot recognize myself anymore]	Symbiotic Merging
15. Mi sento spesso come se non esistesse un confine chiaro tra me e le altre persone [94. I often feel as there is no clear border between the other people and me]	Symbiotic Merging
6. Se sono in un breve viaggio, telefono alle persone che sento vicine quasi ogni giorno [16. If I am traveling for a short period, I call the people I feel close to me almost every day]	Separation Anxiety
17. A volte temo che una delle persone a cui sono vicino potrebbe morire [67. Sometimes I am afraid that one of the people I am close to might die]	Separation Anxiety
18. Quando sono in viaggio, mi manca molto la mia famiglia [79. When I am travelling, I really miss my family]	Separation Anxiety

Note: The numbers of the items inside the parentheses correspond to the numbers of the items of the original instrument (TOR)

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