The Development of the MATRRESS; A Multidimensional Scale of Manipulation Tactics in Romantic Relationships

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Abstract: *The MATRRESS, a MAnipulation Tactics in Romantic RElationships Scale was designed by 18 mental health professionals to facilitate the scientific exploration of the properties of manipulation in couples. In study 1, a PCA on a sample of 610 respondents revealed an 8-factor structure of eight distinct manipulation tactics which was cross-validated with CFA on a second sample of 609 participants. A bi-factor model produced the best fit to the data which consisted of a composite factor (General Manipulation) and 8 distinct reliable manipulation tactics (Threats of Abandonment, Induction to Guilt, Self-harm Threats, Induction to Jealousy, Coercive Distance / Silent Treatment, Dividing and Conquering, Use of Charm and Deflation of Self-esteem). In study 2, 462 participants completed the MATRRESS as well as other scales related to manipulation (Machiavellianism, Emotional Manipulation and Psychopathy) and adequate convergent validity was established as well as satisfactory test-retest reliability. Overall, it appears that the MATRRESS has excellent internal consistency (α=.95), and correlates significantly to Machiavellianism (r=.66), Emotional Manipulation (r=.73) and Psychopathy (r=.49). As a reliable and valid scale it has numerous potential applications in social, psychological and clinical research as a useful tool to assess manipulation tactics in romantic relationships.*

Keywords: Manipulation, Romantic relationships, Emotional Influence, Deception

1. Introduction

Organisms deceive and exploit other organisms (Krebs & Dawkins, 1984; Owren, 2010) using a variety of tactics which evolved under natural selection, conferring competitive advantages in reproductive relationships (Bond & Robinson, 1988). In humans, this deception is called "manipulation" and is viewed as the ways through which individuals exert malicious or benign influence on others to reinforce desired behaviors (behavioral instigation) or discourage unwanted ones (behavioral termination) (Buss, Gomes, Higgins & Lauterbach, 1987). According to Buss (1987), humans unable to manipulate others at any level may fail to elicit care, establish and retain relationships, elevate in complex social hierarchies or even attract mates.

Manipulation shares close links with certain personality types, such as people who possess Narcissistic characteristics but it has been repetitively associated with Psychopathy and Machiavellianism (Austin, Farelly, Black & Moore, 2007; Jonason, Li & Buss, 2010; Jonason, Slomski & Partyka, 2012; Paulhus & Williams, 2002). Although evolutionary psychology highlights certain reproductive advantages and gains for the use of manipulation tactics, the term is negatively employed in couple and family psychology, to vaguely describe some of the difficult and destructive behaviors of people in couple relationships (e. g. Plechaty, 1988).

In clinical psychology and psychiatry, manipulation has been traditionally linked to borderline clients (e. g. Woollaston & Hixenbaugh, 2008, Mandal & Kocur, 2013), however, the occurrence of manipulative behavior is not limited to borderline personalities. According to DSM-V, manipulative behaviors for the sake of personal gain (e. g.

money) or pleasure (e. g. sex) exist at the core of the diagnostic features of Antisocial Personality Disorder. Similarly, in DSM-V it is proposed that the emotional manipulation of partners is a central feature associated with the diagnosis of Histrionic Personality Disorder (5th ed.; DSM-V). Hence, manipulation in relationships and its various forms seem to be of great diagnostic value and should be closely examined by clinicians and researchers as an area to study and determine interpersonal well-being.

Existing manipulation scales view manipulation as a single construct without treating it as a multidimensional variable constituted by numerous tactics some of which may be relationship-sabotaging while others, more productive, or even in certain instances, necessary (e. g. Austen et al., 2007). Common sense dictates that the development and validation of an instrument assessing a variety of manipulation strategies explicitly in romantic relationships is imperative to determine the repertoire of manipulative endeavors and facilitate the scientific exploration of their properties and uses.

Despite the frequent use of the term "manipulation" in couples, it is rarely defined and is consistently neglected by the scientific literature as to what it entails, why it is employed and what it achieves for both the agent and the target. Although, by definition, manipulation tactics are sought to achieve certain primary or secondary relationships gains, their use and how they relate to couple stability and relationship satisfaction for both parties involved, remains an unexplored topic of investigation.

The present body of two studies aimed to design and examine the psychometric properties of the MATRRESS (the MAnipulation Tactics in Romantic RElationships

Scale), an assessment designed to examine manipulation tactics employed in couple relationships and explore its relationship to other measures of personality that have been traditionally linked to manipulation.

2. Methodology (Study 1)

2.1 Data Analysis

To determine a set of reliable factors that compose the MATRRESS, two analytical steps were taken. A PCA (Principal Components Analysis) with varimax rotation was completed on the first sample (N=610) and then, the factor structure which emerged was cross-validated with Maximum Likelihood CFA (Confirmatory Factor Analysis) using the second half (N=609).

2.2 Materials

After a thorough review of the literature, tactics of manipulation were identified via a group discussion among 18 mental health professionals. They were later converted into an initial pool of 52 questionnaire items. At a later stage, they were checked for clarity and coherence by four independent psychology experts who were instructed to identify items that did not effectively capture the topic of investigation or seemed incoherent and confusing. Through this process, 45 items with good face validity remained. A pilot study in an on-line sample of 124 respondents (81 women and 33 men) suggested that 13 additional items should be removed due to a significant lack of normal distribution in items which depicted highly abusive tactics of manipulation (e. g. I would hit my partner or I would humiliate my partner etc.).

2.3 Participants

The PCA and CFA sample consisted of an online English-speaking sample of 1219 adults (N=747 women and N=472 men) between 18 to 60 years of age with a mean age of 28.83 years (SD=4.6). The majority of the sample was in a dating or marital relationship (33% and 31%) and the remaining percentage was in an open relationship or single (9% and 27% respectively).

2.4 Procedure

Respondents were given the following description: "In romantic relationships, we often employ tactics to influence and control our partners. These tactics may be used on our partners to receive their affection, attention, dominate them, gain their respect, see how much they care, prevent them from abandoning us and many other reasons. Please rate the extent to which you have used the following tactics in past or current romantic and sexual relationships. "

A 4-point Likert scale was employed ranging from "Not at all", "Very little", "Somewhat" and "To a great extent". Anonymity was provided, and participants were given the right to drop out at any time they felt uncomfortable with the content of the scale. Two attention check items were also included (Meade & Craig, 2012).

2.5 Results

The data set was randomly divided into two groups using the odds and evens split method. The first group (Group A) consisted of 610 participants (age: M=28.3 years. SD=2.9) and the second group (Group B) consisted of 609 participants (age: M=28.9, SD=3.1). Gender was proportionately represented between the groups.

A principal component analysis with varimax rotation was completed on the first dataset. Taking into consideration the Keiser criterion, Cattell's screeplot and results from parallel analysis, 8 factors were yielded. These 8 factors of four items each, explained 73, 50% of the variance in the scale.

The Cronbach's alpha for the entire scale indicated excellent internal consistency with a=0.95. Factor loadings for each item may be viewed in table 1. Their reliabilities were satisfactory and ranged from .80 to .93. Finally, corrected item-total correlations were all above the .30 threshold.

Table 1: Item Loadings of the MATRRESS and Item-Total Correlations

Items of the MATRRESS (.95)	Loadings	R (Item-Total)
Factor 1 (AT): **Abandonment Threats (.88)**		
AT1. I threatened to leave him/her.	, 829	.41
AT2. I told my partner that I will abandon him/her.	, 809	.47
AT3. I showed signs that a break-up is imminent.	, 740	.42
AT4. I told him to break up, even if I didn't really mean it.	, 649	.37
Factor 2 (IG): **Induction to Guilt (.80)**		
IG1. I appeared more vulnerable.	, 743	.43
IG2. I pretended that I am not feeling very well.	, 730	.44
IG3. I played the victim.	, 676	.46
IG4. I faked crying.	, 601	.37
Factor 3 (SH): **Self-Harm Threats (.93)**		
SH1. I implied that I would hurt myself.	, 868	.45
SH2. I appeared suicidal.	, 861	.44
SH3. I threatened that I would end my life.	, 796	.42
SH4. I displayed self-destructive behaviors.	, 679	.47
Factor 4 (IJ): **Induction to Jealousy (.80)**		
IJ1. I told my partner that other people are into me.	, 801	.38
IJ2. I told my partner that others find me attractive.	, 788	.33
IJ3. I compared him/her with other romantic candidates.	, 729	.32

IJ4. I made him/her feel jealous.	, 667	.42
Factor 5 (CDST): **Coercive Distance/Silent Treatment (.81)**		
CDST1. I appeared indifferent to him/her.	, 758	.45
CDST2. I ignored him/her.	, 725	.45
CDST3. I used silent treatment.	, 707	.49
CDST4. I distanced myself.	, 694	.43
Factor 6 (DC): **Dividing and Conquering (.87)**		
DC1. I isolated my partner from others.	, 825	.45
DC2. I encouraged my partner to clash with others.	, 764	.34
DC3. I urged my partner to mistrust others.	, 733	.44
DC4. I told him no one else really cares about him/her.	, 631	.40
Factor 7 (CH): **Charm and Sweet-talking (.83)**		
CH1. I used sweet-talking.	, 807	.41
CH2. I used compliments.	, 803	.40
CH3. I used flattery.	, 780	.39
CH4. I used my charm over him/her.	, 651	.32
Factor 8 (DE): **Deflation of Self-Esteem (.91)**		
DE1. I lowered my partner's self-esteem.	, 824	.50
DE2. I made my partner feel useless.	, 785	.48
DE3. I made my partner feel inferior.	, 776	.47
DE4. I didn't let my partner feel too good about himself/herself.	, 682	.46

Note. Cronbach's alphas for each factor are presented in bold parentheses. Factors representing manipulation tactics were abbreviated: Abandonment Threats (AT), Induction to Guilt (IG), Self-harm Threats (SH), Induction to Jealousy (IJ), Coercive Distance/ Silent Treatment (CDST), Dividing and Conquering (DC), Use of Charm and Sweet-talking (CH) and Deflation of Self-esteem (DE).

A subsequent CFA was completed which corresponded to the 8 factors obtained by the PCA. The 8-factor model was then tested against a single factor and a bifactor model. The estimation method used was Maximum Likelihood (ML), using the variance-covariance matrix. There were no missing data in the dataset. The following indices were employed: (1) the ratio of chi-square to degrees of freedom (CMIN) (with a value lower than 3 being indicative of acceptable fit); (2) the standardized root mean square residual (SRMR) (with a value below 0.6 indicating good model fit); (3) the Tucker-Lewis index (TLI) and the comparative fit index (CFI) (values equal or higher than.95 indicative of good fit); (3) the root mean square error of approximation (RMSEA) (values below.08 indicate a good fit) (Brown, 2015). As it may be seen in table 2 the bifactor model of a composite score as well as individual tactics (fig.1) produced the most satisfactory results, indicating good model fit.

Table 2: Model Fit Indices for the Proposed Models.

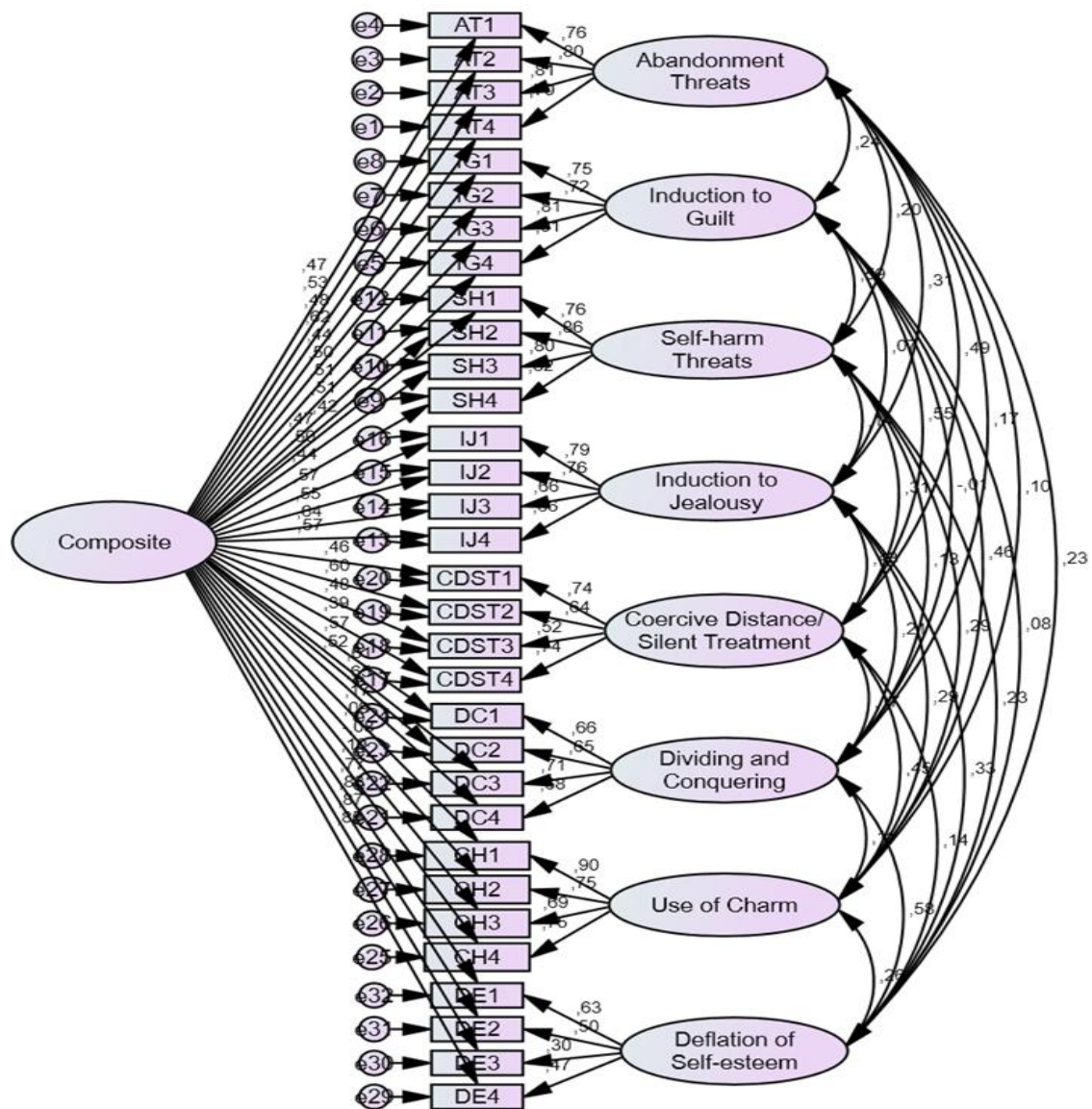| Model	CMIN	SRMR	TLI	CFI	RMSEA
1. Single-factor Solution	9.352	.15	.39	.43	.22
2. Eight-factor solution	1.819	.04	.94	.95	.07
3. Bifactor Solution	1.747	.03	.95	.96	.06

Figure 1: The Bifactor Model of Manipulation Tactics in Romantic Relationships Scale

3. Materials

To assess the convergent validity of the MATRRESS, the following measures were administered.

- *The Mach IV* (Christie & Geis, 1970) which consists of 20 items measuring Machiavellianism, a personality factor characterized by a tendency towards manipulative behaviour and deceitful practices in interpersonal relationships.
- *The Emotional Manipulation Scale* which is a reliable and concise 12-item measure introduced by Austin et al., 2007 and was designed to measure the tendency to exert emotional manipulation on others.
- *The Levenson Self-Report Psychopathy Scale* (Levenson, Kiehl, & Fitzpatrick, 1995) which is a valid and reliable 20-item self-report measure of psychopathic personality traits.

3.1 Participants

A voluntary online sample of 382 English-speaking individuals (212 women and 170 men) with a mean age of 29.5 (SD=8.1) as well as a non-voluntary opportunity sample of 80 older postgraduate university students (40 women and 40 men) with a mean age of 32.4 (SD=5.4) were used. For the assessment of convergent validity both samples were used, while for the assessment of test-retest stability only the second sample was employed. In the overall sample, 40.7% was in a marital relationship, 30% was in a committed relationship, 20, 4% was single and 9, 8% was in an open relationship.

3.2 Procedure

Similarly, to study 1, the same instructions were given, anonymity was provided, and participants were given the right to drop out at any time they felt uncomfortable. Two attention check items were also incorporated (Meade & Craig, 2012). For sample 2, participants were additionally asked to provide their email address and they were contacted again 6 weeks after their initial participation to re-complete the questionnaire. They were paid 10 Euros after the resubmission of the second questionnaire.

3.3 Results

To assess convergent validity, Pearson's correlations were used among the constructs as it may be seen in table 3. It was found that both the composite score of General Manipulation (GM) as well as each tactic shared medium to strong significant correlations with self-report measures of Machiavellianism, Emotional Manipulation and Psychopathy ranging from .49 to .73 for the composite factor and .21 to .57 for each tactic.

The 6-week test-retest correlation coefficient for the components of the MATRRESS ranged from .70 to .81 (n=80), while for the whole scale the correlation coefficient was equal to .83 (p<.01; 95% CI =.77, .89) indicating good test-retest reliability.

Table 3: Correlations between MATRESS Factors and Measures of Convergence

(N=462)	AT	IG	SH	IJ	CDST	DC	CH	DE	GM
MACH-IV	.45	.57	.30	.38	.41	.42	55	40	.66
EMS	.42	.50	.45	.39	.41	.55	50	50	.73
LSRPS	.31	.30	.29	.25	.38	.31	20	34	.49

Note. All correlations were significant at the .01 level. MACH-IV = Machiavellianism, EMS = Emotional Manipulation Scale, LSRPS = Levenson Self-Report Psychopathy Scale, GM = General use of Manipulation Tactics.

4. Discussion

PCA and CFA analyses identified the following manipulation tactics: Abandonment Threats, Induction to Guilt, Self-harm Threats, Induction to Jealousy, Coercive Distance/Silent treatment, Dividing and Conquering and Deflation of Self-esteem. These manipulation tactics have satisfactory reliabilities and the bifactor model which incorporates a composite factor of general manipulation (GM) provides the best model fit.

It appears that the MATRRESS has satisfactory convergent validity by being positively correlated to Machiavellianism, Psychopathy and Emotional Manipulation, yielding similar correlations with other widely used scales such as the Dark Triad Dirty Dozen (Jonason & Webster, 2010). Finally, scores remained rather stable across intervals concluding that the MATRRESS is a scale of satisfactory test-retest reliability.

To our knowledge, this is the first method of assessment, other than clinical observation, to examine manipulation tactics as a multifactorial construct explicitly in romantic relationships. However, a main disadvantage of Study 1 and Study 2 was the data collection method. While online samples have been shown to be generally representative of the normal population (Berinsky, Huber, & Lenz, 2012), and extremely economical and representative of otherwise unreachable populations by reaching large samples (Baltar & Brunet, 2012) which is ideal for the examination of the psychometric properties of a scale, further studies on more diverse samples and locations should be completed before external validity is thoroughly established.

The use of measures like the MATRRESS could help scientists determine the extents to which, as well as the ways in which, manipulation tactics affect the well-being of romantic relationships as well as their individual members. By identifying the most relationship-damaging tactics or the more beneficial ones for relationships through future research endeavors, clinical practice with couples could be guided towards healthier behavioral alternatives.

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