



## Self-deception in forensic self-reports: Detection, effects and testing the model

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**Título:** Autoengaño en los autoinformes forenses: Detección, efectos y sometimiento a prueba del modelo.

**Resumen:** *Antecedentes/objetivos:* La disimulación, entendida como una autopercepción positiva en los autoinformes, se sospecha en las evaluaciones forenses de disputas por la custodia de los hijos. La disimulación se manifiesta por dos medios: la ocultación cualidades negativas (negación de síntomas) y la atribución de cualidades positivas no-existentes o la exageración de existentes (deseabilidad social). Además, la naturaleza de la disimulación puede ser consciente (manejo de la impresión) o inconsciente (autoengaño). Sin embargo, los efectos del autoengaño en los autoinformes de padres en disputa por la guarda y custodia son desconocidos. Por ello, se diseñó un estudio de campo con el objetivo de determinar la eficacia de las medidas autoengaño; los efectos de la disimulación en los marcadores de salud mental autoinformado; y someter a prueba la naturaleza inconsciente del autoengaño. *Método:* 223 padres en proceso de evaluación respondieron al MMPI-2, y 100 padres de familias intactas bajo las instrucciones estándar. Se tomaron las escalas de medida del autoengaño *K*, *S*, *Esd* y *PMH4*, las escalas clínicas estándar y las subescalas obvio-sutil. *Resultados:* Los resultados mostraron puntuaciones significativas mayores, en línea con el modelo de la disimulación, en la población sospechosa de disimulación (litigantes por la custodia de los hijos) en las escalas *K*, *S*, y *Esd*; y una asociación significativa entre clasificación de disimulación y la población sospecha de disimulación. En relación con los efectos de la disimulación, los resultados pusieron de manifiesto que la población sospechosa de disimulación informaba significativamente de menos síntomas clínicos (negación de síntomas) y de más cualidades positivas relacionadas con el otorgamiento de la guarda y custodia (deseabilidad social). Por último, los resultados sugirieron que el proceso subyacente al autoengaño no es inconsciente para el individuo (ejerce control consciente sobre el sesgo de respuesta observado). *Discusión:* Se discuten las implicaciones de los resultados para la evaluación forense en casos de disputa por la guarda y custodia y para el modelo de dos-componentes de la disimulación.

**Palabras clave:** Disimulación. Deseabilidad social. Disputa por la custodia de los hijos. MMPI-2. Diagnóstico diferencial.

**Abstract:** *Background/aims:* Dissimulation, understood as a positive self-presentation in self-reports, is suspected in child custody dispute forensic evaluations. Dissimulation is displayed through two-manifestations: concealment of negative qualities (denial of symptoms) and claiming non-existent positive qualities or exaggerating existing ones (social desirability). Moreover, the nature of dissimulation may be conscious (impression management) or unconscious (self-deception). Nevertheless, the effects of self-deception in self-reports of parents involved child custody forensic disputes are unknown. Thus, a field study was designed with the aim of determining the efficacy of self-deception measures, the effects of dissimulation on self-reported mental health markers, and to test the purportedly unconscious nature of self-deception. *Method:* 223 parents involved in court-mandated child custody proceedings endorsed the MMPI-2 and 100 parents from intact families under standard instructions. The *K*, *S*, *Esd* and *PMH4* measures of self-deception, the standard clinical scales and the obvious and subtle subscales were scored. *Results:* The results exhibited significant higher scores, consistent with dissimulation, were observed in the population suspected of dissimulation (child custody litigants) in *K*, *S*, and *Esd* scales; and a significant association between dissimulation classification and dissimulation suspected population. In relation to the effects of dissimulation, the results showed that the suspected population of dissimulation reported significantly fewer clinical symptoms (denial of symptoms) and more positive qualities related to being granted child custody (social desirability). Finally, the results suggested that the underlying process of self-deception is not unconscious for the individual exercising conscious control over his/her biased responses. *Discussion:* The implications of the results for forensic psychology evaluation of child custody dispute cases and the two-component model for dissimulation are discussed.

**Keywords:** Dissimulation. Social desirability. Child custody disputes. MMPI-2. Differential diagnosis.

## Introduction

Response bias in self-reports is a critical issue in psychological forensic evaluations, making the detection and control of this bias a primary objective of the forensic task. This is because the expert psychologist must estimate the validity (i.e., truth in legal terms) of the self-reported psychological information provided by the assessed person (the claimant or complainant). Thus, in a case involving a claimant of sexual abuse victimization, an assessment is made of both the resulting psychological harm and the validity of the self-reports. Victimization—defined by the United Nations (1985) as suffering that includes mental injury or emotional

suffering (i.e., psychological harm)—is often diagnosed forensically as posttraumatic stress disorder (American Psychiatric Association [APA], 2022; Kessler et al., 2013; O'Donnell et al., 2006). The validity of the claimant's self-reports is then assessed through a differential diagnosis for simulation. Simulation, from the Latin *simulare*, is a conscious process of negative response bias within a forensic (or clinical; APA, 2022) setting, done to achieve an external incentive (e.g., simulating psychological harm to get a compensation). The term is often inappropriately conflated in scientific and clinical literature with concepts like malingering, overreporting, feigning, or symptom exaggeration. However, these terms typically refer to simulation itself or its specific manifestations, not a separate response bias construct. The antonym of simulation is dissimulation, the other side of response bias. Dissimulation, from the Latin *dissimulare* (meaning concealment or feigning), is also frequently and inappropriately referred to by other names, such as underreporting,

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defensiveness, faking good, or social desirability. These terms are narrower than, or are specifications of, dissimulation. In terms of response bias, dissimulation is a positive self-presentation in self-reports (Paulhus & Holden, 2010). This positive self-presentation can manifest through (Arce et al., 2015): a) the concealment of negative qualities (denial of symptoms; in child custody disputes, denial of symptoms negatively related to being granted child custody) and b) claiming non-existent positive qualities or exaggerating existing ones (social desirability; in child custody disputes, parental abilities positively related to being granted child custody).

Nevertheless, the current use of these terms is characterized by significant confusion, particularly concerning "dissimulation." For example, Rogers (2018a) and many others have defined dissimulation as a "general term to describe an individual who is deliberately distorting or misrepresenting psychological symptoms" (p. 5). Another example of this confusion is Gough's Dissimulation (*Ds*) scale (Gough, 1954), which, despite its name, actually measures simulation by discriminating between genuine neurotic patients and individuals instructed to simulate neurosis.

Paulhus (1984) designed and validated a two-component model for dissimulation via socially desirable responses: self-deception (unconscious positive self-reports) and impression management (conscious positive self-reports). The distinction between these components—whether the response bias is conscious or unconscious—has critical implications for judicial decision-making: a conscious response bias is considered false testimony in a judicial setting, whereas an unconscious response bias carries no legal culpability (i.e., it is a biased but honest testimony).

The human ability, including legal practitioners, to detect deception is weak (O'Donnell et al., 2024). Then, in judicial setting, the detection of deception rests on experts. The validity (i.e., the value as expert evidence) of a forensic report for judicial decision-making depends on the estimated accuracy of classifying simulation or dissimulation, as the core forensic task is to validate the individual's self-reported testimony. Consequently, response bias must always be suspected in a forensic evaluation (i.e., through differential diagnosis). The evaluation of response bias requires a combination of interviews and psychometric measures (Puente-López et al., 2024; Rogers, 2018b; Vilarino et al., 2013). In this regard, the worldwide gold standard to measure psychological adjustment and the differential diagnosis of simulation/dissimulation in forensic settings is the MMPI-2 (Ackerman & Pritzl, 2011; Arce et al., 2015; Baer & Miller, 2002; Graham, 2011; Greene, 2011). Other instruments (e.g., MMPI-2-RF, PAI, SCL-90-R) have been studied and proposed for forensic evaluation; nevertheless, most either fail to measure the primary target of the forensic evaluation (e.g., PTSD in assessments of psychological harm) and relevant comorbid disorders (i.e., secondary diagnoses), or their validity scales are less sensitive to simulation and dissimulation, or are insensitive to specific types of these response styles. Moreover, the MMPI-2 contains the largest number of vali-

dated items, scales, and indexes to measure simulation/dissimulation. It is a statistical maxim that extended versions with more measures are more valid than shorter versions with fewer measures. On the MMPI-2, impression management is measured by the *L*, *Mp*, *Od*, and *Wsd* scales, while self-deception is measured by the *K*, *S*, *Esd*, and *PMH4* scales (Arce et al., 2015; Bagby & Marshall, 2004; Paulhus, 1984; Strong et al., 1999; Wiggins, 1964).

Estimations of the prevalence of response bias in forensic evaluations range from 10% to 90%, though these figures are not definitive because an exhaustive "ground truth" for classifying biased self-reports is unavailable. In this regard, Larrabee et al. (2009) posited a 'magical number' of  $40 \pm 10\%$  for forensic evaluations (termed 'magical' because it rests on impressions rather than on hard data), while Young (2015) suggested a general rate of  $15 \pm 15\%$ . Thus, the evaluation setting (e.g., forensic vs. clinical) is a moderator of this wide range, with higher rates reported in forensic settings. These estimates primarily refer to simulation. Dissimulation is typically suspected in two main settings: personnel selection and forensic evaluations (e.g., parents involved in child custody disputes, youths evaluated in correctional settings, and convicts during jail intake). There are no such 'magical numbers' for the prevalence of dissimulation. Nevertheless, the literature estimates that dissimulation is suspected in approximately one-third of protocols obtained in child custody litigations (Arce et al., 2015; Baer & Miller, 2002; Strong et al., 2009). Among convicts in the jail reception phase, the rate has been estimated at around one-quarter (Arce et al., 2024). Furthermore, a meta-analysis of youths assessed in correctional/forensic settings projected the rate of dissimulation to be approximately one-quarter (Hildebrand et al., 2018). Higher rates of dissimulation are suspected in personnel selection, but numerical estimates have not been established.

Based on this literature review, a field study was designed with the following aims: to determine the efficacy of self-deception measures in discriminating between a group suspected of dissimulation (parents in child custody disputes) and a matched group not suspected of dissimulation (parents from intact families); to assess the classification accuracy of the *K*, *S*, *Esd* and *PMH4* self-deception scales for the differential diagnosis of dissimulation; to examine the effects of the self-deception factor (suspected vs. not suspected) on mental health self-reports; and to test the purportedly unconscious nature of self-deception (i.e., whether it is truly unconscious or a defensive strategy).

## Method

### Participants

The sample consisted of 323 parents aged 23 to 63 years ( $M = 40.7$ ,  $SD = 13.6$ ). This total was composed of two groups: 223 parents involved in child custody litigation (115 female) and 100 parents from intact families (51 female). The two subsamples were matched on sex (51.6% female in the

litigant group vs. 51.0% in the intact family group;  $\chi^2(1) = 0.00, p = 1.00$ ) and age ( $t = 0.74, p = .473$ ). Parents in the intact family group had been cohabiting as a couple for more than two years and had children in common.

### Measure instruments

The Spanish version of the MMPI-2 (Butcher et al., 2019) was used to measure clinical symptoms and assess dissimulation, with Spanish gendered norms being applied. Clinical symptoms and syndromes were measured with the standard clinical scales. Nine of the MMPI-2's standard clinical scales were used: Hypochondriasis (*Hs*), Depression (*D*), Hysteria (*Hy*), Psychopathic Deviate (*Pd*), Paranoia (*Pa*), Psychastenia (*Pt*), Schizophrenia (*Sc*), Hypomania (*Ma*), and Social Introversion (*Si*). The Masculinity-Femininity scale was excluded as it is not a measure of a clinical syndrome (Graham, 2011). Additionally, the three subscales of the Paranoia scale (Harris & Lingoes, 1955) were scored: Persecutory ideas (*Pa1*), Poignancy (*Pa2*), and Naiveté (*Pa3*). To investigate the unconscious origin of dissimulation, the obvious (items clearly associated with emotional disturbance) and subtle (items not easily associated with emotional disturbance) subscales were also scored. Finally, the *K* validity scale (Meehl & Hathaway, 1946), the Superlative (*S*) scale (Butcher & Han, 1995), the Edwards Social Desirability (*EsD*) scale (Edwards, 1957), and the Positive Mental Health scale (*PMH4*; Nichols, 1992) were scored to measure unconscious dissimulation (i.e., self-deception) (Bagby & Marshall, 2004; Paulhus, 1984).

### Design and procedure

A differential prevalence group design was used to compare a group where dissimulation is suspected (parents involved in child custody disputes) with a matched group where it is not (parents from intact families) (Rogers, 2018a). This approach aimed to assess the efficacy of measures in discriminating between these groups (a scientific task), determine the classification rate of dissimulation (a clinical and forensic task; APA, 2022; Arce, 2017), and evaluate the effects of self-deception on mental health self-reports. Furthermore, it sought to examine the pattern of these effects on both obvious and subtle symptoms to test the nature of self-deception; if it were truly unconscious, effects should appear for both subtle (items not easily associated with emotional disturbance) and obvious symptoms (items clearly associated with emotional disturbance). In contrast to this method, simulation designs, which have high laboratory validity, suffer from low external validity in applied settings and tend to overestimate effects. Indeed, simulation designs can be tautological, meaning their qualitative results (i.e., the direction of an effect) may be valid, but their quantitative estimations are not (Amado et al., 2015; Fariña et al., 1994). Conversely, differential prevalence designs tend to underestimate effects because not all individuals in the suspected

group actually dissimulate (a floor effect; Gancedo et al., 2021). However, these designs gain external validity for applied settings if the measures can successfully discern between suspected and non-suspected populations (gold standard: significant discrimination with a moderate effect size,  $d \geq 0.50$ ; Arce, 2017) or accurately classify dissimulation (gold standard: a significant association between the suspected population and true positives, with a moderate effect size,  $DOR \geq 2.47$ ; Arce, 2017). Although mean differences have great scientific relevance, case studies ( $N = 1$ ) are a necessary complement in applied settings, particularly in forensic contexts, to estimate the unacceptable forensic error of a false negative—that is, classifying a dissimulator as a genuine respondent (APA, 2022; Fariña et al., 2014).

The MMPI-2 was completed by participants as part of court-mandated child custody proceedings, and the resulting protocols were stored in the archive of the Forensic Research Unit of the University of Santiago de Compostela (Uforense). Parents from the intact family group were assessed in one-on-one evaluations at the Uforense facility. Participation for the intact family group was voluntary, and individuals received no compensation. The selection criteria for parents in this group were: no history of separation or divorce, more than two years of cohabitation as a couple, and having children in common.

### Data analysis

A Multivariate Analysis of Variance (MANOVA) was computed to compare mean scores on self-deception measures (i.e., self-deception validity scales), clinical self-reports (i.e., standard clinical scales), and obvious-subtle symptoms (i.e., obvious and subtle clinical subscales) based on the evaluation setting factor (parents in child custody disputes vs. parents from intact families). Multivariate effect size was obtained as  $\eta^2$ , i.e., the percentage of variance explained by the model, interpreted as a small magnitude when  $\eta^2 = .01099$ , moderate when  $\eta^2 = .0588$  and a large magnitude when  $\eta^2 > .1379$ ; and the univariate effect sizes (numerator  $df = 1$ ) with Cohen's  $d$  (Hedges's formula when  $N_1 \neq N_2$  and Glass's formula when heterogeneity of variance was observed) being interpreted as small ( $d = 0.20$ ), moderate ( $d = 0.50$ ), large ( $d = 0.80$ ) and more than large ( $d = 1.20$ ) (Arce et al., 2015; Cohen, 1988). And the quantification (%) of the effect was estimated with a derivation of the BESD (Corrás et al., 2017). As the assumption of homogeneity of variance was violated (Box's  $M$  was significant), the multivariate test Pillai's trace was chosen because it is robust to heterogeneous variances, and for univariate analysis three safeguards were followed to validate the acceptance of the alternative hypothesis (Mayorga et al., 2020): the observed  $F$  was greater than the theoretical one ( $df(1, N-k/k)$ ); the observed effect size was  $\geq$  small magnitude ( $d \geq 0.20$ ); and the ratio between type II (acceptance of false null hypothesis) and type I (rejection of true null hypothesis) error was  $\geq 1$  ( $\beta/\alpha$

$\geq 1$ ). These three criteria were met when heterogeneity of variance was observed.

The classification accuracy of the self-deception measures was estimated using sensitivity, specificity, and overall accuracy. The association between a diagnosis of disimulation and group membership (child custody dispute parents—the suspected group—vs. intact family parents—the non-suspected group) was assessed using the Diagnostic Odds Ratio (DOR) as the effect size (small,  $DOR = 1.44$ ; moderate,  $DOR = 2.47$ ; large,  $DOR = 4.25$ , and more than large,  $DOR = 8.82$ ; which correspond approximately to Cohen's  $d$  values of 0.20, 0.50, 0.80, and 1.20, respectively (Arce et al., 2015; Cohen, 1988).

## Results

### Effect of the evaluation setting on self-deception

The results revealed a significant multivariate effect of the evaluation setting (parents in child custody disputes vs. parents from intact families) on self-deception,  $F(4, 317) = 12.22, p < .001$ . This effect accounted for 13.4% of the variance ( $\eta^2 = .134$ , 95% CI [.064, .195]), which is considered a large effect size, and had an observed power of 1.00. This indicates a 0% probability of a Type II error (i.e., a false negative) for this result. Regarding the univariate effects (see Table 1), significant differences were found for the  $K$  scale ( $K$ ), the Edwards Social Desirability ( $EsD$ ) scale, and the Superlative ( $S$ ) scale, but not for the Positive Mental Health ( $PMH4$ ) scale ( $p = .724$ ).

**Table 1**  
ANOVAs on MMPI-2 Self-Deception Validity Scales for the Evaluation Setting Factor

| Scale  | $F$   | $p$    | $1-\beta$ | $M_{dispute}$ | $M_{intact}$ | $d$                 |
|--------|-------|--------|-----------|---------------|--------------|---------------------|
| $K$    | 14.64 | < .001 | .968      | 54.86         | 50.19        | 0.46[0.42, 0.50]    |
| $S$    | 29.09 | < .001 | 1.00      | 29.37         | 24.34        | 0.65[0.61, 0.69]    |
| $EsD$  | 28.34 | < .001 | 1.00      | 28.06         | 24.66        | 0.64[0.60, 0.68]    |
| $PMH4$ | 0.13  | .724   | .064      | 21.55         | 21.75        | -0.04[-0.08, -0.00] |

Note.  $df(1, 320)$ ; Box'  $M = 43.11, F(10, 175745.9) = 4.24, p < .001$ ;  $M_{dispute}$  = mean of the group of child custody dispute parents;  $M_{intact}$  = mean of the group of parents from intact families.

The case studies exhibited (see Table 2) a significant association between the  $K$ ,  $S$  and  $EsD$  scales' classification of the protocols as self-deceptive and the child custody dispute population. No differences were observed for the  $PMH4$  scale. As for the diagnostic impression of self-deception, the results showed a significant and moderate magnitude effect size ( $DOR = 2.47$ ) for the  $K$  (2.89 times more probable a diagnosis of self-deception in the child custody dispute population than in the non-dispute population) scale and of a large magnitude ( $DOR \geq 4.25$ ) for the  $S$  (4.22 times more probable a diagnosis of self-deception in the child custody dispute population) and  $EsD$  (4.48 times more probable a diagnosis of self-deception in the child custody dispute population) scales. The accuracy in the classification of self-deception (concordance between the true and experimental classification) is above 50% (the lower limit of the 95% CI is higher than .50) for the  $K$  and  $S$  scales and 50% for the  $EsD$  scale (the 95% CI includes .50). The sensitivity (true positives: observed probability of self-deception among parents in child custody disputes) ranged from approximately 1/3 for the  $EsD$  scale to 1/2 for the  $K$  and  $S$  scales. And the specificity (true negatives: observed probability of non-self-deception among parents of intact families) revealed rates around 75% for  $K$ , 80% for  $S$ , and 90% for the  $EsD$  scale.

**Table 2**  
Classification Rate of the Self-deception Scales

| Scale  | Cut score     | Se               | Sp               | OA[95% CI]       | $\chi^2(1)$ | DOR[95% CI]                       |
|--------|---------------|------------------|------------------|------------------|-------------|-----------------------------------|
| $K$    | $\geq T56$    | .520[.455, .585] | .727[.632, .805] | .584[.529, .636] | 17.01***    | 2.89[1.73, 4.84]<br>$Z = 4.05***$ |
| $S$    | $\geq r30.83$ | .448[.385, .514] | .838[.753, .898] | .568[.514, .621] | 24.47***    | 4.22[2.32 7.66]<br>$Z = 4.73***$  |
| $EsD$  | $\geq r30.25$ | .309[.252, .373] | .909[.836, .915] | .494[.440, .548] | 17.83***    | 4.48[2.13, 9.41]<br>$Z = 3.96***$ |
| $PMH4$ | $\geq r22.50$ | .184[.139, .240] | .818[.731, .882] | .379[.328, .433] | 0.00        | 1.01[0.55, 1.87]<br>$Z = 0.04$    |

Note. The cut scores from Baer and Miller (2002) are the mean scores of the meta-analysis for the non-coached underreporting group; Se = sensitivity; Sp = specificity; OA = overall accuracy; DOR = diagnostic odds ratio.

### Effects of the evaluation setting factor in clinical self-reports

The results showed a significant multivariate effect,  $F(9, 312) = 4.73, p < .001$ , of the evaluation setting factor on clinical self-reports, accounting for 12.0% of the variance,  $\eta^2 = .120$ , 95% CI [.040, .166], a large effect size (the bench-

mark is .1379) with an observed power of 99.9%,  $1-\beta = .999$ ; that is, the probability of a false positive (type II error) for this result is 1/1000. The univariate effects (see Table 3) displayed significant differences, in line with self-deception prediction (less symptoms in the group suspected of self-deception), and of a small magnitude effect size in the psychasthenia ( $Pt$ ), paranoia ( $Pa$ ), schizophrenia ( $Sc$ ), hypomania

(*Ma*) and social introversion (*Si*) clinical scales. When the magnitude of the effect was quantified, the group suspected of self-deception reported 18.7% less symptoms of psychastenia ( $r = -.187$ ), 17.2% less symptoms of schizophrenia ( $r = -.172$ ), 13.9% less symptoms of hypomania ( $r = .139$ ), and 12.4% less traits of social introversion ( $r = -.124$ ). Contrary to the model prediction for dissimulation (parents in child custody disputes reported more symptoms), significantly higher scores were reported by parents involved in child custody disputes in paranoia (*Pa*), quantified as 12.4% more paranoid symptoms reported by child custody dispute parents. As for this counterintuitive result with the prediction model, the paranoia subscales were analyzed revealing no differences,  $F(1, 315) = 1.39, p = .239$ , in the persecutory ideas (*Pa1*) subscale (blaming others for his/her problems, feeling others try to control him/her, believing others try to harm him/her), meanwhile significantly,  $F(1, 315) = 6.35, p = .012$ , higher scores in the child custody dispute population ( $M = 56.59$ ) than in the non-dispute group ( $M = 52.36$ ), were registered in the poignancy (*Pa2*) subscale (higher scores are related to being more sensitive than other people and feeling more intensely than others) with a small to moderate magnitude effect size,  $d = 0.30$ , 95% CI [0.26, 0.34]; and significantly higher scores,  $F(1, 315) = 13.88, p < .001$ , in the population of parents in child custody dispute ( $M = 52.85$  vs.  $M = 48.10$  in parents from intact families) in the naïveté subscale (*Pa3*: denial of hostility, self- and hetero-perception as believable, honest with high moral standards) with a small to moderate effect size,  $d = 0.44$ , 95% CI [0.40, 0.48]. Indeed, parents involved in child custody disputes reported a more positive self-presentation (denial of hostility, honesty, high moral standards, high sensitivity, and intense feelings).

No clinical caseness ( $\Gamma \geq 66.45$ , indicating statistical and clinical significance) was observed on the clinical scales for parents involved in child custody disputes.

**Table 3**  
Univariate Effects on the MMPI-2 Standard Clinical Scales for the Evaluation Setting Factor

| Scale | <i>F</i> | <i>p</i> | 1- $\beta$ | $M_{\text{dispute}}$ | $M_{\text{intact}}$ | $d[95\% \text{ CI}]$ |
|-------|----------|----------|------------|----------------------|---------------------|----------------------|
| Hs    | 1.14     | .287     | .186       | 51.05                | 52.32               | -0.10[-0.14, -0.06]  |
| D     | 0.34     | .558     | .090       | 50.34                | 50.96               | -0.07[-0.11, 0.03]   |
| Hy    | 0.78     | .377     | .143       | 50.78                | 51.89               | -0.11[-0.15, -0.07]  |
| Pd    | 2.40     | .122     | .340       | 51.64                | 53.46               | -0.19[-0.23, -0.15]  |
| Pt    | 10.30    | .001     | .893       | 46.84                | 50.39               | -0.38[-0.42, -0.34]  |
| Pa    | 4.27     | .039     | .540       | 54.32                | 51.26               | 0.25[0.21, 0.29]     |
| Sc    | 8.49     | .004     | .827       | 47.92                | 51.18               | -0.35[-0.39, -0.31]  |
| Ma    | 5.49     | .020     | .646       | 49.01                | 51.99               | -0.28[-0.28, -0.24]  |
| Si    | 4.43     | .036     | .555       | 48.53                | 50.73               | -0.25[-0.29, -0.21]  |

Note.  $df(1, 320)$ ; Box'  $M = 103.26$ ,  $F(45, 129063.1) = 2.21, p < .001$ ;  $M_{\text{dispute}}$  = mean of the group of child custody dispute parents;  $M_{\text{intact}}$  = mean of the group of parents from intact families.

### Effects of the evaluation setting on obvious and subtle clinical subscales

In the depression, hysteria, psychopathic deviate, paranoia and hypomania clinical scales, Weiner (1948) identified rationally two types of symptoms according to their facility of being related to psychological disturbance: obvious and subtle symptoms. When the responses in the obvious and subtle subscales for the suspected of dissimulation factor (classification by *K*, *S*, *PMH4* and/or *Esd* dissimulation measures as suspicious) in the population of parents in child custody dispute were contrasted, the results displayed a significant multivariate effect,  $F(10, 212) = 21.18, p < .001$ , and an extraordinarily large effect size,  $\eta^2_p = .500$ , explaining 50.0% of the variance, for the dissimulation factor on the obvious and subtle symptom measures. The observed power for the results was 100%,  $1-\beta = 1.00$ , i.e., the chance of making a false negative (type II error) was 0%. The univariate effects (see Table 4) revealed a different response pattern to obvious and subtle symptoms: the suspicious dissimulation groups showed significantly higher scores in obvious symptoms in the depression, hysteria, psychopathic deviate, paranoia and hypomania obvious subscales, whereas significantly lower scores were observed in the depression, hysteria, psychopathic deviate and paranoia subtle subscales. Moreover, the magnitude of the effects and the power are mainly high, encouraging the robustness of the findings. These dual and inverse results do not support the theoretical hypothesis that self-deception is unconscious.

**Table 4**  
ANOVAs on MMPI-2 Obvious and Subtle Subscales for the Dissimulation Factor

| Scale | <i>F</i> | <i>p</i> | 1- $\beta$ | $M_{\text{SDG}}$ | $M_{\text{non-SDG}}$ | $d[95\% \text{ CI}]$ |
|-------|----------|----------|------------|------------------|----------------------|----------------------|
| D,O   | 48.04    | < .001   | 1.00       | 9.38             | 12.93                | -0.91[-0.96, -0.86]  |
| D,S   | 64.18    | < .001   | 1.00       | 12.89            | 10.61                | 1.08[1.03, 1.13]     |
| Hy,O  | 10.32    | .002     | .892       | 5.74             | 7.89                 | -0.43[-0.48, -0.43]  |
| Hy,S  | 61.59    | < .001   | 1.00       | 18.75            | 14.37                | 1.05[1.00, 1.05]     |
| Pd,O  | 47.34    | < .001   | 1.00       | 5.96             | 9.64                 | -0.93[-0.98, -0.88]  |
| Pd,S  | 5.59     | .019     | .653       | 10.65            | 9.92                 | 0.32[0.27, 0.37]     |
| Pa,O  | 69.06    | < .001   | 1.00       | 3.68             | 7.26                 | -1.11[-1.16, -1.06]  |
| Pa,S  | 33.07    | < .001   | 1.00       | 8.74             | 6.94                 | 0.78[0.73, 0.83]     |
| Ma,O  | 123.17   | < .001   | 1.00       | 4.68             | 8.38                 | -1.49[-1.54, -1.44]  |
| Ma,S  | 5.84     | .017     | .672       | 9.48             | 10.29                | -0.32[-0.37, -0.42]  |

Note. Box'  $M = 122.33$ ,  $F(55, 118830.3) = 2.11, p < .001$ ;  $M_{\text{SDG}}$ : mean of the suspicious dissimulation group;  $M_{\text{non-SDG}}$ : mean of the non-suspicious dissimulation group.

### Discussion

This study was designed to assess the efficacy of self-deception measures in classifying dissimulation within a population where it is often suspected (i.e., parents involved in judicial custody disputes). Additionally, it aimed to examine the effects of self-deception on self-reports within this population. The results support the validity of the *K*, *S*, and *Esd* scales for discriminating between the populations, but do not support the validity of the *PMH4* scale for this purpose. In short, higher scores, consistent with dissimulation,

were observed in the population suspected of dissimulation. The magnitude of the effect for these scales exceeded the forensic gold standard ( $d \geq 0.50$ ). Consequently, the *K*, *S*, and *Esd* scales can be considered robust estimators of dissimulation. Regarding their validity in forensic settings, the results validate the capacity of the *K*, *S*, and *Esd* scales to detect dissimulation, but not that of the *PMH4* scale. Furthermore, the magnitude of the association between a dissimulation classification and membership in the suspected population was moderate (*DOR* > 2.47) for the *K*, *S*, and *Esd* scales, thereby meeting the gold standard for forensic validity.

Thus, the *K*, *S*, and *Esd* scales are valid and robust estimators for correctly classifying dissimulation. However, the rate of forensic error (i.e., the failure to detect false negatives) was not zero for any of the measures, which is a limitation for their validity in forensic settings. Therefore, forensic techniques must involve the combination of multiple dissimulation measures, as the primary goal of a forensic evaluation is the identification of all possible false negatives. The use of a combination of two or more dissimulation measures is the gold standard for inferring that self-report responses are biased by dissimulation (Arce et al., 2015).

The effect of the population factor on psychological self-reports accounted for 12% of the variance (a large effect): the population suspected of dissimulation (child custody litigants) reported fewer clinical symptoms and more positive qualities related to being granted child custody. However, this represents a floor effect (a limitation of the study design), as the effect is calculated across all litigants, while only an estimated one-third of them actually dissimulate. Therefore, the true variance explained by the dissimulation factor is likely higher than what was observed, as it is partially masked by the differential prevalence group design. In other words, the study design masks a significant portion of the effect attributable to the dissimulation construct. These results confirm the two-manifestation model of dissimulation: the concealment of negative characteristics (e.g., clinical symp-

toms) and the claiming of non-existent positive qualities (or the exaggeration of actual ones) relevant to a specific goal (in this case, being granted child custody).

The results suggest that the underlying process of self-deception, despite being defined as unconscious positive self-reports, is not unconscious in the sense that the individual lacks any conscious control over their biased responses. Therefore, in a judicial setting, the witness (the parent in our study) bears legal responsibility for the bias in their responses (self-reports).

Future research should focus on estimating the true effect of dissimulation on self-reports; that is, by comparing populations of known dissimulators with populations of non-dissimulators. A further goal should be to define stricter criteria to identify all individuals who are dissimulating (a key forensic target).

### Complementary information

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**Informed Consent Statement.**- Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement.**- The raw data supporting the conclusions of this article will be made available by the correspondence author, without undue reservation.

**Conflicts of Interest.**- The authors declare that there is no conflict of interest.

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