Acta Psychiatrica Scandinavica

DID is trauma based: Further evidence supporting the Trauma Model of DID

Journal:	*Acta Psychiatrica Scandinavica*
Manuscript ID	ACP-2016-6083
Manuscript Type:	Letter to the Editor
Date Submitted by the Author:	07-Sep-2016
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Keywords:	Trauma, Affective disorders, PTSD

DID is trauma based:
Further evidence supporting the Trauma Model of DID

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We welcome the opportunity to respond to Merckelbach, Lynn and Lilienfeld (2016)'s commentary concerning our study (1). Results of our study support the Trauma Model of dissociative identity disorder (DID), but Merckelbach, Lynn & Lilienfeld (2016) raised some concerns, which we will address point-by-point.

Despite specific recognition of our modest sample sizes being a limitation, Merckelbach et al. twice criticize our sample sizes. Interestingly, in the only study they cite in which DID patients were included (2) as evidence of the Fantasy Model, which they prefer to call the socio-cognitive model (SCM), they relied on an even smaller sample ($N = 12$ versus our $N = 17$ DID patients). In addition, a major concern with their study is that DID patients were not assessed by a clinical expert but only by an experimental psychologist, increasing the risk of including false positive DID cases (factitious or imitated DID) (3). As a matter of fact, in our study we went to great lengths to prevent inclusion of imitated DID by using two clinical experts to do the SCID-D[a] assessments; they verified the other's diagnoses to determine exclusion. Five false positive

[a] Instruments' Abbreviations: SCID-D = Structural Clinical Interview for DSM-IV Dissociative Disorders; TEC = Traumatic Experiences Checklist; DES = Dissociative Experiences Scale; SDQ-20 = Somatoform Dissociation Questionnaire; CDS = Cambridge Depersonalization Scale; CEQ = Creative Experiences Questionnaire; ISES = Iowa Sleep Experiences Survey; GSS = Gudjonsson's Suggestibility Scale; DRM = Deese-Roediger-McDermott; SIMS = Structured Inventory of Malingering Symptoms; PBI = Parental Bonding Instrument.

cases were excluded from the current study. Based on our experience that one in five patients presenting with DID is a false positive, the study cited by Merckelbach et al. (2) could possibly include 2-3 false positives, making their publication and its results questionable while our study would have double their sample of genuine DID (DID-G) patients. Further challenging our statistical power, Merckelbach et al. (2016) propose that we should collapse the two clinical groups (DID and posttraumatic stress disorder (PTSD)) and test whether trauma self-reports are better (independent) predictors of dissociative symptoms than is fantasy proneness. Results of these new analyses show that trauma measures are indeed more predictive of dissociative symptoms then fantasy proneness measures: the TEC[a]-total correlated significantly with all measures of dissociation, that is the DES[a], SDQ-20[a] and the CDS[a], whereas the CEQ[a] did not. Detailed results are presented in the Supplementary Materials, Table 1.

Merckelbach et al. (2016) point out that according to SCM, DID does not involve conscious simulation of dissociative personality states, but largely unconscious role-enactments, implying that actors as DID simulators (DID-S) represent a poor comparison condition because simulation is based on conscious role-enactment. However, SCM theorists are inconsistent in their recommendations about role-enactments. In fact, in 2015, Lilienfeld and Lynn acknowledged that the different states shown by DID patients are “in some ways similar to the sense of imaginative involvement that some actors report when playing a part” (4) (p. 124). Furthermore, Nicholas Spanos, one of the earliest SCM theorists, relied on role-enactment research designs using methodology similar to ours (5). As acknowledged in the original publication, our simulation protocol was based on the instructions and protocol used in the studies of Huntjens et al. (6–10), which have not been criticized by SCM theorists. It would therefore be helpful if SCM theorists could specify a design and experiment that they would find compelling instead of inconsistently commenting and complementing across publications on DID-simulating protocols.

Merckelbach et al. (2016) discuss DID in relation to other psychopathologies and they state that the SCM emphasizes that people with DID have psychological disorders such as PTSD and that they are at a much elevated risk for DID. Merckelbach et al. (2016) overlook an obvious explanation: DID patients almost always suffer from comorbid PTSD because both DID and PTSD are trauma-related disorders (11–13). Individuals with DID acknowledge very high levels of childhood and adult trauma (14). PTSD does not put them at risk for DID – early chronic childhood abuse does. As research has amassed that challenges the notion that fantasy proneness and suggestibility cause DID, the SCM theorists have added other causative mechanisms to their theory, including most recently sleep disturbances (as measured in our study with the ISES[a]). However, SCM theorists are unwilling to see that trauma exposure often causes nightmares and hyperarousal that are endemic among DID patients; to ascribe DID to sleeping problems would be comparable to ascribing lung cancer to brown fingers. Sleep problems do not cause DID – childhood abuse does, along with causing myriad other psychological problems including depression, PTSD, and self-destructiveness, among other well-documented comorbidities (15,16).

Merckelbach et al. (2016) agree that, contrary to SCM hypotheses, our data show that DID individuals are not more suggestible or more prone to creating false memories than DID simulators, individuals with PTSD, or healthy controls on the basis of the GSS[a] and the DRM[a] memory illusions. That is, they concur with us that our study challenges two of the central tenets of the Sociocognitive/Fantasy Model. They suggest that our results could be strengthened by informing the reader about how instructions

were given to the DID patients, to exclude any possibility that we influenced them to be less suggestible and less prone to creating false memories. This is indeed an important consideration, but one already accounted for in the design of the study. Our instructions to the DID and other groups did not indicate the nature of the current study. The participants were informed that the goal of the functional magnetic resonance imaging study was to assess the processing of autobiographical memory in the human brain, which was the main component of the study (paper in preparation). We informed them that as part of this study we would ask them to complete a number of interviews and questionnaires, but not which ones or why. We carefully adhered to the various questionnaire-specific instructions at all times, including with the GSS and the DRM (more detail in the Supplementary Materials).

In the last critique, Merckelbach et al. (2016) suggest two new lines of analyses to address the possibility of DID patients over-reporting symptoms on the SIMS[a]. In the *first* line of analyses, participants who exceed a SIMS cut-off score of ≥16 were excluded to remove participants who may have been malingering (17). Kruskal-Walis *H* tests on the remaining subset of participants revealed significant group differences for all dissociation measures but not for anxiety (see Supplemental Material, Table 2). Post-hoc tests showed that both DID and PTSD groups show high levels of dissociation and similarly high levels of trauma exposure, thereby supporting the Trauma Model. Furthermore, there were significant group differences on the SIMS-total as well as the SIMS-psychosis subscale, but not on the SIMS subscales for neurological, amnesia or affective symptoms, nor on the SIMS-low intelligence, nor on fantasy proneness or either ISES subscale. Post-hoc tests on group differences in the SIMS-total revealed that DID-G participants scored significantly higher than DID-S, PTSD, and healthy control groups. On the SIMS-total and SIMS psychosis subscale, PTSD participants scored significantly higher than healthy control participants. These results generally support the Trauma Model.

In the *second* line of additional analyses, we performed a MANCOVA covarying the SIMS total score to assess whether results replicated when controlling for potential malingering. The new results indicate the DID patients had higher dissociation and trauma exposure as well greater attachment insecurity with mothers and fathers, even when supposed malingering is controlled (see Supplemental Materials, Table 3). Again, these findings support the Trauma Model. A MANCOVA controlling for SIMS scores demonstrated significant group differences on the ISES general subscale, and the neurologic, low intelligence, and psychosis subscales of the SIMS. Post-hoc pairwise comparisons revealed that the DID-G group, as compared to the other groups, scored significantly higher on the DES, SDQ-20, PBI[a]-paternal overprotection, and all measures of the CDS and TEC (and significantly lower on paternal care compared to all other groups, and significantly lower on maternal care compared to DID-S and HC participants); the DID-G participants scored significantly higher on the SIMS-neurologic subscale and significantly lower on SIMS-psychosis subscale compared to PTSD participants; the DID-G group scored significantly higher than healthy control participants on sleep problems (ISES-general subscale) and SIMS-low intelligence subscale; and the DID-G group scored significantly higher on the SIMS-low intelligence subscale than the DID-S group. The neurologic subscale of the SIMS is likely associated with trauma exposure and given that endorsement of the items on this scale could be due to trauma exposure (e.g., psychoform experiences such as one's senses, muscle tone, or balance being variable), we expected that the most highly traumatized group, that is the DID-G group, would score higher on this scale than the PTSD group. In

summary, the second set of new analyses support the Trauma Model. The consistent lack of group differences on fantasy proneness, even when we controlled for SIMS scores and applied the SIMS cutoff, strongly supports the Trauma Model.

In sum, the findings from our original study (1) combined with the additional analyses we present here and in the Supplementary Materials provide strong and consistently compelling support for the Trauma Model. Our study challenges the heart of the theory underlying the SCM/Fantasy Model of dissociation.

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