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A Critical Analysis of Myths About Dissociative Identity Disorder

Une Analyse Critique des Mythes Relatifs au Trouble Dissociatif de l'Identité

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Abstract

In a review of the literature in this journal, Piedfort-Marin et al. (2021) identified what they purported to be myths about dissociative identity disorder (DID) and dissociative amnesia. When responding to these beliefs, they supported the Trauma Model of dissociation and argued for a causal etiological link between trauma and dissociative conditions. In contrast, they challenged the Sociocognitive Model (SCM), which they claimed rejects the existence of DID and associated disorders (e.g., dissociative amnesia) and considers symptoms to be the byproduct of fantasy, suggestion, and the iatrogenic effect of psychotherapies. In this article, we critically evaluate the authors' arguments and propose a more balanced, accurate, and comprehensive view of the sociocognitive model. We demonstrate that this model neither rejects the existence of DID, nor a link between trauma and dissociation potentially mediated by a variety of cognitive-affective-behavioral variables. We argue, contrary to Piedfort-Marin et al., that the tendency to confabulate and other cognitive and socio-cultural variables may also contribute to the development of DID. We contend that a multifactorial integrative etiological perspective can move the field beyond a limited focus on controversies that divide the TM and SCM models of dissociation.

Keywords: Amnesia, Dissociative identity disorder, Dissociation, Trauma, Dissociative Amnesia

Résumé

Dans une revue de littérature parue dans ce journal, Piedfort-Marin et al. (2021), ont relevé et répondu à plusieurs croyances relatives au trouble dissociatif de l'identité (TDI). Pour certaines d'entre elles, ils ont opposé le modèle traumatique de la dissociation, suggérant un lien étiologique causal entre trauma et TDI et le modèle sociocognitif qui, selon eux, rejette l'existence du TDI et de troubles associés (e.g., amnésie dissociative) et considère que

l'expression symptomatique est le résultat d'invention, de suggestion et d'effet iatrogène des psychothérapies. Dans ce commentaire, nous répondons aux arguments des auteurs en proposant une vision plus nuancée, plus exacte et plus complète du modèle sociocognitif. Nous démontrons ainsi que ce modèle ne rejette ni l'existence du TDI, ni celle d'un lien causal entre trauma et dissociation, et proposons qu'un tel lien, s'il existe, serait plutôt indirect et médié par une variété de dérégulations cognitives, affectives et comportementales. Nous soutenons, contrairement à Piedfort-Marin et al., que la tendance à l'affabulation et d'autres facteurs cognitifs et socioculturels peuvent aussi contribuer au développement du TDI. Nous plaidons ainsi pour une approche étiologique multifactorielle intégrative et invitons à sortir de l'opposition classique entre les modèles traumatique et sociocognitif de la dissociation.

Mots clés : Amnésie, Trouble dissociative de l'identité, Dissociation, Trauma, Amnésie dissociative

1. Introduction

Dissociative Identity Disorder (DID) is as controversial in the scientific literature as it is fascinating and compelling to the public in popular culture. The intriguing question of the co-existence of several distinct identities resident in one individual has been dramatized in many successful movies, such as *Fight Club* or, more recently, *Split*. DID is characterized in the DSM–5 (American Psychiatric Association, 2013, p. 291) “by the presence of two or more distinct personality states or an experience of possession and recurrent episodes of amnesia” (see Piedfort-Marin et al., 2021, for a more exhaustive presentation of this disorder). As Piedfort-Marin et al. (2021) pointed out, DID is also the subject of many misconceptions about the occurrence of its symptoms and its etiology. In their literature review, Piedfort-Marin and colleagues (2021) addressed five myths they believe are often encountered when discussing DID: (i) DID is schizophrenia; (ii) DID does not exist; (iii) DID develops in response to the influence of the media and/or therapists in suggestible people who are fantasy prone; (iv) The etiology of DID is iatrogenic and not posttraumatic; and (v) Amnesia for the terrifying traumatic stories that DID people report in therapy is not likely, and such stories have been invented.

To discuss and share the scientific view regarding these myths, Piedfort-Marin et al. (2021) compared two models, namely the trauma model (TM) of dissociation and the sociocognitive model (SCM) to explain the development of DID. The TM asserts a direct causal link between trauma and the development of DID (e.g., Brand et al., 2018; Dalenberg et al., 2013), whereas the SCM is an open model that considers the potential influence and interaction among social and cognitive variables (e.g., fantasy proneness; cognitive failure; suggestibility; peer, therapist or media influence; e.g., Giesbrecht et al., 2008; Lynn et al., 2014) as antecedents of dissociative experiences and symptoms. Piedfort-Marin et al. (2021) mainly rejected the tenets of the SCM and were more in favor of the TM. Specifically, they

concluded the following: DID is distinct from schizophrenia; it develops independent of influence of therapists, media, or more generally sociocognitive variables; the origin of DID is traumatic in nature; and people with DID do not exhibit proneness to fantasy or confabulation. Rather, the horrifying events of childhood sexual abuse reported by people with DID in therapy are real and known to law enforcement. In this critical commentary, we challenge a number of interpretations of the literature that Piedfort-Marin et al. (2021) advanced and argue for a more balanced, accurate, and comprehensive interrogation of potential antecedents of DID beyond trauma. While we agree that DID is not schizophrenia and recovered memories of terrifying childhood events may be accurate, we view other claims as more questionable. We will argue that some contentions are fallacious in that they inaccurately attribute claims to proponents of the SCM that they have not advanced (e.g., “dissociative amnesia cannot exist”). Furthermore, we will show that the authors failed to consider recent contributions to the literature that would have provided a more accurate view of the complexity that DID represents. Finally, we will posit that accounts advanced by the SCM are more nuanced than what the authors portray.

To structure our commentary, we focus on aspects of Piedfort-Martin et al.’s review (2021) that we judge to be the most problematic. We will not elaborate on possible differences between DID and schizophrenia, as there is scant disagreement that DID should be confused with schizophrenia. However, we will focus on the following issues: 1) Does DID exist, 2) Does DID have a traumatic origin, 3) Does dissociative amnesia exist, and 4) Are the horrific stories of people with DID unfounded?

2. Does Dissociative Identity Disorder Exist?

Piedfort-Marin et al. (2021) criticized three issues that they attributed to the SCM: DID is caused by media influence, it has an iatrogenic origin (i.e., an influence of therapy and

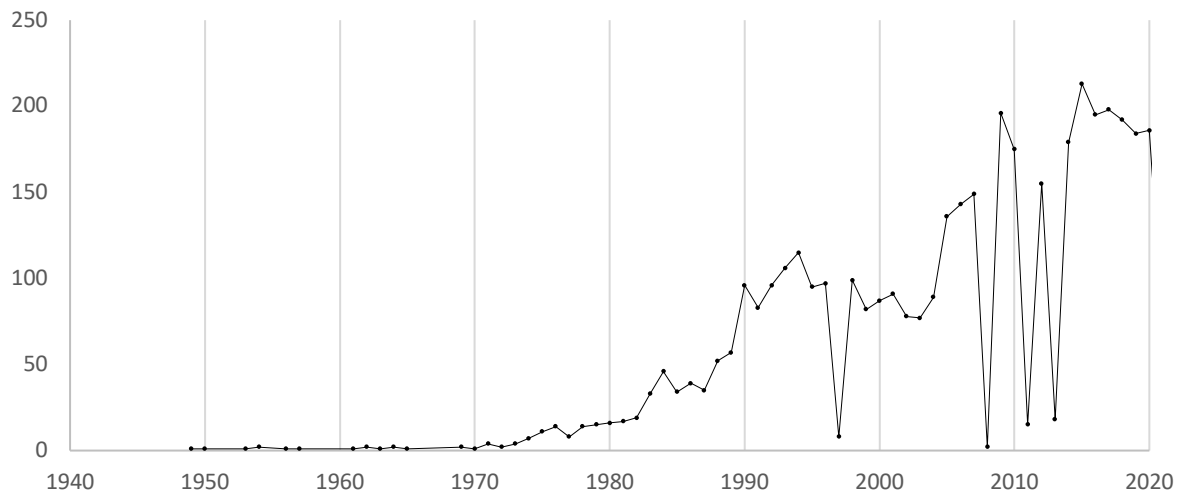
therapists), and people with DID are fantasy prone. We do not find their arguments convincing, either because they are not supported by compelling evidence, or because they disregard certain aspects of the literature supportive of the SCM. We will therefore follow the organization of the authors' three subsections and provide a critical evaluation of their contentions.

2.1. Media and DID

According to Piedfort-Marin et al. (2021), proponents of the SCM identified the release of a novel (and its movie adaptation), *Sybil*, as the source of the outbreak of DID diagnoses and that DID would only be a fad. We agree with Piedfort-Marin et al. (2021) that, contrary to Paris (2012) it does not appear to be the case that DID only manifested in the 1980–1990 period before disappearing. A quick search on Medline using the keywords “Dissociative Identity Disorder” and “Multiple Personality Disorder” shows that, as illustrated in Figure 1, a rise in publications on these topics occurred in the 1980s, and the publication hits remain quite high and relatively stable. However, the fact that papers are published on the topic of DID should not be conflated with valid and reliable evidence for the TM. Considering the popularity (even among scientists) of a disorder as evidence of its existence would be exemplify an *argumentum ad populum*.

Figure 1

*Number of Publications per Year Identified in a PudeMed Search Using the Keywords
“Dissociative Identity Disorder” and “Multiple Personality Disorder”*



Critically, the authors omitted the fact that the case described in *Sybil* is based on fabricated and/or misleading information, as exposed by the investigative journalist Deborah Nathan (2011). According to Shirley Mason, the woman renamed *Sybil* in the book, stated that her therapist suggested symptoms of DID, and that she enacted the role of a person with “multiple personalities” largely to please her therapist (Paris, 2012). Another significant omission by the authors was that there was no credible or corroborated evidence of childhood abuse in the case, a problem that plagues much of the research on DID. In fact, Mason’s childhood appeared to be quite ordinary (Paris, 2012).

In support of the claim that the media does not affect the genesis of DID, Piedfort-Marin et al. (2021) referred to Dell's study (2006) showing that of all the symptoms of DID, 83–95% of people diagnosed with DID exhibited 15 symptoms (out of 23) that were “unknown to the media, to the general public, but also to the majority of health care professionals” (p. 379) because they would be subjective and unobservable. Such a finding, according to Dell (2006) and Piedfort-Marin et al. (2021) would contradict the SCM.

However, the authors did not disclose several critical limitations of this study. First, the assertion that the 15 symptoms in question are unknown to the public, the media and health practitioners is not supported by any evidence in Dell's article (2006), or any evidence we are aware of. The fact that the symptoms are experiential, subjective, and not evident to onlookers, for example, does not signify that they are not known to exist, particularly given that publicized accounts of DID are widely disseminated in the media.

Second, the DSM-5 (American Psychiatric Association, 2013) lists in the differential diagnosis section no less than 10 other disorders or types of disorders that could be confused with DID (e.g., post-traumatic stress disorder, bipolar disorder, depressive disorder, psychotic disorder). Thus, many of the 15 symptoms frequently evident in DID patients, which are claimed to be unknown, are present in one or more disorders and not specific to DID. Among the eight remaining symptoms frequently found in DID there exist (i) those known to the public, the media, and health professionals, and (ii) symptoms that make it possible to rule out other disorders from the differential diagnosis; for example, the presence of two (or more) distinct personality states. In short, this study alone has no apparent bearing on the SCM.

The authors observed that, despite the release of several movies featuring DID, “there does not seem to have been an increase in treatment demands for DID” (Piedfort-Marin et al., 2021, p. 379). Furthermore, the authors concluded that they find it “difficult to draw the conclusion that DID is always the result of media influence” (p. 379). The SCM does not assert the extreme case that “DID is “always the result of media influence.” To the contrary, according to the SCM, media exposure is only one of multiple pathways by which DID might develop (Lilienfeld et al., 1999; Lynn et al., 2014). Moreover, the SCM does not assert a monotonic relation between media exposure and the genesis of DID (although such a relation is possible) or demand for treatment of DID.

2.2. *Is DID Iatrogenic?*

According to Piedfort-Marin et al. (2021), what makes the proponents of the SCM reason that DID could be the result of therapist influence is that “the clinical presentation of DID becomes more explicit after the beginning of treatment” and that presentation would be a reflection of the therapist who would “take advantage, most of the time unconsciously, of the patient's cognitive failures, high level of imagination and suggestibility” (p. 379). Proponents of the SCM have expressed concerns regarding the use of suggestive techniques in psychotherapy in diagnosing and treating DID (Lilienfeld, 2007; Spanos, 1996). These methods include journaling, hypnosis, referring to different personality states with different names, mapping purported personality systems, attempts to recover memories associated with different personalities, and so forth (Lilienfeld, 2007). These techniques arguably would reify presentations of identity confusion and the expression of puzzling and disturbing symptoms in terms of a narrative of “multiple selves” consistent with DID. Narratives that emerge in therapy may thus be a function of suggestive methods, but also can arise from widely available cultural beliefs about DID and idiosyncratic ways individuals represent their subjective experience of self-fragmentation. Even adherents of the TM concede that some cases of DID can be iatrogenic (Dalenberg et al., 2012), although the rate of occurrence of such cases is unknown.

Simulation studies reveal that healthy people are readily able to mimic symptoms of DID in laboratory contexts with minimal cues to do so (see Boysen & van Bergen, 2014; Spanos et al., 1985; Stafford & Lynn, 2002), implying that sociocultural narratives regarding DID are widely accessible to the general public. However, the ability to simulate DID should not be conflated with the idea that DID itself is typically simulated or faked, which is not the case, other than in probably rare forensic contexts. The SCM does make such a claim.

Piedfort-Marin and colleagues (2021) rejected the idea that individuals with DID exhibit

high levels of suggestibility stating that dissociation would explain only 1% of the variance in suggestibility. Piedfort-Martin et al.'s concern regarding suggestibility is based on Dalenberg et al.'s meta-analysis (Dalenberg et al., 2012) whose study inclusion criteria have been criticized (Lynn et al., 2014; Patihis & Lynn, 2017). Dalenberg et al. (2012) used studies that measured dissociation mostly with the Dissociative Experience Scale (DES, Bernstein & Putnam, 1986). However, Dalenberg's analysis excluded studies conducted with a modified version of the DES, the DES-C (Wright & Loftus, 1999), which was developed to counteract the floor effect and skewness of the distribution encountered in nonclinical populations. Patihis and Lynn (2017) found no empirical justification for excluding DES-C studies. In fact, the DES and the DES-C performed comparably across indices of psychopathology, highlighting the problem of comorbidity of psychological symptoms in discerning the specificity of trauma to dissociation. Additionally, both scales secured evidence for only weak correlations between trauma and dissociation, with correlations ranging between $r = .122$ and $r = .269$ across the two studies, whereas the correlation with the DES and both fantasy proneness and cognitive failures ranged between $r = .50$ and $r = .60$ across these measures (Study 1). In fact, the correlations between sexual abuse and harassment and dissociation were not statistically significant (Study 2), consistent with other studies cited by Dalenberg et al. (2012), which found little or no association of trauma with dissociative experiences. One could argue that the Patihis and Lynn (2017) findings were secured in a non-clinical sample and therefore not relevant to severe dissociation. However, there was no evidence for the findings to be associated with different levels of trauma and, more generally, scant studies have directly compared the correlations across patient and healthy individuals or traumatized and non-traumatized individuals in the context of the same study. Still, we acknowledge the possibility that future research will reveal that trauma plays a more causative role in some populations of individuals and across different types of trauma.

2.3. Does DID Reflect Fantasy Proneness?

Piedfort-Marin and colleagues (2021) suggested that, contrary to what the SCM implies, “there is no strong evidence that DID is the product of a fantasy proneness (...)” (p. 380). The authors rejected the argument of positive correlations observed between DES scores and different measures of fantasy proneness, because “as the DES includes many items referring to absorption (the ability to do an action while in a non-pathological daydreaming state), it is not surprising that correlations are found between the DES and different measures of daydreaming tendency and imagination” (p. 380). In addition to the fact that fantasy proneness is not only characterized by a proneness to daydreaming and imagination, but also by difficulties in distinguishing between reality and fantasy, the proportion of variance explained by fantasy proneness in dissociation remains large (i.e., 32%, Pekala et al., 1999), even when the DES absorption items are excluded, which is more than the approximately 10% of variance that represents the average correlation (i.e., effect size, $r = .32$) between dissociation and trauma reported by Dalenberg et al. (2012; see Lynn et al., 2014). Although the authors accurately reported the findings of van der Boom et al. (2010) that fantasy proneness did not play a mediating role in the association between trauma and dissociation, van der Boom et al. (2010) themselves emphasized that their results did not support a direct causal relation between trauma and dissociation either, given findings of only a modest correlation.

Piedfort-Marin et al. (2021) criticized the fact that most studies investigating the associations between fantasy proneness and dissociation were not conducted with clinical samples but with general public samples (e.g., students) and claimed that these studies do not allow for satisfactory conclusions. To bolster this claim, the authors cited Nijenhuis and Reinders’s study (2012) that reported low mean scores in DID patients on a fantasy proneness

scale (CEQ, Merckelbach et al., 2001). The DID sample scores were lower than several control groups (e.g., actors, fantasy gamers, and patients diagnosed with borderline personality disorder). Nevertheless, this study has notable limitations that warrant caution in interpreting the results. First, crucial information is missing (e.g., the sample size of the control groups, the characteristics of these samples, the control participants' possible traumatic history, their score on dissociation scales). Second, clinical patients may be motivated to suppress endorsement of items that tap fantasy proneness in order to not invalidate their DID diagnosis, as merely the product of fantasy. Accordingly, there is reason to suspect strong biases, particularly among patients with DID in psychotherapy, to underreport scores on measures of fantasy-proneness and for correlations between measures of fantasy proneness and dissociation to be attenuated. However, this plausible contention remains to be confirmed empirically. Third, although scores on the CEQ were low in the DID condition, the researchers reported no statistical comparison of mean scores across comparison conditions. Fourth, Piedfort-Martin et al. (2021) conflated mean scores with correlations, which are the appropriate analysis to shed light on the association between fantasy proneness and dissociation, as mean scores are independent of correlations.

Importantly, in a recent meta-analysis of 132 articles with 24,007 participants, Merckelbach et al. (in press) found that the link between fantasy proneness and dissociative experiences and the link between fantasy proneness and an eight-item version of the DES that tapped more serious dissociative pathology was appreciably higher (respectively, $r = .52$ and $r = .40$). So, contrary to what Piedfort-Martin et al. (2021) contend, considerable evidence exists for a sizable and meaningful relation between fantasy proneness and dissociation.

Unfortunately, adherents of the TM, like Piedfort-Martin et al. (2021), often overlook or minimize findings not entirely supportive of their perspective.

2.4. Final remarks

The suggestion that proponents of the SCM consider that DID does not exist (p. 380) is not founded. Decades ago, Lilienfeld et al. (1999) dismissed this contention as a “pseudoissue” (p. 509) and conceded what is obvious: some people express symptoms of DID. Rather than quarrel about the existence of DID, the SCM addresses the etiology of the disorder and the role of trauma, sociocognitive variables presumed to be linked with dissociative experiences, and the mechanisms that contribute to the diagnosis. Current discussions still focus on these three points of controversy (Lynn et al., 2019a).

Piedfort-Marin and his colleagues (2021) claimed that SCM proponents use the DES as a measure of dissociation “while asserting that dissociation is a universal phenomenon without a traumatic origin, whereas the DES is built on the assumption of a traumatic origin of severe dissociation” (p. 380). It is unclear what the relevance is of the scale being “built on the assumption of a traumatic origin...” in terms of how it is related to the validity and psychometric properties of the scale. What is relevant to the SCM is that weak-to-moderate correlations between reports of trauma and dissociation, which we consider in the next section, imply that other variables or mechanisms must be elucidated to more fully account for dissociative experiences and disorders.

3. Does DID Have a Traumatic Origin?

Piedfort-Marin et al. (2021) state that SCM researchers rejected the idea of an etiological association between trauma and dissociation because DID patients reporting childhood traumatic experiences would suffer the effects of “the malleability of memory which would be vulnerable to suggestion” (p. 380). We contend that this is possible and add the imperative that memory reports—whether of traumatic or nontraumatic events (Bernsten & Nielsen, 2021)—should be corroborated by objective evidence where possible, given the

widely accepted finding that memory is reconstructive (e.g., Barlett, 1932), prone to inaccuracies, and sensitive to the influence of external sources, including the media (Bernsten & Nielsen, 2021; Nahleen et al., 2019).

As Piedfort-Marin et al. (2021) pointed out, the proponents of the SCM do not reject a potential etiological role of trauma in dissociation (p. 378). Nevertheless, we maintain that the evidence for trauma playing a necessary, sufficient, specific, or direct role in the genesis of dissociation is not as compelling as the TM model and Piedfort-Marin et al. (2021), in specific, maintain. In fact, the evidentiary basis for the TM is neither compelling nor convincing: It rests largely on modest (on average) and inconsistent correlational findings based on uncorroborated reports of trauma, rather than on replicated positive findings based on longitudinal studies of confirmed traumatic events (Giesbrecht et al., 2008; Patihis & Lynn, 2017).

Piedfort-Marin et al. (2021) presented neuroimaging studies to support the idea of a causal relation between trauma and dissociation. For example, they described a study showing an association between childhood trauma and reduced hippocampal volume in patients diagnosed with post-traumatic stress disorder (PTSD) and/or DID (Chalavi et al., 2015). They stated that “this study concludes that DID is closely related to PTSD and that both disorders are traumatic in origin” (p. 381).

Nevertheless, we argue that this conclusion is not supported by the quality of the evidence. Given the impossibility—for obvious ethical reasons—of inducing sufficient levels of stress in the laboratory to induce trauma, many extant biomarker findings are correlational and not longitudinal, and therefore do not indicate the direction of the association. Indeed, the associations between hippocampal volume and trauma may indicate a risk factor for the experience of distress or trauma due to pre-existing hippocampal abnormality (Childress et al., 2013). In addition, biomarkers studies generally do not control for the confounding effects

of comorbid conditions, include comparison groups matched for general psychopathology, and distinguish traumatic events from generalized stressors and daily life stress or hassles (Lynn et al., 2019a). Nor do they typically compare dissociative conditions associated with reports of a history of trauma versus no history of trauma to isolate the role of trauma, if any. To our knowledge, there exists no reliable, replicable neurobiological signature specific to trauma, much less a biomarker that reflects the diversity of traumatic experiences, just as there is no set of personality characteristics specific to or indicative of trauma or sexual abuse. Accordingly, we contend that the following conclusion is not warranted: “(...) the most recent and extensive (neuroimaging) studies confirm that DID is a trauma-induced disorder and that it is at the extreme end of a continuum of trauma-induced disorders” (Piedfort-Marín et al., 2021, p. 381).

These considerations aside, we do not reject the potential etiological role of trauma in dissociative disorders such as DID, but we assume that sociocognitive and other variables need to be considered in a complete account of dissociative conditions. Lynn et al. (2019), for example, suggested direct as well as indirect influences on dissociation via sleep disturbances (see also van der Kloet et al., 2012) and emotion dysregulation. Additionally, as Lynn et al. (2019) and others discuss, dissociative symptoms can occur in disorders that also are associated with sleep dysfunctions, cognitive-affective-behavioral dysregulation (e.g., borderline personality disorder, schizophrenia spectrum disorders), and alexithymia/poor meta-cognition, indicating shared vulnerabilities among different manifestations of psychopathology that are comorbid with dissociative conditions. Whether trauma is causally connected with these variables remains an open question, but even if it were found to be the case, it would still not support the proposition that different personality states are separated by amnesic barriers and associated with independent systems of control, which is a highly questionable assumption that is not supported by the available evidence, as we will note

below in our discussion of interidentity amnesia.

Lynn et al. (2019) recommended moving beyond the traditional TM/SCM debate and proposed additional factors that may contribute to the development of dissociative disorders. Supplementing a growing body of research over the past 20 years, which has highlighted the relation between sleep disturbance and dissociation (e.g., van der Kloet et al., 2012; Watson, 2001; Watson et al., 2015), Lynn et al. (2019) advanced the hyperassociativity hypothesis. This hypothesis was based on Lynn's observations of six DID patients who shifted rapidly and dramatically in their clinical presentation across cognitive-affective-behavioral states in response to internal and external triggers (Lynn et al., 2019b). Lynn et al. (2019a) defined hyperassociativity as the fluid association of concepts, memories, or emotions that are weakly associated semantically and emotionally. To onlookers, such extreme shifts could be perceived as manifestations of different identities based on traditional notions of DID (Lynn et al., 2019a).

Lynn et al. (2019a, b), however, did not view such shifts to signify different "personalities" or identities with independent executive systems, memories, or behavioral patterns separated by amnesic barriers, as argued by the TM. Rather, Lynn and his colleagues (2019a, b) posited that cognitive, affective, and behavioral instability and hyperassociativity evidenced in DID reflects weakly monitored, poorly regulated and processed, dysfunctional response sets and self-representations that patients and therapists can come to construe as separate indwelling identities in DID.

Still, this formulation does not exclude an indirect (e.g., via sleep, self-control deficits, emotional dysregulation) or even a potentially direct role for trauma (i.e., in cases of depersonalization/derealization in peritraumatic dissociation), among a variety of mechanisms of dissociative experiences and symptoms. Nor does this perspective dismiss the personal and social sequelae and costs of trauma and its aftermath. Nevertheless, we contend that scant

evidence exists to support Piedfort-Marin et al. (2021) implication that trauma is a necessary, sole, or generally sufficient cause of dissociation.

4. Does Dissociative Amnesia Exist?

This section in Piedfort-Marin et al.'s article (2021) is possibly the most problematic. Here, the authors again respond to arguments or claims that do not accurately reflect those advanced by proponents of the SCM. First, they argued that for some SCM proponents, dissociative amnesia “cannot exist” (p. 381). This statement is not consistent with arguments voiced by critics of dissociative amnesia. For example, Otgaar et al. (2019) stated that “the idea of repressed memories runs counter to well-established principles of human memory” (p. 1074), not that the phenomenon “cannot exist.” Also, recently, Mangiulli and colleagues (in press) stated explicitly that “we do not want to imply that dissociative amnesia is a non-existing diagnostic entity. Rather, our findings highlight that case study data surrounding the nature and etiology of dissociative amnesia are unconvincing, lacking of convergence and cohesion across clinicians and academics.” What these authors argue is that the mechanisms described in the DSM–5 as “dissociative amnesia” do not correspond to current knowledge of how memory works, either in an ordinary way or in intense stress circumstances. In a recent French review of the critical literature on dissociative amnesia, Dodier (in press) stated in an introductory statement: “(...) it is necessary to note that the purpose of this article is not to assert that dissociative amnesia does not exist. Rather, the purpose is to emphasize both a lack of evidence for a link between trauma and forgetting but also alternative, more parsimonious empirical evidence, thus creating an obstacle to the claim that dissociative amnesia exists.” To say that evidence is lacking for the existence of a phenomenon or process is not the same as saying that the phenomenon or process does not exist. This epistemological caution is important in that, contrary to what Piedfort-Marin and his colleagues (2021) claim, skeptical

scholars of dissociative amnesia remain quite open to the existence of dissociative amnesia. However, in the absence of convincing evidence, we contend that continued caution is warranted.

Second, the authors attributed to the proponents of the SCM the argument that dissociative amnesia may be ordinary forgetting, and that by forgetting, SCM proponents are suggesting that people can remember their trauma if they are helped to do so. Piedfort-Marin et al. (2021) therefore expressed surprise that the “danger of suggestion does not seem to be a problem here” (p. 381). We see two major concerns with this last claim: (i) the danger of suggestion is problematic for dissociative amnesia skeptics (see, e.g., Dodier & Patihis, 2021), and (ii) helping people to remember better can be done completely independently of any suggestion, as illustrated by the large body of research on non-suggestive forensic interviewing methods such as the cognitive interview (see Dodier et al, 2021, for real-world highly stressful experiences; see Memon et al., 2010, for a meta-analysis). It is also entirely conceivable that individuals will recover ordinarily forgotten (accurate) traumatic memories on their own and spontaneously in the presence of relevant retrieval cues in everyday life (e.g., hearing the perpetrator's name, returning to the scene of the abuse). Interestingly, people who spontaneously recovered memories in this manner were found to be less susceptible to false memories than people who recovered their memories in therapy (Geraerts et al., 2009), and their memories were more likely to be corroborated by external evidence than memories recovered in therapy (Geraerts et al., 2007).

In the following discussion, Piedfort-Marin et al. (2021) relied on two types of studies to support the validity of dissociative amnesia. First, they presented data from retrospective studies (i.e., Briere & Conte, 1993; Hermann & Schatzow, 1987) showing that victims of childhood abuse reported “rates of amnesia (...) in 59% of the cases (out of 450 subjects), and 28% of the women (out of 53) in their sample, respectively” (p. 381). The authors also

described the work of Elliott and Briere (1995) finding “20% total amnesia and 42% partial amnesia” (p. 381). Finally, they reported the findings of Wilsnack et al. (2002) that 25% of a non-clinical population reported amnesia, of which only 1.8% recovered their memories in therapy. None of these studies, however, support the validity of dissociative amnesia. The question asked in these studies is not that of amnesia, but that of the period without memories of abuse between the event and the study. Researchers have argued that reporting periods without memories of the events can be explained in terms of alternative processes or phenomena related to ordinary memory (Dodier & Patihis, 2021, Loftus et al., 1998; McNally & Geraerts, 2009). To address this issue, Dodier and Patihis (2021) reported very large inconsistencies in the percentages of self-report of periods without abuse memories (rank = 6%–77%). They then hypothesized that, in addition to methodological weaknesses of studies, false positives (i.e., mistakenly reporting periods of time without memories) could explain these large variations in proportions. Using follow-up questions (i.e., asking participants what they meant exactly when they reported recovering memories of childhood abuse) to limit false positives, (i) 23% of people reporting memories of childhood abuse had experienced a period without memory of the events before recovering them at a specific time in their lives, and (ii) 31% of people who initially reported recovering previously forgotten memories had in fact always had memories, but had reinterpreted them over time. This second result aligns with hypotheses of alternate developmental phenomena or processes proposed earlier in the literature (e.g., McNally & Geraerts, 2009). In addition, almost 10% of recovered memories of childhood abuse that individuals were previously unaware of were recovered in therapy, and many of the contexts of recovery were consistent with the SCM (e.g., media exposure, personal documentation on repressed memory of child abuse, discussion with relatives about childhood abuse and repressed memories).

Additionally, Piedfort-Marin et al. (2021) relied on Williams's prospective study (1994),

which reported that 38% of women who had reported abuse 17 years earlier did not spontaneously recall it during an interview. Nevertheless, this research does not constitute unambiguous evidence for dissociative amnesia. Loftus et al. (1994), for example, explained that not spontaneously recalling events by no means provides dispositive evidence that they have truly been forgotten; that is, people may simply have chosen not to talk about the abuse. In addition, Piedfort-Marin et al. (2021) stated that this study found that “the closer the relationship to the perpetrator, the greater the possibility of forgetting the abuse in adulthood” (p. 382). Although the authors do not provide an explanation for this result, which Williams (1994) reported, non-pathological social factors might provide an explanation. Indeed, Leach et al. (2017) observed that when abuse was intrafamilial, younger children were less likely to disclose it during a police interview. Accordingly, the authors explained, children, especially if they are young, may not perceive the abuse as such, fear reprisal for disclosure, or feel loyalty to the abuser. Unfortunately, Piedfort-Marin et al. (2021) conflate cases of not spontaneously recalling events, or not reporting them for a period of time, with proof of dissociative amnesia, rather than consider more parsimonious and less controversial explanations that are available in the literature. In any case, further research is needed to illuminate the mechanisms underlying the phenomena of recovered memories. Of course, experiencing traumatic events can lead to memory problems (e.g., involuntary and persistent memories, encoding failure). However, such problems do not support the existence of amnesia for entire autobiographical experiences. Moreover, concerning the inter-identity amnesia often reported in the DID literature (e.g., Eich et al., 1997), researchers have documented that—despite subjective reports of forgetting information (i.e., amnesia)—when objective indicators are employed with individuals with DID, information is, in fact, implicitly transferred from one “identity” to another (Huntjens et al., 2012). Moreover, performance on inter-identity episodic memory transfer tasks is similar among DID patients,

simulators, and healthy control participants (Huntjens et al., 2003).

Finally, Mangiulli and colleagues (in press) reviewed case studies on dissociative amnesia in the period of 2000-2020. They critically examined 128 case studies and assessed whether the information reported in these case studies was aligned with DSM–5 criteria for dissociative amnesia. The authors found, however, that the evidence to support dissociative amnesia was very weak and plagued with unexplained heterogeneity regarding the origin of the memory loss. None of the case studies completely satisfied all DSM–5 criteria, and most case studies failed to consider alternative explanations for the claimed memory loss.

Collectively, at present, evidence to support dissociative amnesia, as a phenomenon distinct from ordinary forgetting and ruling out memory loss in response to neurological injuries, is severely lacking. Hence, we encourage clinicians and researchers to consider alternative and more mundane memory-based explanations more critically for claimed autobiographical memory loss.

5. Are the Terrifying Stories of People with DID Unfounded?

The authors presented documented cases of paedophile networks in support of their claim that the terrifying and traumatic events that DID patients report can be real (Piedfort-Marin et al., 2021)—because, in fact, such events do occur. When people claim to recall abuse that was formerly forgotten, one always needs to examine the validity of these claims, which may confirm the accuracy of recovered memories. The proponents of SCM do not deny the reality of sexual abuse, and they do not deny that recovered memories (even in therapy) can be accurate. Rather, we assert the imperative to explore a variety of ordinary and non-controversial explanatory mechanisms before resorting to dissociative amnesia to account for memory loss (e.g., delayed understanding of the abuse, reluctance to report events, encoding failure, brain injury).

However, we cannot endorse the use of anecdotal evidence to contradict the false memory hypothesis. If we must rely on anecdotal cases, it is also possible to propose some that illustrate cases of false memories. For example, the Benoit Yang Ting case in France, widely reported in the media, concerns a clinical psychologist who induced false intrauterine memories in patients of attempted abortions by their mothers. Such memories are highly unlikely and the criminal investigation, as well as the court decision recognized these memories as false and induced during suggestive therapy and the therapist was given a one year suspended prison sentence for abusing vulnerable people. Does this case and the court finding reduce all memories of childhood abuse to false memories? Surely not. In the same way, the fact that paedophile networks have been found to be active does not imply that all memories of childhood abuse, which arise in therapy, are veridical. Only a careful, case-by-case examination of the events in question and potential factors that may be detrimental to memory can yield information that can corroborate, not corroborate, or determine the impossibility of corroborating memories in and out of the therapy context.

6. Conclusion

We argue that that the literature review presented by Piedfort-Marin et al. (2021) represents an imbalanced and inaccurate accounting of the literature on DID and misrepresents the SCM. Current proponents of the SCM do not contend that DID or dissociative amnesia do not exist; that trauma plays no role in the etiology of the disorder (although that can be the case), and that the memories of terrifying events reported by DID patients are necessarily false and implanted by unscrupulous or incompetent therapists. Instead, the SCM proposes that, as is the case in many disorders, sociocognitive and cultural factors play a role in DID. Nor do SCM proponents claim that all DID symptoms are invariably media or therapist induced or even necessary or exclusive etiological components.

Dwelling on increasingly stale controversies and points of disagreement across perspectives will not advance the field forward in meaningful directions and will only further polarize the discussion on the origins of dissociation. Clearly, the generally unimpressive link between trauma and dissociation, when it is apparent, and limits in earlier sociocognitive accounts in providing comprehensive modeling of DID (see Lynn et al., 2019a), underscores the necessity of expanding our consideration of moderators and mediators of DID symptoms and other dissociative conditions. We suggest that an “open” multifactorial approach, which integrates the strengths of competing models (see Lynn et al., 2019a) and considers more recent data on the roles of sleep disturbance; generalized stress (apart from trauma); deficits of self-awareness, self-regulation, and representation; and hyperassociativity, provides the best opportunity to capture the complexity of dissociative disorders and to delineate multiple pathways to understanding and treating dissociative conditions.

References

- American Psychiatric Association (APA). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing; 2013.
- Bartlett FC. Remembering: A study in experimental and social psychology. Cambridge University Press; 1932.
- Bernstein EM, Putnam FW. Development, reliability, and validity of a dissociation scale. *J Nerv Ment Dis* 1986;174:727–35.
- Bernsten D, Nielsen NP. The reconstructive nature of involuntary autobiographical memories. *Memory* 2021;17:1–6.
- Boysen, GA, VanBergen A. Simulation of multiple personalities: a review of research comparing diagnosed and simulated dissociative identity disorder. *Clin Psychol Rev* 2014 34:14–28.
- Brand BL, Dalenberg CJ, Frewen PA, et al. Trauma-related dissociation is no fantasy: addressing the errors of omissions and errors commission in Merckelbach and Patihis (2018). *Psychol Inj Law* 2018;11:377–93.
- Briere J, Conte J. Self-reported amnesia for abuse in adults molested as children. *J Trauma Stress* 1993;6:21–31.
- Chalavi S, Vissia EM, Giesen ME, et al. Abnormal hippocampal morphology in dissociative identity disorder and posttraumatic stress disorder correlates with childhood trauma and dissociative symptoms. *Hum Brain Map* 2015;36:1692–704.
- Childress JE, McDowell EJ, Dalai VVK, et al. Hippocampal volumes in patients with chronic combat-related posttraumatic stress disorder: a systematic review. *J Neuropsychiatry Clin Neurosci* 2013;25:12–25.
- Dalenberg CJ, Brand BL, Gleaves DH, et al. Evaluation of the evidence for the trauma and fantasy models of dissociation. *Psychol Bull* 2012;138:550–88.

- Dell PF. A new model of dissociative identity disorder. *Psych Clin N Am* 2006;29:1–26.
- Dodier O, Ginet M, Teissedre F, Verkampt F, Fisher RP. Using the cognitive interview to recall real-world emotionally stressful experiences: road accidents. *Appl Cogn Psychol* in press.
- Dodier O, Patihis L. Recovered memories of child abuse outside of therapy. *Appl Cogn Psychol* 2021;35:538–47.
- Dodier O. L'amnésie dissociative : limites méthodologiques, limites conceptuelles, et explications alternatives. *Ann Psychol* in press.
- Eich E, Macaulay D, Loewenstein RJ, Dohle PH. Memory, amnesia, and dissociative identity disorder. *Psychol Sci* 1997;8:417–22.
- Elliott DM, Briere J. Posttraumatic stress associated with delayed recall of sexual abuse: A general population study. *J Traum Stress* 1995;8:629–47.
- Geraerts E, Lindsay DS, Merckelbach H, et al. Cognitive mechanisms underlying recovered-memory experiences of childhood sexual abuse. *Psychol Sci* 2009;20:92–8.
- Geraerts E, Schooler JW, Merckelbach H, Jelicic M, Hauer BJA, Ambadar Z. The reality of recovered memories: corroborating continuous and discontinuous memories of childhood sexual abuse. *Psychol Sci* 2007;18:564–68.
- Giesbrecht T, Lynn SJ, Lilienfeld SO, Merckelbach H. Cognitive processes in dissociation: an analysis of core theoretical assumptions. *Psychol Bull* 2008;134:617–47.
- Herman JL, Schatzow E. Recovery and verification of memories of childhood sexual trauma. *Psychoa Psychol* 1987;4:1–14.
- Huntjens RJC, Postma A, Peters ML, Woertman L, van der Hart O. Interidentity amnesia for neutral, episodic information in dissociative identity disorder. *J Abnorm Psychol* 2003;112:290–7.

- Huntjens RJC, Verschuere B, McNally RJ. Inter-identity autobiographical amnesia in patients with dissociative identity disorder. *PLoS One* 2012;7:e40580.
- Leach C, Powell MB, Sharman SJ, Anglim J. The relationship between children's age and disclosures of sexual abuse during forensic interviews. *Child Maltreat* 2017;22:79–88.
- Lilienfeld SO, Kirsch I, Sarbin TR, et al. Dissociative identity disorder and the sociocognitive model: recalling the lessons of the past. *Psychol Bull* 1999;125:507–23.
- Lilienfeld SO. Psychological treatments that cause harm. *Perspect Psychol Sci* 2007;2:53–70.
- Loftus EF, Garry M, Feldman J. Forgetting sexual trauma: what does it mean when 38% forget? *J Consult Clin Psychol* 1994;62:1177–81.
- Loftus EF, Joslyn S, Polage D. Repression: a mistaken impression? *Dev Psychopathol* 1998;10:781–92.
- Lynn SJ, Lilienfeld SO, Merckelbach H, et al. The trauma model of dissociation: inconvenient truths and stubborn fictions. Comment on Dalenberg et al. (2012). *Psychol Bull* 2014;140:896–910.
- Lynn SJ, Lilienfeld SO, Merckelbach H, Maxwell R, Baltman J, Giesbrecht T. Dissociative disorders (2016). In Maddux JE, Winstead BA, *Psychopathology: foundations for contemporary understanding*. London: Routledge; 2019; 298–318.
- Lynn SJ, Maxwell R, Merckelbach H, Lilienfeld SO, van Heugten-van der Kloet D, Miskovic V. Dissociation and its disorders: competing models, future directions, and a way forward. *Clin Psychol Rev* 2019;73:101755.
- Mangiulli I, Otgaar H, Jelicic M, Merckelbach H. A critical review of case studies on dissociative amnesia. *Clin Psychol Sci* in press.
- McNally RJ, Geraerts E. A new solution to the recovered memory debate. *Perspect Psychol Sci* 2009;4:126_34.

- Memon A, Meissner CA, Fraser J. The cognitive interview: a meta-analytic review and study space analysis of the past 25 years. *Psychol Public Policy Law* 2010;16:340–72
- Merckelbach H, Horselenberg R, Murriss P. The Creative Experiences Questionnaire (CEQ): a brief self-report measure of fantasy proneness. *Person Ind Diff* 2001;31:987–95.
- Merckelbach H, Otgaar H, Lynn SJ. Empirical research on fantasy proneness and its correlates 2000-2018: a meta-analysis. *Psychol Conscious* in press.
- Nahleen S, Nixon RDV, Takarangi MKT. Memory consistency for sexual assault events. *Psychol Conscious* 2019;8:52–64.
- Nathan, D. *Sybil exposed: The extraordinary story behind the famous multiple personality case*. New York: Free Press; 2011.
- Nijenhuis ERS, Reinders AATS. Fantasy Proneness in dissociative identity disorder. *PLoS ONE* 2012;7:239–79 [Supporting information S1].
- Otgaar H, Howe ML, Patihis L, et al. The return of the repressed: the persistent and problematic claims of long-forgotten trauma. *Perspect Psychol Sci* 2019;14:1072–95.
- Paris J. The rise and fall of dissociative identity disorder. *J Nerv Ment Dis* 2012;200:1076–9.
- Patihis L, Lynn SJ. Psychometric comparison of Dissociative Experiences Scales II and C: a weak trauma- dissociation link. *Appl Cogn Psychol* 2017;31:392–403.
- Pekala RJ, Kumar VK, Ainslie G, et al. Dissociation as a function of child abuse and fantasy proneness in a substance abuse population. *Imagination, Cognit Pers* 1999;19:105–29.
- Piedfort-Marin O, Rignol, G, Tarquinio, C. Le trouble dissociatif de l'identité : les mythes à l'épreuve des recherches scientifiques. *Ann Méd Psychol*, 2021 ;179:374–85.
- Spanos, NP, Weekes, JR, Bertrand, LD. Multiple personality: a social psychological perspective. *J Abnorm Psychol* 1985;94:362–76.
- Spanos, NP. *Multiple identities and false memories: a sociocognitive perspective*. Washington, DC: American Psychological Association; 1996.

- Stafford J, Lynn, SJ. Cultural scripts, memories of childhood abuse, and multiple identities: a study of role-played enactments. *Int J Clin Exp Hypn* 2002;50:67–85.
- van der Boom KJ, van den Hout MA, Huntjens RJ. Psychoform and somatoform dissociation, traumatic experiences, and fantasy proneness in somatoform disorders. *Pers Individ Differ* 2010;48:447– 51.
- van der Kloet D, Merckelbach H, Giesbrecht T, Lynn SJ. Fragmented sleep, fragmented mind: the role of sleep in dissociative symptoms. *Perspect Psychol Sci* 2012;7:159–75.
- Watson D, Stasik SM, Ellickson-Larew S, Stanton K. Explicating the psychopathological correlates of anomalous sleep experiences. *Psychol Conscious* 2015;2:57.
- Watson D. Dissociations of the night: individual differences in sleep-related experiences and their relation to dissociation and schizotypy. *J Abnorm Psychol* 2001;110:526–35.
- Williams LM. Recall of childhood trauma: a prospective study of women’s memories of child sexual abuse. *J Consult Clin Psychol* 1994;62:1167–76.
- Wilsnack SC, Wonderlich SA, Kristjanson AF, Vogeltanz-Holm ND, Wilsnack RW. Self-reports of forgetting and remembering childhood sexual abuse in a nationally representative sample of US women. *Child Ab Negl* 2002;26:139–47.
- Wright, DB, Loftus EF. Measuring dissociation: comparison of alternative forms of the Dissociative Experiences Scale. *Am J Psychol* 1999;112:497–519.