

Recent developments in the theory of dissociation

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Although the construct of dissociation was introduced into psychiatry at the end of the 19th century by Pierre Janet, the term still lacks a coherent conceptualization, which is partially reflected by differences in the classification of dissociative and conversion disorders in ICD-10 and DSM-IV. Given the clinical significance of dissociative psychopathology in numerous clinical conditions, it is very valuable that various efforts have been made to refine and to specify current conceptualizations in recent years. The most promising and convincing approaches converge in subdividing dissociation into qualitatively different types, i.e. pathological versus non-pathological dissociation, and “detachment” versus “compartmentalization”. We review these concepts and discuss their scientific and clinical potential as well as their limitations.

Key words: Pathological dissociation, detachment, compartmentalization, classification

Dissociation is the core feature of the dissociative disorders (1-3). Furthermore, dissociative experiences are among the diagnostic criteria for acute stress disorder (ASD) and post-traumatic stress disorder (PTSD) as well as borderline personality disorder (1,4-6). Moreover, dissociative psychopathology is found in a wide variety of mental disorders (e.g., schizophrenia, affective disorders, obsessive-compulsive disorder and somatoform disorders) and has been associated with distinct personality traits (7-13). It has been linked to traumatic experiences (4,14,15) and seems to be an important predictor for poor treatment response and high relapse rates, at least in patients with panic and obsessive-compulsive disorders (16,17).

Despite the recognized clinical significance of dissociation, there is an ongoing controversy about its conceptualization. The notion that it “lacks a single, coherent referent ... that all investigators in the field embrace” (18) is reflected by differences in the definition and classification of dissociative disorders in the ICD-10 and the DSM-IV. While the latter characterizes dissociation as “disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment” (1), the former defines it as “partial or complete loss of the normal integration between memories of the past, awareness of identity and immediate sensations, and control of bodily movements” (2). In sum, both classification systems agree that dissociation relates to the (autobiographical) memory system, consciousness and the domain of personal identity. However, the ICD-10 acknowledges that it also may involve the sensory and motor systems, leading to symptoms which are subsumed under the term of conversion. In contrast, the DSM-IV restricts dissociation to the level of psychic functions and systems. Consequently, conversion disorders are one among the somatoform disorders in the DSM-IV, while the ICD-10 claims that dissociative and conversion disorders represent one category that is independent from the somatoform disorders.

Beyond this “academic” controversy, the clinical utility of both the ICD-10 and the DSM-IV classifications of dissociative disorders has been called into question. For example, in a large North American study with 11,292 gen-

eral psychiatric patients, 57% of those with a dissociative disorder were classified as “atypical” because their symptomatology did not correspond well to any of the dissociative disorder types mentioned in the DSM (19). Correspondingly, in a subgroup of general psychiatric patients with clinically relevant levels of dissociation, 60% warranted the “catch-all” diagnosis of “dissociative disorders not otherwise specified” (DDNOS) (20). Similar discomfort with the classification has been reported from non-Western countries, e.g. India and Uganda (21,22). In India, 90% of outpatients with a dissociative disorder were assigned to the subcategory DDNOS (23). Thus, it is not surprising that several authors have proposed additional diagnostic categories within the dissociative disorders (24). For example, clinicians from India suggested the diagnosis of “brief dissociative stupor”, which is somewhat similar to the North American proposal of a “dissociative trance disorder” (25,26), that might also encompass the transculturally important syndrome of possession states (27).

In any way, these inconsistencies between ICD-10, DSM-IV and clinical reality not only illustrate the confusion surrounding the complex issue of dissociation, but may also serve to perpetuate it (28). Fortunately, both clinicians and researchers have become more and more aware of the semantic openness of the term dissociation and its arguably too all-encompassing definitions (18,28). Various efforts have been made to refine and specify current conceptualizations, and all of them converge in subdividing dissociation into qualitatively different forms. For the purpose of this article, we will briefly review and discuss the most promising and convincing approaches, i.e. the distinction between pathological and non-pathological dissociation, and the proposal to separate “detachment” from “compartmentalization” within the domain of dissociation.

PATHOLOGICAL DISSOCIATION

It was Pierre Janet, at the end of the 19th century, who systematically elaborated on the concept of dissociation

(29), which he viewed as a discontinuous phenomenon that is only seen in individuals with mental disorders, particularly hysteria, and is absent in healthy people (30). In contrast, his contemporaries William James (31) and Morton Prince (32) and later investigators (33,34) have conceptualized dissociation as a dimensional process existing along a continuum from normal and relatively common dissociative experiences such as daydreaming to severe and clinically relevant forms such as the dissociative disorders.

Until recently, this so-called “dissociative continuum” has been one of the prevalent key principles in the field of dissociation (33,34). However, the controversy about whether dissociation represents a dimensional or typological construct has re-emerged (8). A sophisticated taxometric analysis of the Dissociative Experiences Scale (DES), the most widely used self-report measure of dissociation (35,36), empirically validated the distinction between a dimensional, non-pathological type and a discontinuous, pathological class of dissociation (37). This pathological dissociation can be identified by a subset of eight items of the DES, the so-called “DES-Taxon” (DES-T). These items mainly assess depersonalization (e.g., the feeling that one’s own body does not belong to oneself) and derealization (e.g., the feeling as if other people, objects, and the world around are not real). Although scores on the DES-T are numerically continuous, the underlying factor is class-like rather than trait-like and represents a distinct taxonomic category to which an individual either belongs to or does not. The biometric structure of pathological dissociation was replicated in a large general population sample (38).

The prevalence of pathological dissociation in the general population of North America was estimated to range between 2 and 3.3% (38,39). European studies reported prevalence rates of 0.3% for a non-clinical population and between 1.8 and 2.9% for student samples (40,41). In randomly selected psychiatric inpatients, the prevalence of pathological dissociation was found to range between 5.4 and 12.7% (40,41). Specific diagnostic groups display higher frequencies: in women with eating disorders, the prevalence of pathological dissociation varied between 4.8 and 48.6%, depending on the type of eating disorder, with binge-purge anorexia showing the highest and binge eating disorder the lowest prevalence (41,42). Sixty-four percent of patients with depersonalization disorder (DPD) showed pathological dissociation (43).

Although the link between taxonomic membership and clinical diagnoses, particularly those of dissociative disorders, is still a matter of intense debate (40,43,44), it was suggested that subjects with pathological dissociation qualify for the diagnoses of dissociative disorder (37), PTSD or, to a lesser extent, schizophrenia (38). These findings have been called into question by other researchers (8,40,43,45), and it has already been noted that pathological dissociation is frequent in eating disorders (42) and personality disorders (41,46). Moreover, Putnam et al (1996) reported that high dissociating subjects are distributed across all diagnostic groups.

The relationship between demographic variables and pathological dissociation remains inconclusive. While some studies found that pathological dissociation seems to be more frequent in younger individuals (38,39,41,47), there was no such association in DPD patients (43). The majority of studies have failed to find gender differences in pathological dissociation (38,43,47,48); in contrast, one investigation found an association of DES-T scores with male gender (39). With respect to the marital status, subjects with pathological dissociation tend to be singles (39,41).

Although most researchers agree that the pathological dissociation taxon is a useful tool (42,43), its clinical and scientific value might be reduced by methodological problems. Initially, it was recommended to assign subjects to the taxonomic class by a complex statistical procedure (38). However, other investigations (39,42) relied on dimensional threshold values (e.g., 20 or 30), while others (38) argued against the uncritical use of rigid cut-off scores. Thus, results of the different studies are difficult to compare and, consequently, future research is needed to establish a generally acceptable method for empirically defining pathological dissociation. Another methodological issue relates to the temporal stability of both the dimensional DES-T scores and the categorical taxon membership, which was found to be low over a two-month period (49), underscoring the limitations of cross-sectional designs when studying pathological dissociation. In addition, there is still the unresolved matter of whether pathological dissociation is indeed a typological construct (43). Even more generally, its existence has been called into question (49). Future research is warranted to clarify these issues.

DETACHMENT AND COMPARTMENTALIZATION

Since there is no consistent agreement about precisely what dissociation “is”, it was Cardena’s valuable contribution to provide an elaborated and systematic overview of the various uses of the term (18). He described dissociation in three distinct ways: as a lack of integration of mental modules or systems, as an altered state of consciousness, and as a defense mechanism. While the third category largely reflects the function of the other two, the first and second category qualitatively differ from each other. The majority of recent conceptualizations converge on this dichotomy, and it has been suggested to label these two types of dissociation as “compartmentalization” and “detachment” (28,50).

Compartmentalization is characterized by a partial or even complete failure to deliberately control processes and take actions that can normally be influenced by an act of volition, e.g. an inability to bring usually accessible information into conscious awareness. It is constitutive for this category that the “compartmentalized” processes, information and functions continue to “work” normally (apart from that they are inaccessible to volitional control); thus, they keep influencing emotion, cognition and behavior.

Clinically, the manifestations of compartmentalization comprise dissociative amnesia and conversion symptoms, possibly even other instances of the so-called “somatoform dissociation” (51).

In contrast, detachment is defined by the subjective experience of an altered state of consciousness characterized by “alienation” of oneself or the external world. During these altered states, there is often an absence or flattening of emotional experiences. On a descriptive level, detachment becomes evident as derealization and/or depersonalization, e.g. out-of-body experiences. These phenomena have been associated with trauma and PTSD, and detachment shares numerous similarities with the concepts of peri-traumatic dissociation (i.e., dissociative experiences during a traumatic event) and emotional numbing (28). It was even suggested that intrusive memories and flashbacks may be explained by peri-traumatic detachment: the altered state of consciousness characteristic for detachment may interfere with the encoding and consolidation of (traumatic) information, resulting in poorly integrated representations which themselves are considered vital in the development of intrusions (52).

Further evidence for the conceptually and phenomenologically convincing distinction between compartmentalization and detachment stems from clinical, psychometric and experimental research. For example, patients with disorders characterized by compartmentalization (e.g. somatization disorders) have been found to hardly display symptoms typical for detachment and vice versa (7,43,53,54). Furthermore, the majority of DES factor analytic studies (35,36) have consistently separated factors of depersonalization/derealization (i.e., detachment) and amnesia (representing the compartmentalization type of dissociation) (55). Finally, experimental research has indicated that detachment constitutes a specific mental state with a core neurophysiological profile characterized by the top-down inhibition of limbic emotional systems and an activation of the right prefrontal cortex (56). This kind of state serves the evolutionary function to minimize anxiety and to maintain behavioral control in the face of extreme threat. However, it is evident that such a state becomes very dysfunctional if triggered in the absence of threat or becomes a chronic condition. In contrast, compartmentalization has not been associated with a distinct neurophysiological profile.

Last, but certainly not least, the above outlined dichotomy is clinically meaningful and might even hold treatment implications (28). A prototypic example of the detachment form of dissociation would be DPD, whereas conversion disorder is conceived as a typical example of compartmentalization. PTSD is considered a clinical condition comprising both compartmentalization and detachment. With respect to therapeutic approaches, it has been argued that compartmentalization may be successfully treated by reactivation and reintegration of the compartmentalized elements using hypnosis, direct and indirect suggestions (e.g., to return to normal function in conversion disorder) and reliving procedures designed to access procedural repre-

sentations about pre-morbid functioning (28,57). Because detachment represents a specific state of consciousness, therapeutic strategies need to focus on the identification of potential triggers, how to stop these triggers to induce detachment and finally, how to end it once triggered. Cognitive behavioral techniques, such as attention training, or elements of dialectical behavior therapy, such as skill training, might be beneficial for patients suffering from detachment (58,59). Certainly, future research is warranted to evaluate these treatment approaches.

Some critical aspects should also be outlined. It has been claimed that patients with somatization and conversion disorders, which are considered the clinical manifestations of compartmentalization, do usually not exhibit symptoms of detachment (7,54). However, numerous clinical studies have demonstrated high levels of dissociative experiences in patients with conversion disorders in general and those with psychogenic non-epileptic seizures (pseudo-seizures) in particular (60-63). From a clinical point of view, it might even be difficult to draw the line correctly between detachment and compartmentalization. For example, a patient's experience of perceiving his environment as if he is looking through a tunnel might be interpreted as both derealization and conversion with a continuous transition (64). Another critical issue relates to dissociative amnesia, which is considered as representing compartmentalization in that there is a failure of volition to bring specific memories into conscious awareness (i.e., a retrieval deficit). However, in some cases detachment as an altered state of consciousness might interfere with the encoding and storage of information, particular in cases of traumatic material (28). Thus, dissociative amnesia might be due to either compartmentalization (i.e., retrieval failure) or to detachment (i.e., encoding and storage deficit) or even both. Again, it becomes obvious that it is not always easy to disentangle the proposed types of dissociation.

CONCLUSIONS

Despite its clinical importance, dissociation represents a semantically open term leading to conceptual confusions which – in turn – might restrict its value. Thus, it is fortunate that recent developments have attempted to refine current conceptualizations. These approaches converge in subdividing dissociation into qualitatively distinct types, i.e. pathological versus non-pathological dissociation and detachment versus compartmentalization. However, the scientific and clinical value of these promising refinements of the dissociation theory remains to be proven.

Future research will need to focus on the following issues: a) further elaboration of the theoretical conceptualization; b) empirical validation of the emerging concepts; c) applying the concepts to clinical questions, in particular to aspects of classification, differential diagnosis, pathogenetic mechanisms and therapeutic relevance, possibly

from a transcultural perspective; d) evaluation of the concepts' utility for other domains involving dissociation, e.g. ASD, PTSD or borderline personality disorder.

Considering the unique history of the dissociation theory, with a first peak of interest in the last two decades of the 19th century followed by a decline at the beginning of the 20th century and a resurgence since the 1970s (34), we are confident that the recent developments in the field will help to further establish the importance of dissociation in psychiatry, psychotherapy and psychosomatic medicine.

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