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THE USAGE OF LANGUAGE OF A TRAUMATIZED PATIENT IN A PSYCHODYNAMIC PSYCHOTHERAPY PROCESS: A SINGLE CASE STUDY

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The Usage of Language of A Traumatized Patient in A Psychodynamic Psychotherapy Process: A Single Case Study

Travmatize Bir Danışanın Psikodinamik Bir Psikoterapi Süreci İçerisindeki Dil Kullanımı: Tek Vaka Çalışması

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ABSTRACT

This thesis aims to explore the language usage of a traumatized patient throughout the process of long-term psychodynamic psychotherapy by trying to capture and make sense of the changes within while questioning its compatibility with the studies in the field of trauma narratives. The data of the study consists of 43 transcribed sessions with a 17-year-old female patient. The verbal material of the patient was detached for each session and converted to separate files. These files were analyzed using Linguistic Inquiry Word Count (LIWC) to determine values in selected linguistic categories (Nonfluencies, Body Words, Perceptual Processes, Negative Emotion, Positive Emotion, and Cognitive Processes) for each session. One hypothesis was formulated before analyses. It was expected that the levels of linguistic variables which were identified to represent the symbolization and reorganization capacity in the language would increase significantly, and the levels of linguistic variables which were determined to represent the arousal expressed in the language will decrease significantly over the process of psychotherapy. The data were analyzed using regression curve estimation to observe trends of change over the psychotherapy process. Significant peak and decline points in trends of variables were identified, and the content of sessions containing these points was analyzed qualitatively, focusing on the therapeutic relationship and trauma. The results indicated that all linguistic variables excluding Body Words and Nonfluencies presented statistically significant quadratic trends in time. The clinical implications of the study suggested that the language usage of a traumatized patient is worthy of attention to trace the changes in the psychotherapy process and these changes may pursue discontinuous and nonlinear patterns, as observed in the quadratic trends of linguistic variables. The study also revealed the significance of the middle phase of the psychotherapy process, where memories of traumatic experiences emerge thoroughly to be worked upon and processed.

Keywords: Trauma, language, psychotherapy process, single case study, LIWC

ÖZET

Bu çalışma, uzun süreli psikodinamik bir psikoterapi süreci boyunca travmatize bir danışanın dil kullanımını, kullanımındaki değişiklikleri yakalamaya ve anlamlandırmaya çalışarak, aynı zamanda da bunların travma anlatıları alanındaki çalışmalarla uyumluluğunu sorgulayarak incelemeyi amaçlamaktadır. Bu çalışmanın verileri, 17 yaşında bir kadın danışan ile yürütülen 43 seansın deşifre edilen kayıtlarından oluşmaktadır. Danışanın dilsel materyali her seans için ayrıştırılarak ayrı dosyalara dönüştürülmüştür. Bu dosyalar LIWC programı kullanılarak her seans için önceden belirlenmiş dilsel kategorilerdeki (Akıcısızlıklar, Beden Sözcükleri, Algısal Süreçler, Negatif Duygu, Olumlu Duygu ve Bilişsel Süreçler) değerleri belirlenmiştir. Analizlerden önce tek bir hipotez formüle edilmiştir. Psikoterapi süreci içerisinde dildeki sembolizayon ve yeniden düzenleme kapasitelerini temsil ettiği belirlenen dilsel değişkenlerin düzeylerinin anlamlı olarak artması ve dile yansıyan uyarılmayı temsil ettiği belirlenen dilsel değişkenlerin düzeylerinin ise anlamlı olarak azalması beklenmektedir. Veriler, psikoterapi sürecindeki değişim eğilimlerini gözlemlemek için regresyon eğrisi tahmini kullanılarak analiz edilmiştir. Değişkenlerin eğilimlerindeki anlamlı tepe ve düşüş noktaları tespit edilmiş ve bu noktaları içeren seansların içeriği terapötik ilişki ve travmaya odaklanarak kalitatif olarak analiz edilmiştir. Sonuçlar, Beden Sözcükleri ve Akıcısızlıklar dışındaki tüm dilsel değişkenlerde zaman içinde istatiksel olarak anlamlı kuadratik eğilimlerin var olduğunu göstermiştir. Çalışmanın klinik çıkarımları travmatize bir danışanın dil kullanımının psikoterapi sürecindeki değişikliklerin izini sürmek için dikkate değer olduğunu ve bu değişikliklerin, dilsel değişkenlerin kuadratik eğilimlerinde görüldüğü üzere, süreksiz ve doğrusal olmayan örüntüler izleyebileceğini ortaya koymuştur. Travmatik deneyimlere dair anıların, üzerinde çalışılması ve işlenebilmesi için tamamen ortaya çıktığı psikoterapi sürecinin orta fazının önemini ortaya çıkmıştır.

Anahtar Kelimeler: Travma, Dil, Psikoterapi Süreci, Tek Vaka Çalışması, LIWC

INTRODUCTION

The relationship of trauma to language has been a controversial but fruitful issue, especially in the context of psychotherapy. This study focuses on the narrative of a traumatized patient throughout a psychotherapy process by trying to track down and make sense of the changes in language usage while questioning its compatibility with the studies in the field of trauma narratives. Furthermore, the study aims to explore the psychotherapy process by being attentive to contextual factors and the therapeutic relationship with a specific focus on the narrative coherency, the referential process, and the verbalization of the traumatic experience.

The first chapter aims to present the conceptual basis for understanding the crucial components of the study by relying on related psychoanalytical and cognitive science theories; trauma, trauma narratives, traumatic memory, and language. The literature will be reviewed to provide a theoretical background in the perception and conceptualization of these notions, to analyze the information critically by revealing the limitations of related theories and disputes over these notions, and in this way to identify where this study may fit into with prospective contributions. This chapter aims to combine research in the field of trauma and trauma narratives with research on the study of language in the psychotherapy process. Based on the literature, the hypothesis of the study will be presented. In the next sections, the methodology and results of analyses will be introduced and discussed further considering the literature. Lastly, the clinical implications and limitations of the study will be presented while including suggestions for future studies.

CHAPTER 1
LITERATURE REVIEW

In the first two sections, trauma is defined from psychiatric and psychoanalytic perspectives. Its evolution as a psychoanalytical concept is reviewed throughout history by referring to disputes over its conceptualization. Thus it is aimed to determine how this study would approach trauma. The third section examines the relations between memory and trauma from psychoanalytical and cognitive science approaches to understand how traumatic memory differs from others in terms of processing, storing, retrieving, and representing. The following section focuses on trauma narratives by characterizing their structural and content features. The fifth section addresses how trauma manifests through language in the clinical environment by referring to the multiple code theory. The final section reviews various measures to assess language usage in psychotherapy.

1.1. PSYCHOLOGICAL TRAUMA

Trauma as a term is derived from Greek and carries the meaning of "wound". The term was initially used for describing physical injuries. Today, however, the term is being used ubiquitously to express several conditions. According to Merriam-Webster Dictionary (2021), one of them is "an injury (such as a wound) to living tissue caused by extrinsic agent." This definition meets the original meaning of the word by highlighting the physicality of the damage. Another one manifests the psychological aspect of the term as being "a disordered psychic or behavioral state resulting from severe mental or emotional stress or physical injury." Lastly, it is used for defining "an agent, force, or mechanism that caused trauma." The last two definitions reveal the confusion regarding the usage of trauma. On the one hand, trauma can be understood as an internal stimulus and its effect on the psyche in response to extrinsic force. On the other hand, the term also refers to its external nature to identify harmful events.

This confusion in the usage of the term points out an essential dispute over understanding and conceptualizing trauma in psychiatry and psychology. Are there harmful stressors that can be intrinsically identified as traumatic? If not, what renders a harmful experience traumatic? Is it its intrinsic objective quality, duration, severity, or impact, and subjective meaning for the traumatized individual?

Green (1990) defines the process of traumatization in three steps which provide a valuable tool to clarify the abovementioned dispute over what renders an environmental encounter traumatizing (p. 1633). In the first step, there is an encounter with a stimulus in the form of an event. This event may be catastrophic, but an event does not need to be catastrophic to lead the agent to be traumatized. As Mitchell (1998) puts into words: "even so extreme an experience as the Holocaust may not breach the defenses of a particular individual" (p. 121), and therefore, even the Holocaust may not have a traumatizing impact on the individual. As Bucci (2007) suggests, "what is trauma for one is not trauma for all" (p. 168). On the other hand, an objectively non-catastrophic or an ordinary event may bear traumatic consequences with its catalytic nature by triggering "an earlier occurrence which becomes traumatic only by virtue of its retrospectively endowed meaning" (Mitchell, 1998, p. 121). This aspect will be discussed further in the next chapter.

In the second step, the stressor gets perceived and appraised immediately by the individual, which leads to the interaction between the environment and the individual. The individual attempts to interpret, process, and react to what happened both psychologically and physiologically. On the physiological level, the autonomic nervous system triggers the fight or flight response with the traumatic encounter to defend the organism. The higher functions of the brain get collapsed, and the body becomes pushed to react or to hide in order to get rid of the serious threat and to establish internal equilibrium in time (van der Kolk, 2015). The threat may persevere to exist for the individual, or the individual may/might not be in a position to react appropriately to get rid of the danger. In that case, the body and the brain become captive in the traumatic situation even though the threat ceased to exist. It also means

that the individual cannot process and give meaning to what happened consciously or unconsciously.

The third step contains the reaction aspect of the process. With the fact that the individual becomes unable to process what happened during the traumatic experience, the initial functional defensive responses turn out to be ineffective (Ogden et al., 2006, p. 104). Because these responses fail to protect the individual from what happened. In that sense, the system of self-defense turns out to be "overwhelmed and disorganized" and ordinary defensive responses "tends to persist in altered and exaggerated state long after the actual danger is over" (Herman, 2015, p. 34). These exaggerated defensive responses emerge in physical and psychological symptoms.

The abovementioned symptoms are classified by three major elements, which also highlight the main diagnostic criteria of posttraumatic stress disorder (PTSD) in the Diagnostic and Statistical Manual of Mental Disorders (DSM): 1) "The repeated reliving of memories of the traumatic experience", which manifests in the form of intrusive visual and sensory representations. That is an attempt to process what could not be experienced on time. 2) "Avoidance of reminders of the trauma" which may include numbing response, detachment, and emotional blunting. In that sense, the traumatized person attempts to protect herself from reexperiencing a similar situation. 3) "A pattern of increased arousal," which is usually expressed in irritable and hypervigilant behavior. Thus the person stays on alert to be prepared for harmful stimuli even though there is no real threat to herself (van der Kolk, 2000, p. 9). Another element is negative changes in cognition and mood after the trauma, including a distorted perception of self and others dominated by feelings of guilt and shame.

The latest version of DSM (DSM-V) specifies all trauma and stressor-related disorders, including PTSD requiring exposure to a traumatic or stressful event. That reveals the current prevailing understanding of trauma. Without the emergence of a stressful event, it is highly impossible to talk about the reaction to trauma. The eleventh revision of ICD (ICD-11) makes a distinction between PTSD and complex PTSD. The main difference between them is that PTSD is generally developed after a single

traumatic event or a set of events in a relatively short period of time, while complex PTSD is associated with repeated and prolonged exposure to trauma, particularly involving long-term physical, emotional, or sexual abuse. Although the abovementioned symptoms of PTSD may also be relevant for the condition of complex PTSD, emotional and relational disturbances as reactions to trauma are included in the formulation of complex PTSD. These disturbances include difficulties in emotion regulation, sustaining relationships, and evaluating self realistically.

In this study, trauma will be conceptualized as creating "a breach in a protective covering of such severity that it cannot be coped with by usual mechanisms by which we deal with pain or loss" whether psychical or physical (Mitchell, 1998, p. 121). An ordinary event that cannot be defined traumatic objectively may create the breach that Mitchell mentions and lead to traumatic reactions. Therefore this study will attempt to focus on "the reaction to trauma, not to the trauma itself" (Mitchell, 1998, p. 121).

Like Mitchell (1998) suggested, psychoanalysis is better equipped to understand the reaction to trauma. In other words, trauma is "an internal psychic condition, determined not only by a particular environmental situation, but by how an organism reacts to this, as his own powers and capacities allow" (Bucci, 2007, p. 169). So, trauma will be discussed further within the psychoanalytic literature in the next section.

1.2. TRAUMA AND PSYCHOANALYSIS

The emergence of the very concept of psychoanalysis and psychoanalytical theory intersects with the recognition of hysteria by the pioneers of the field; Freud and Breuer (1895) and Janet (1889), who took the researches of Charcot on the treatment of hysteria as a basis, as being a condition arising as a result of psychological trauma rather than anatomicophysiological changes which was the prevailing paradigm at that time. According to them, vehement emotional reactions during the encounter with the traumatic events involving mortal danger to the individual lead to the state of

consciousness to be altered, which in time was causing hysterical symptoms to appear vividly (Herman, 2015). Breuer and Freud (1895) named this alteration in the state of consciousness as double consciousness; for Janet, it was described as dissociation. For Freud (1895), the reaction of the individual to the traumatic experience cannot be reduced to a simple physiological-causal response to the shock. The reaction also includes a period of post-traumatic incubation in which there is a continuing latent process of psychic elaboration.

In "The Aetilogy of Hysteria" (1896), Freud suggested that the only way to understand the hysterical symptoms is by examining the history of the patient to detect the precocious experiences that had a traumatic effect on her. These early experiences are comprised of sexual seduction or assault, which in time result in suffering from the symptoms of hysteria. This approach to the hysteria echoes, and at the same time, constructs Freud's seduction theory. In simple terms, the seduction theory proposes that memories of sexual seduction or assault early in life turn out to be repressed to the unconscious, having harmful effects on the ego. It is essential to underline that Freud focuses on the damaging effects of memories instead of originary events in the context of trauma. According to Leys (2000), many readers of Freud fail to understand is that "even at the height of his commitment to the seduction theory, Freud problematized the originary status of the traumatic event by arguing that it was not the experience itself which acted traumatically, but its delayed revival as a memory after the individual had entered sexual maturity and could grasp its sexual meaning." (p. 20). What Leys here suggests about the process of traumatization refers to a crucial Freudian concept called Nachträglichkeit or deferred action. It is one of the central concepts for the psychoanalytical understanding of trauma, but it has not been utilized and discussed respectably in contemporary studies on trauma (Bistoen et al., 2014). The insufficient attention to the concept within the literature and emphasized attention on trauma as an external event in discussions about the seduction theory may be due to the same reason, and that is, contemporary approaches on trauma primarily concentrates on the internal effects of trauma on the psyche as a result of an external event and interpersonal

relations. In Freud's approach to trauma, there is a general tendency of solely examining internal processes and avoiding the role of outer reality to understand the effects of the traumatic situation, especially after his discard of the seduction theory (Herman, 2015). In that sense, it may be claimed that contemporary approaches on trauma selectively avoid the concept of deferred action to emphasize Freud's relative focus on external forces in the seduction theory.

Nachträglichkeit was defined by Freud (1895) to clarify the process of traumatic symptom formation in patients with hysteria. According to the logic of Nachträglichkeit, the memory of an initial event which was not inevitably traumatic for the child because of the fact that developmentally the child encountered it too early to be able to understand, assimilate, and also react, turns out to be triggered by a second event which again is not inherently traumatic. With the subsequent encounter, the initial memory, which has been repressed, becomes revived and unconsciously gains a traumatic meaning. In other words, trauma becomes constituted within a dialectic between two events which are not necessarily traumatic per se, after a period of "temporal delay or latency through which the past is available only by a deferred act of understanding and interpretation." (Leys, 2000, p. 20). A second event may not include a severe stressor, such as a mortal threat, but cause intense and long-term distress for the individual by transforming into a traumatic memory retrospectively through its reference to another etiological moment in time. In other words, a second event is a "catalytic event in the present triggers an earlier occurrence which becomes traumatic only by virtue of its retrospectively endowed meaning" (Mitchell, 1998, p. 121). In line with Freud, Caruth (1996) argues that a traumatic event cannot be experienced on time, but only with a deferral, and only because of this characteristic an initial event can lead to traumatic reactions. According to her, neither event carries the traumatizing potential for the individual, but it is in the gap that separates two events. Caruth's aspect emphasizes the role of the event as coming from outside in the process of traumatization. However, as Leys (2000) states, the concept of Nachträglichkeit has the potential to "call into question all the binary oppositions -inside versus outside,

private versus public, fantasy versus reality, etc.- which largely govern contemporary understandings of trauma." (p. 21).

Bistoen et al. (2014) posit that the concept of deferred action opposes the diachronic understanding of linear time with its suggestion of retroactive movement at the second event paving the way to traumatic symptoms. The emergence of these symptoms may be delayed for years until encountering a triggering event. Although Freud's conceptualization of deferred action is limited to the effects of belated precocious memories comprised of sexual encounters, it is possible to argue that the exact mechanism works for experiences that do not specifically trigger a precocious memory. Horesh, Solomon, and Zerach (2011) examine the belated emergence of trauma symptoms in delayed-onset PTSD and suggest that "some trauma casualties experience a long latency period during which they preserve good functioning and present little or no PTSD symptoms." (p. 864). However, they may experience another event in the following period that reminds the traumatic event symbolically or actually, and therefore brings it to light. Here they seem to describe the process of traumatization as happening due to a simple association between two events. On the other hand, the concept of Nachträglichkeit proposes that a second event which is symbolically reminiscent of the initial event "elicits the formation of a traumatic memory, rather than the reviving of an old wound that was already constituted." (Bistoen et al., 2014, p. 675). The wounding does not happen during the initial experience; instead, it gets separated from the rest of the psyche until distressing of the wound at the second event.

After he abandoned the seduction theory in 1897, Freud’s emphasis turned from the factuality of the external and precocious traumatic event to the role of fantasy and internal processes during the traumatization. Hysterical symptoms were not necessarily caused by real memories of external events of seduction but rather related unacceptable conflicting wishes that are aggressive or sexual in nature. In other words, Freud decided to focus on the psychosexual meaning of trauma within the context of libido theory by "rejecting the notion of trauma as direct cause." (Leys, 2000, p. 21). An external wounding experience becomes efficiently traumatic for the individual only through

internal elaboration processes within the psyche, which were fundamentally constructed by earlier conflicts, psychosexual wishes, and fantasies. Many readers of Freud (e.g., Herman, 2015; Masson, 1984) criticized him for overly interiorizing trauma and thus trivializing the factuality of the external experience and the context in which the event has happened.

With World War I and the traumatic neurosis of its subjects, Freud was challenged to reevaluate his position on the significance of early psychosexual drives and conflicts in the process of traumatization. Because there were many adult men who were seemingly healthy yet showing symptoms of the combat hysteria. Without considering the peculiar nature of the external event, it would be farfetched to think that they were suffering from similar symptoms due to their infantile psychosexual wishes and conflicts. Therefore, Freud took up this challenge by attempting to "assimilate the experience of shell shock into his already well-established theoretical system, especially the libido theory and the theory of psychosexual origins of the neuroses." (Leys, 2000, p. 22). Freud argued that the neuroses of war were not the result of a conflict between the unconscious sexual or aggressive drives and the ego, but between the libidinally charged old peaceful ego of the soldier which aims to ensure the preservation of the integrity of the self and the new warlike ego which is also sexually charged and implies the instinct for aggression (Freud, 1917-1919/1955). From this point of view, traumatic neuroses of the combat were not different from ordinary transference neuroses by leading the soldier to regress to an earlier stage of libidinal development. With the regressive flight into the traumatic neuroses, the old ego of peace time attempts to defend itself from the life-threatening new ego. For Freud (1915-17), the traumatic experience of the war, in a short time "presents the mind with an increase of stimulus too powerful to be dealt with or worked off in the normal way, and this may result in permanent disturbances of the manner in which energy operates" (p. 275). This early economic consideration of the psychological process of traumatization became the basis for Freud to formulate the death drive and the

repetition compulsion as crucial concepts to understand not only trauma experience but also internal processes of the human psyche.

Especially after WWI, it became clear that people who have been traumatized were repeating painful parts of their experiences in their dreams or with flashbacks over and over again and also reenacting these events by putting themselves in situations where they might relive the similar experience. This unconscious compulsion for repetition of painful experiences was incompatible with the pleasure principle posited by Freud as being the instinctive tendency of the psyche to seek pleasure and avoid pain for libidinal satisfaction. It led Freud (1920) to investigate beyond the pleasure principle and thus suggest initially that the repetition was serving the very purpose of mastering the consequences of the intense experience (symptoms of psychic trauma), which ruptured the protective shield of the ego unexpectedly and left the mental apparatus flooded with "large amounts of stimulus" (p. 29) due to its unpreparedness and to the role of fright. Instead of defining an independent drive for mastery and binding of the amounts of stimulus which breached the protective shield of the ego, Freud suggested the existence of the death drive, as opposed to the life drive, which becomes incited and unbound with the traumatic experience. Actually, Freud's conceptualization of the death drive, as opposed to life drive, takes the abovementioned theory of conflicting egos regarding the traumatic neuroses of war as its base. The death drive echoes the urge of the psyche to return to an inorganic state to cease the unbound tension and over-stimulation caused by a traumatic experience. For this purpose, it may manifest in the organism as a tendency toward self-destruction or in the form of aggression by being turned outwards. According to the theory of the repetition compulsion (Freud, 1920), the painful aspects of traumatic experiences turn out to be repeated through actions or thoughts; because the psyche eventually desires to return to the most primitive and inorganic state, which is non-existence or death, by reducing the tension to point zero retrogressively. Many of the subsequent psychoanalytical theories rejected the notion of the death drive (Gabbard, 2014), but they recognized the repetition phenomena as an essential aspect of the theory and practice. As Bass (2006)

suggests, the repetition phenomenon was mainly related to life drive in Freudian thinking before he formulated the death drive, which led life drive to be deprived of creative possibilities of the repetition.

In his subsequent formulations of repetition, Freud (1926/1961) made a distinction between two types of repetition in the psyche. One of them undermines the possibility of representation, whereas the other leads to the strengthening of the ego to constitute a representational structure for the traumatic experience. Regarding the former, van der Kolk (1989, p. 389) argues that repetition does not necessarily help to gain mastery over painful experiences; instead, repetition leads to further suffering for survivors and also for their acquaintances by reinforcing the sense of helplessness and being out of control. Reexperiencing trauma over and over through the soma or the acts, even in the context of psychotherapy, may indeed strengthen the preoccupation of the mind and the fixation on the experience. Green (2002) names this type of repetitions passive, which causes the psyche to be fixated on trauma, inhibiting any potential for a representation. For the latter, Freud suggests that repetition of adverse experiences aims at creating the signal anxiety, which will eventually reduce the effect of the traumatic event on the psyche. As Halfon and Weinstein (2016) posit, this type of unconscious repetition attempts to "repair the traumatic breach by binding and discharging tensions caused by traumatic experiences and to reestablish the pretraumatic situation" (p. 123). With the active repetition of trauma, it is expected that trauma experienced passively by the individual turns into an experience under the agency of the individual. Although van der Kolk (1989) claims the opposite, many researchers within the tradition of ego psychology highlight the repetition compulsion as having "a structuralizing function" for the ego by leading traumatic registrations to transform into "a higher organization" (Cohen, 1980, as cited in Halfon & Weinstein, 2016). In this case, the repetition compulsion serves the purpose of mastering trauma.

The main difference between the two types of repetition is whether they are active or passive in nature. The unconscious repetitions tend to be passive when it is not possible for the individual to express the traumatic stimuli to another subject who

can help her transform these excitations by leading her to contextualize and contain them. "This kind of passive repetition is a tendency toward duplication of traumatic experience with no aim toward resolution or mastery" (Loewald, 1971, as cited in Halfon & Weinstein, 2016, p. 124). More than that, this type of repetition compulsion forces the psyche to get rid of the conflicts by attacking linking (Green, 2002). On the other hand, the individual may restructure and contextualize the traumatic excitations, especially with the help of containing therapeutic relationship, so the traumatic repetitions can reach significance by turning into "re-creative repetitions, capable of achieving psychic representability and opening the way to the possibility of working through the patient's past experiences" (Halfon & Weinstein, 2016, p. 124). This type of transformed repetition can be called active. These active repetitions are not identical and may differ from each other with little details, such as the tone of voice during the verbalization of the traumatic experience (de M'Uzan, 2007). In this respect, the repetitions do not eventually end up representing a single and unified narrative. However, with their variation, the psyche gets modified, and "a real elaboration takes place through multiple renditions of the same narrative" (de M'Uzan, 2007, as cited in Halfon & Weinstein, 2016, p. 125).

After World Wars (WWI and WWII) and the Holocaust, it became inevitable for psychoanalytical discussions to consider trauma occurring as a result of catastrophic experiences that do not necessarily take their destructive force on the ego by relating to early precocious events and their fragmented memories but being capable forces to have a shattering impact on the ego per se. Thus, the attention to the externality of the traumatic event and its internal effects on the psyche have proliferated. It also became clear that the traumatic event does not only impact the psyche of the individual but also alters her perception of the outside world and interpersonal relations (van der Kolk, 2015). The traumatized individual is mostly capable of experiencing and expressing emotions. However, it becomes more difficult for her to contain and reflect over affective experiences (McDougall, 1989), which consequently impairs her relations with the outside world. In this respect, it turned out to be necessary to formulate

traumatic experiences within a dialectical understanding of the inner and the outer psychic reality. What van der Kolk (2015) and McDougall (1989) suggest here reflects the "paradigm shifts" in psychoanalytic theory in terms of considering trauma from repression to dissociation, from cognition to affect (Bromberg, 2006).

As mentioned before, Janet was among the first psychiatrists who explained the alteration in the state of consciousness after the traumatic experience with the concept of dissociation and theorized it elaborately (van der Hart & Dorahy, 2009). Janet suggested that ordinary life experiences are integrated into a unitary order of consciousness, and therefore they are available to be recalled voluntarily. On the other hand, disturbing experiences cannot be integrated and processed like other ones, which will lead the traces of these experiences to be cut off from conscious awareness. The cut-off traces contain sensory fragments that impact the emotions and actions of the individual. In that respect, the frightening event leads the vehement emotions to unfold, which impairs the unitary system of consciousness in the form of dissociation (van der Kolk et al., 1989). From a similar perspective, Van der Kolk and van der Hart (1991) claim that the disruptive impact of trauma on the mind has more to do with dissociation, "a process whereby the mind, faced with an incomprehensible experience, fails to organize that experience within an unfolding temporal order" and "assimilate it into a broader life narrative" than with repression, a process where the experience gets "relocated to a hidden region that escapes conscious attention" (Barnaby, 2012, p. 119). In other words, dissociation is about the compartmentalization of the traumatic experience whose elements are not "integrated into a unitary whole, but are stored in memory as isolated fragments consisting of sensory perceptions, affective states or behavioral reenactments" (van der Kolk & Fisler, 1995, p. 510). They refer to dissociation here by limiting its impact on the memory during the traumatic experience. It also refers to specific responses in the form of depersonalization and derealization in the exact encounter with trauma. After the traumatic experience, depersonalization may last in everyday life, and/or its memory may be contained in another distinct ego-state. As Van der Kolk and Fisler (1995) suggest, dissociation is also used for these responses

after the traumatic experience. In that respect, dissociation implies the gaps between the inner and the outer reality during and after the traumatic experience.

The conceptualization of dissociation by Boulanger (2007) concerning trauma echoes the contemporary relational psychoanalytic understanding of self as having multiple states (Bromberg, 2013), instead of assuming that it would remain as a stable and fixed entity after its formation. Boulanger (2007) makes a clear distinction between adult-onset trauma and childhood trauma which may be helpful for understanding how dissociation functions during and after the traumatic experience. According to her, memory integrates nearly everything related to human experiences, such as affect, perceptions, emotions, and acts, while providing a sense of continuity and coherence to the self. Traumatic experience, however, interrupts the integrating role of memory and creates a sense of discontinuity and incoherence for the human psyche. Caruth (1996) expands the understanding of traumatic experience by suggesting that it is not simply the result of an encounter with a violent event but also the inability to experience it in time. In that sense, it is not possible to comprehend and know a traumatic experience fully because it was not experienced right at that time.

For the traumas of childhood, Boulanger (2007) states that unacceptable experiences in the unconscious turn out to be "split off and stored" (p. 28), like cut-off traces, in dissociated states of self. In that sense, severely traumatized children have major difficulties retrieving the memories of unacceptable events with a continuous sense of self-doubt regarding the past. However, adult-onset traumas do not leave individuals uncertain about what had happened. They seem capable of recalling the traumatic experience by knowing what had happened, even though some parts of memory might be repressed or retrieved incorrectly. On the other hand, the sense of continuity between past and present gets disturbed while at the same time the anticipation of the future turns out to be blurred. That kind of discontinuity condemns the traumatized individual to live in a condition that is dominated by fears of annihilation, without being able to reflect on what is going on. Boulanger (2007) suggests that it leads to "the collapse of the self" (p. 29), so the sense of self becomes

discontinuous through dissociation. The memory of traumatized adult gets disturbed, and in return, he/she loses agency as a subject and turns into a vulnerable object in a world full of danger. In that regard, dissociation leads to the collapse of the self in adulthood trauma. However, for childhood traumas, it offers a possibility of protection during the traumatic encounter by leading to encapsulating the traumatized self. In adulthood, dissociation still protects the individual during the experience. However, encapsulation of the self turns out to be not viable since the self is already entirely constructed, and the capability to dissociate is drastically lessened.

1.3. TRAUMA AND MEMORY

The relationship between trauma and memory has been a major subject of debate in the academic field in recent years (Williams & Banyard, 1999). One of the critical aspects of focus in the debate has been and is still about the suggested 'unique' nature of trauma memories, especially in comparison to other non-traumatic memories. The differences between these memories are generally examined throughout the steps of processing, storing, and retrieving. Empirical studies in this subject reveal contradictory results, and there seems to be not much consensus between researchers (McNally, 2005). On the one hand, some researchers (Brewin et al., 1996; Porter & Birt, 2001; van der Kolk & Fisler, 1995) have been able to prove their claims on the fact that memories of traumatic events are processed, stored, and remembered differently compared to other memories.

On the contrary, several studies (Berntsen, 2001; Cordon et al., 2004) provide empirical evidence that overall, these memories are similar and not significantly superior or inferior to other memories in terms of processing or recalling. The contradiction between these claims may be caused by the incompatibility of their theoretical frameworks and also by the methodological diversities. Sotgiu and Mormont (2008) reviewed the literature focusing on the differences between traumatic and other emotional memories. According to them, "emotional intensity of the event,

retention interval, and methods of assessing memory" (Waters et al., 2013, p. 634) are usually not controlled by the researchers. Thus, these uncontrolled factors cause inconsistencies within these studies on this subject. In the following sections of this chapter, major theoretical positionings on trauma and memory will be discussed in detail. Then, the methodological disputes will be referred to while discussing narratives of trauma.

1.3.1. Traumatic Memory Argument

Traumatic memory argument stems from psychoanalytic theory having its roots in Janet and Freud. Because of the fact that psychoanalytic understanding of trauma has been examined in detail in the previous chapter, it will be briefly mentioned here, mainly focusing on its relation with memory processes. According to trauma theory, memories for highly stressful experiences turn out to be encoded uniquely compared to other experiences. These experiences trigger specific defense mechanisms: repression and/or dissociation, to protect the psyche from the overwhelming effects of the traumatic situation (Mollon, 1998). In that sense, traumatic memories get excluded from conscious awareness by being stored with only non-verbal and sensory fragments (van der Kolk, 1998). Therefore, it leads traumatic memories to be recalled mainly "in non-verbal, sensory form and as informational fragments" (Porter & Birt, 2001, p. 102). As Freud states, another form of recalling or attempting to remember is through repetitive action. "The patient does not remember anything of what he has forgotten and repressed but acts it out. He reproduces it not as a memory but as an action, he repeats it, without, of course, knowing that he is repeating it" (Freud, 1914/1961, p. 150)

The basic assumptions of Trauma theory have been examined empirically by several studies. One of them was conducted by Tromp, Koss, Figueredo, and Tharam (1995). In their research, they collected data to assess the memory quality of traumatic, nontraumatic, but negative, and positive experiences through self-report by using

Memory Characteristics Questionnaire (MCQ) (Suengas & Johnson, 1988). Results revealed that negative experiences had similar ratings of MCQ factors (affect, nonvisual sensory detail, clarity, and re-experiencing) with positive experiences. Nevertheless, traumatic experiences were significantly lower in the factors mentioned above. According to these results, they came to the conclusion that the emotional intensity of the event, rather than valence, plays a significant role in the impairment of the memory. It is important to underline that the design of the research only depends on the subjective ratings without attempting to evaluate narrative accounts of the participants on certain experiences objectively. It also does not attempt to control for the retention interval of memories. There are also several studies in the field that particularly focus on the trauma narrative with objective methods. These studies will be discussed elaborately while examining trauma narratives.

1.3.2. Trauma Equivalency Argument

Trauma equivalency argument mainly suggests that traumatic memories are not different from other autobiographical memories, regardless of whether they are positive or negative, in the sense that they are processed, encoded, and retrieved ordinarily through equivalent cognitive and neurobiological mechanisms (Cordon et al., 2004; Shobe & Kihlstrom, 1997). More than that, memories, regardless of whether they are traumatic or not, do not also significantly differ from each other in terms of their phenomenological characteristics such as quality and vividness (Geraerts et al., 2007; Waters et al., 2013). Traumatic memories may be well maintained, but they deteriorate progressively over time like other memories through distortion and forgetting, which, and also above factors, lead some researchers (Berntsen, 2001; Rasmussen et al., 2015) to posit that they are not significantly unique related to other memories. If a traumatic memory is well retrieved over time or more vivid than other memories, it does not happen because of a fundamental difference regarding the nature of traumatic memory. However, the difference lies in the cognitive factors; for instance, the frequency of

thinking about an event may lead its memory to be more permanent or transient regardless of the severity of the event.

Butler and Wolfner (2000) compared memories of undergraduate students, including both traumatic and positive events, in terms of detail, vividness, and emotionality. Their study revealed that there is not a significant difference between these memories in terms of their quality. Waters et al. (2013) question their methodology by stating that their research is solely based on subjective ratings of the participants without using narrative measures to investigate their accounts of events. Moreover, participants were only asked to rate their memories in their childhood, which means the retention interval is not controlled as a factor. Gray and Lombardo (2001) compared positive and traumatic memories of students, but it has been done through investigating their narratives. According to their research, there is no significant difference between narrative accounts of traumatic events and non-traumatic ones in terms of certain narrative measures.

1.3.3. Trauma Superiority Argument

Like the traumatic memory argument, trauma superiority theory suggests that traumatic memories are special and qualitatively different from other non-traumatic memories. Although they agree on the status of traumatic memories related to other memories, they disagree on the phenomenological characteristics of stored records and also the underlying cognitive and psychological mechanisms during the formation of these records. According to the theory, traumatic memories are superior to other memories because they seem to be remembered more vividly with accurate details over time (Alexander et al., 2005; Peace & Porter, 2004). Peace and Porter (2004) argue that the enhanced stability and quality of traumatic memory stem from the fact that highly stress-arousing events are processed in a different manner in comparison to other experiences on both neurological and cognitive levels. These emotionally laden experiences increase the attention of the individual and thus lead memories to be stored

and retrieved more detailly. On the other hand, Sotgiu and Galati (2007) posit another reason for the superiority by arguing that enhanced recalling of trauma may protect the individual from threats of traumatization in the future. Because of the superior memory, the individual becomes more prepared for the threats, which in return makes it easier to avoid or cope with the traumatic situation.

Rubin, Feldman, and Beckham (2004) examined four different memories of a group of veterans who have been diagnosed with PTSD. These memories were questioned four different times, which were determined according to the importance of some events during their service and also non-service. Results indicate that their traumatic memories were more detailed and coherent than non-service (positive) and non-traumatic memories. On the other hand, they could not find the same difference within narratives when they compared these memories according to the subjective ratings of the participants. Peace, Porter, and Brinke (2008) compared the phenomenological characteristics of traumatic memories with a particular focus on sexual abuse or assault. While conducting their research, they controlled the factors recommended to pay attention to by Sotgiu and Mormont (2008) to minimize inconsistencies between research in the field. Because of the fact that they controlled the emotional intensity of events by getting narratives about non-sexual trauma, sexual trauma, and positive events, they were able to argue that memories of sexual traumatic events are more detailed and vivid, consisting of more sensory components in comparison to other memories.

1.3.4. Modes of Memory

This section will be mainly based on the article of Dana Amir (2016), which aims to define different forms of traumatic testimony and, at the same time, highlight the modes of memory to understand the variance in these testimonies. In a similar vein to Boulanger (2007), Amir suggests that traumatic events trigger "a psychic process of self-annihilation" (p. 620). It turns out to be not possible to process and work through

traumatic memories regularly. Against the threat of annihilation, these memories are turned into inaccessible remnants as part of a defensive reaction. The traumatized individual gets stuck in between two periods of time; the time of traumatic memories, which gives a sense of the eternal present, and the present time which runs concretely. It becomes impossible for the individual to be present both times by integrating them. In these conditions, recovery from the traumatic situation only becomes possible with managing to convey the traumatic remnants to another subject who is not vulnerable to get annihilated by them. According to Amir (2016), this possibility is at "the core of bearing witness" (p. 620). Testimony is crucial for the survivor in terms of providing a possibility for another subject to bear witness to a trauma that often has not been fully witnessed by the survivor. As Laub (2002) suggests, though he mainly talks about survivors of the Holocaust, traumatized individuals need to "give their testimony to a willing and responsive listener" (p. 85), and only then can they reclaim their life narrative and reconstruct their reflecting inner witness.

Amir (2016) specifies three types of traumatic testimonial mode; 1) metaphoric testimonial mode, 2) metonymic testimonial mode, 3) psychotic testimonial mode. The last one has two subcategories; 1) Muselmann-psychotic subcategory, 2) excessive-psychotic subcategory. All of these modes may be activated and thus observed in the same testimonial narrative of the survivor. A testimonial narrative can be dominated by one of these modes, but there is often a distinct combination in every testimonial narrative. Between these testimonial modes, Amir points out metaphorical mode as embodying the most substantial therapeutic potential for traumatic memories and suggests that using and also inviting the survivor to use this mode while narrating these memories can be seen as the goal of the analytic process. In this mode, there is a continuous shift between "the first person and the third person experience, or between the experiencing I and the reflective I, ... the position of victim and the position of the witness" (p. 622) in the narrative of testimony. On the one hand, the survivor represents what she has been through with the metaphoric action in her narrative. On the other hand, traumatic experiences are not simply reproduced with their expression in the

testimony but also put into a process of transformation, serving the purpose of forming new meaning as part of an integrated and organized narrative. In other words, the survivor attempts to verbalize what she has not been experienced thoroughly, what she cannot represent with the language by forming a new language with the act of witnessing her own experience. Amir (2016) proposes that this metaphoric attempt can be observed from the narrative of the survivor if she is capable of shifting between different states of self (I to She, She to I). In that sense, this action in language represents metaphoric memory, which "repeatedly and dynamically recreates the traumatic object through thought's deferred action" (p. 630). Because of the fact that trauma has not been experienced at the time of the experience, as Caruth (1996) suggested, it needs to be repeated and recreated, although belatedly.

The metonymic testimonial mode refers to the lack of reflective aspect of the survivor in her narrative. The narrative only reproduces the fragmented and incoherent nature of the traumatic experience by being limited to first-person reporting. In that sense, the traumatic experience gets enacted in the narrative without having the potential to transform into a part of an integrated and coherent narrative. Although it is located in the first-person by lacking the shift between experiencing and reflecting I, this does not simply mean that there is an excessive amount of I in the narrative. Instead, as Amir (2016) puts it out, the metonymic mode of testimony uses "no distancing, maintaining a living continuum with the traumatic memories and through it also with a sense of selfhood." (p. 622). Repetition of traumatic experience in the narrative may give a sense of continuity between the subject and the traumatic experience by offering a "psychic outline" (Amir, 2016, p. 624). However, the metonymic testimony gets stuck in this psychic outline without having the potential to reproduce a new language for the traumatic memory through reflection and retrospection. It is like the exact "repetition of the sign" (Rimmon-Kenan, 1980) without having any psychic distance from the experience to represent. The main action in the language is repetition, and it represents metonymic memory, which "preserves

the link to the traumatic object ... but without the possibility to contemplate" (Amir, 2016, p. 630).

The Muselmann-psychotic mode substantially interferes with "the ability to narrate and language itself" (Amir, 2016, p. 622). Because of the very fact that the attack aims at the language, narrative expressions of this mode of testimony are rarely found. It involves a discourse which "annihilates any contact with the psychic reality and pain it involves" (Amir, 2016, p. 622). The subject is neither capable of experiencing nor reflecting on the traumatic experience. In that sense, it is not possible for the survivor to represent what she has been through. More than that, it is not even feasible for the subject to protect the link with the traumatic experience. According to Amir (2016), this mode can be seen in the accounts of some Holocaust survivors. The main action in the language is evacuation, and it represents Muselmann memory, which "renders the traumatic object present by means of its repeated negation" (Amir, 2016, p. 630).

The excessive-psychotic mode creates an excessive and artificial link with the traumatic experience, which in fact attacks every possible attempt to relate to trauma. The traumatic object turns out to be a gratifying object of pleasure for the survivor. It seems like a total and elaborated testimony by often having an "articulate and well-developed language, with a wealth of rhetorical features." (Amir, 2016, p. 623). Nevertheless, this language interferes with the transformative potential of testimony underneath its rhetorical excess and totality. The traumatic object becomes fixated in the center of the narrative without leaving room for the subject to reflect on trauma. The main action in the language is stagnation, and it represents excessive memory, which "keeps the traumatic object frozen in rhetorical formaldehyde, thus enacting a double movement of preserving while also preventing vivid access to it." (Amir, 2016, p. 630). This kind of testimony does not allow the survivor to access the reality of the traumatic experience, although it pretends to be so.

Laub (2009) defines testimony as "a struggle with extreme, frequently traumatic experience that should be interpreted with close attention to the dynamic

processes in which the narrative unfolds." (p. 127). Therefore, it may be crucial to focus on these dynamic processes to examine how trauma manifests itself through the language within the context of trauma narratives.

1.4. TRAUMA NARRATIVES

Narrative as a noun has several meanings. According to Merriam-Webster Dictionary (2002), one of them is "something that is narrated: story, account" and another one is "a way of presenting or understanding a situation or series of events that reflects and promotes a particular point of view or set". These definitions reveal the two-sided nature of the act of narration. Human beings constantly attempt to give meaning to their feelings, thoughts, and actions through what they have experienced individually and collectively by constructing life stories about themselves. In that sense, stories that they tell about their lives reflect their particular point of view regarding their identities. However, at the same time, the act of telling these stories reciprocally shapes and transforms their identities (Giddens, 1991). The mediums for expressing and simultaneously shaping the narratives about the events and also themselves may vary quite widely for people. These narratives can be expressed through introspection, human interaction, communication, and also through the representative and performative acts of art and literature.

It is expected for an individual to hold "a coherent, meaningful, and dynamic narrative of himself" to stay healthy both psychologically and emotionally (Tuval-Mashiach et al., 2004). The construction of a narrative is an ongoing process and, at the same time, always open to alterations through experiences. Although the process is dynamic by its nature, the narrative is also in need of coherence, demanding experiences to be comprehended meaningfully. Some events and experiences may damage the process by hindering its consistency and continuity. In this case, it may be difficult for an individual to hold a well-known narrative about oneself.

As discussed in previous sections detailly, the experience of trauma leaves an imprint "on mind, brain, and body. This imprint has ongoing consequences for how the human organism manages to survive in the present" (van der Kolk, 2014, p. 21). According to him, this imprint is not structured like a coherent narrative but comprises disorganized and fragmented parts of emotions and senses. By giving reference to Janet, Busch, and McNamara (2020) define the traumatic experience as the result of an emotional accident happening "when a person is not able to integrate what she or he went through into her or his perception of the world, to link it with experiences and memories, and to incorporate it into biographical narration" (p. 329). In that sense, Bosch and McNamara (2020) and also van der Kolk (2014) pay attention to the disruptive effect of traumatization or emotional accident on the narrative of the traumatic event itself by turning it into a cluster of fragmented and unintegrated traces. As Wigren (1994) reveals, trauma does not only disrupt the narrative of the event itself, but it also causes the general narrative of the individual to be interrupted. In that case, a traumatized individual will need to construct a coherent general narrative about himself and also a narrative about the traumatic event. In a similar vein, Herman (2015) suggests for the treatment of a traumatized individual to aim to integrate the traumatic experience and its narrative into the general life story of the survivor through reconstructing it. From a neurobiological perspective, Siegel (1999) suggests that the organization of the self tends to be disrupted with the traumatic event. Through recreating the trauma narrative, which becomes possible only with the allowance of the prefrontal context and limbic system, the individual reclaims a sense of self with neural integration.

Any attempt to verbalize the traumatic experience within the clinical or interactional contexts and/or express it through performative and representative acts will be serving to the same aim of constructing an integrated trauma narrative. In that sense, a trauma narrative can be defined from two main aspects: At first, it is the personal account of the individual on the traumatic experience; in addition, it is an

indication of the will to integrate what has been disrupted by the traumatic event through verbalization and/or representation.

The vast literature suggests that researchers have generally examined trauma narratives to identify the association between their linguistic properties and the development of posttraumatic stress disorder (PTSD) and other persistent psychopathology, which may be evaluated as related to trauma. An important question may be posed about the connection between trauma and narration, which is discussed within the literature often: "Can one identify a narrative as a trauma narrative because of particular linguistic features?" (Busch & McNamara, p. 330). Trauma narratives are consisted of autobiographical memories which are specifically related to traumatic events, and these memories are different from other autobiographical memories in terms of their structure and content (Jelinek et al., 2009). On the other hand, Busch and McNamara (2020) claim that it is "not possible to speak of a specific language of trauma as there is a broad spectrum of possible trauma-related representational phenomena." (p. 330). According to them, narratives may vary severely in their content and structure. In other words, they might be fully structured or fragmented, emotionally involved, or totally detached. The approach of Busch and McNamara (2020) seems to require researchers to focus on the context while investigating trauma narratives in terms of their content and structure. Although the current linguistic measurements provide researchers greater insight to understand the nature of trauma and thus develop powerful interventions to approach it, yet they cannot be solely relied upon as valid and operative tools to assess the traumatic condition (Crespo & Fernandez-Lansac, 2015). The structure and content of trauma narratives will be examined in detail in the next two sections.

1.4.1. Structure of Trauma Narratives

Structural features of trauma narratives are highlighted by Jaeger et al. (2014) as disorganization and fragmentation. Disorganization and fragmentation are usually

manifested in trauma narratives in particular forms such as “confusion regarding temporal order, difficulties accessing important detail, the presence of repetitions and speech fillers” (Jaeger et al., p. 473). These features may suggest either failure during the encoding process or recalling traumatic memories. This claim is based on the operational definitions of fragmentation and dissociation by Foa et al. (1995) regarding the difficulties in narrativization of PTSD patients on traumatic events. According to their early and influential research, fragmentation is based on consistent repetitions, speech fillers, and incomplete thoughts, which overall reflect the disruption in the flow of the narrative regarding traumatic events. On the other hand, they define disorganization as “utterances that implied confusion or disjointed thinking, in contrast to utterances indicating realization, decision making, or planning, which were coded as organized thoughts” (Brewin, 2016). Although the definitions of fragmentation and disorganization are precise and well-structured, researchers in the trauma field tend to use these concepts interchangeably or differently from each other, which in return leads to disputes between them and inconsistencies in their studies. As O'Kearney and Perrott (2006) suggest, the inconsistency, especially regarding the conceptualization of fragmentation construct, causes the results to be unreconcilable.

Jelinek et al. (2009) take attention to the fact that trauma memories of individuals with PTSD manifest in two particular ways: unintentional and intentional recall. Because of the fact that involuntary experiencing trauma (e.g., intrusive flashbacks) is at the core of PTSD symptomology, Jelinek et al. (2009) claim that much research has generally dealt with it. On the contrary, voluntary recalling of the traumatic experience has been rarely examined. The disturbed intentional recalling of traumatic experience tends to be disorganized and/or fragmented (van der Kolk & Fisler, 1995). Foa and Riggs (1993) point out that general memory records of victims with PTSD are more fragmented and disorganized than trauma survivors who are not suffering from PTSD. Moreover, Foa and Riggs (1993) claim that their records, which are specifically related to traumatic events, are more disorganized and fragmented than records of other non-traumatic unpleasant memories. In that sense, structural features

of trauma narratives are useful to be examined for identifying victims who may be suffering from PTSD in consequence of unpleasant events. Brewin et al. (1996) explain this difference between the records of traumatic and non-traumatic memories by suggesting that memories related to traumatic events are difficult to be processed, encoded, and integrated into the autobiographical memory.

Miragoli et al. (2019) take attention to the fact that researches on trauma narratives generally focused on the association between narrative coherence and the development of PTSD in adults. Their investigation of the literature on this subject revealed that the structure of traumatic narratives is complex. According to them, much of the study on this topic reveal contradictory results. By giving reference to several studies (e.g., Foa et al., 1995; Halligan et al., 2003; Jelinek et al., 2010), they underline the fact that the narrative incoherence of traumatized samples may be correlated with the existence of PTSD related symptoms and exposure to therapy lead incoherent narratives to be less fragmented and disorganized. Foa et al. (1995) take attention to this fact by stressing that narratives of sexual assault victims turn out to be longer with a higher degree of organized thoughts after the treatment of exposure therapy. On the other hand, the number of unfinished thoughts does not seem to change significantly after the treatment. The reduction in narrative fragmentation and disorganization tends to be correlated with the reduction in assault-related anxiety and depression. Moreover, several studies (Gidron et al., 2002; Pennebaker & Susman, 1988) reveal that the ability to construct an organized narrative soon after traumatic instances predict a better outcome for the traumatized individual in terms of the severity of depression and anxiety-related symptoms for the short term and also PTSD related symptoms for the long term.

Several studies on this subject (Berntsen et al., 2003; Gray & Lombardo, 2001; Rubin et al., 2016) reveal no significant relationship between the occurrence of PTSD symptoms and narrative coherence. Another study (Van Minnen et al., 2002) shows that the improvement of PTSD symptoms does not seem to be related to narrative fragmentation. There are also other studies (Kindt et al., 2007; Moulds & Bryant, 2005;

Mundorf & Paivio, 2011) that are unable to find a decrease in fragmentation or incoherence with the treatment of PTSD symptoms. On the other hand, Bedard-Gilligan et al. (2017) review these studies, which are unable to show any relationship between structural features of trauma narratives and the outcome of the treatment, and claim that their findings are difficult to interpret because of the fact that they are "limited by reliance on subjective coding, a lack of treatment control groups, and by sample sizes" (p. 213).

Berntsen et al. (2003) and Rubin et al. (2016) not only claim that traumatic memories are not fragmented and incoherent as unintegrated parts of the life narrative, but they also propose that distinctively emotional traumatic events turn out to be reference points for PTSD patients in terms of interpreting, organizing and integrating other events into their life narratives. In that sense, they suggest other researchers question well-established clinical theories and general assumptions regarding the relationship between trauma and narrativization. In response to Rubin et al. (2016), Brewin (2016) suggests they misread general clinical assumptions regarding traumatic memories. According to him, clinical theories do not claim that traumatic events are not connected with the appraisal of other events, self and others afterward, but the traumatic event and its memory create severe discrepancies between the event and earlier assumptions and future expectations of the traumatized individual.

Jaeger et al. (2014) also takes attention to the contradictory nature of results in this regard and explain the reasons for the emergence of mixed findings in the literature as "variability in methods and lack of control for potentially confounding factors such as recounting style, recounting distress, and overall cognitive ability" (Jaeger et al., p. 474) of the participants who voluntarily recall the traumatic events. In a similar vein to Jaeger et al. (2014), Jelinak et al. (2009) take attention to the fact that traumatic memories of people with PTSD are definitely more disorganized if researchers follow certain methodological standards suggested by Foa et al. (1995), such as including both people with or without a PTSD diagnosis to the research as participants. Bedard-Gilligan et al. (2017) emphasize the importance of controlling confounding variables

"specifically dissociation, cognitive ability, state anxiety, trauma severity" (p. 213). Brewin also suggests following the methodology of Foa et al. (1995), which requires researchers to take traumatic narratives by leading participants to recall the traumatic event and describe it in as much detail as possible, "including the surroundings and the activities of the actors in the event as well as everything they thought and felt" (Brewin, 2016, p. 1014). Brewin focuses on the type of taken narrative to investigate fragmentation and dissociation in traumatic memory. According to him, examining general narratives leads some researchers (Berntsen et al., 2013; Rubin et al., 2016) to claim that traumatic memories are not significantly incoherent, especially compared to other memories. In that sense, Brewin suggests taking detailed narratives by following the methodology of Foa et al. (1995), which will eventually reveal the incoherency.

Another important suggestion for examining narratives is attempting to focus on local parts of the narrative, which contain "sections of text concerned with the worst moments of the trauma rather than with a global focus on the text as a whole." (Brewin, 2016, p. 1011). At the global level and/or without detailed descriptions of the experience, the trauma narrative can be evaluated as similar to the narrative of other memories because of the fact that this type of narrative would be well-rehearsed and elaborated with prior narrating experiences.

Gray and Lombardo (2001) raise another concern about the methods used by researchers to assess disorganization. According to them and also to McNally (2005), incomplete encoding of memories suggesting disorganization may not be limited to traumatic memories, but it may be a part of standard features of autobiographical memory. Halligan et al. (2003) take this criticism seriously and attempt to compare encodings of traumatic memories and other unpleasant memories for the general population. As a result, they support the initial claim of Foa and Riggs (1993) by revealing that traumatic memories are rated more disorganized compared to other unpleasant memories. Moreover, the difference between these memories seems more dramatic for participants with PTSD diagnoses.

1.4.2. Content of Trauma Narratives

Content features of trauma narratives which highlight the comprehension and reflection of the survivor on the traumatic event, others and also her or himself, are also considered by many researchers (Foa & Riggs, 1993; Jaeger et al., 2014) as determinative factors in terms of differentiating people who struggle with PTSD symptoms from the ones who do not. It is expected that trauma narratives of people with PTSD differ significantly in terms of some content features from those without PTSD. The examination of content features of trauma narratives has been less advanced than structural features (Jaeger et al., 2014; Tuval-Mashiach et al., 2004). In their research, Jaeger et al. (2014) conclude that "what individuals say during their trauma narratives (e.g., emotion words, pronouns) rather than the manner in which they say it (e.g., fragmentation, disorganization) plays a more central role in PTSD and other associated reactions" (p. 478). In that sense, content features of trauma narratives are highlighted as more reliable as a predictor of PTSD compared to structural features.

Brewin's theory of the dual representation model of PTSD (1996) offers two memory systems that work in parallel: verbally accessible memory (VAM) and situationally accessible memory (SAM). The first one consists of verbal records regarding the events integrated with other autobiographical memories and can usually be retrieved voluntarily. On the other side, the SAM system comprises perceptual, sensory elements, and emotional states, recorded without a temporal context or sequence and retrieved involuntarily because of the situational triggers. With the affective power of traumatic experience, sensory details of the records tend to be encoded dominantly, and verbal/contextual details are either encoded weakly or without having usual connections with the sensory representations. It makes traumatic memories more challenging to recall verbally with an interrupted temporal context and more prone to involuntary activation of their sensory representations (e.g., flashbacks). In a similar vein, van der Kolk and Fisler (1995) suggest that traumatic memories are apparently unique and qualitatively different in comparison to records of ordinary

events. These memories tend to be based on perceptual and emotional components instead of declarative ones, leading them to be part of the implicit memory. Brewin and Power (1999) suggest that these components tend to be stuck in semantic memory. In that sense, traumatic memories turn out to be encoded differently than other declarative memories "via alterations in attentional focusing, perhaps because extreme emotional arousal interferes with hippocampal memory functions" (van der Kolk & Fisler, 1995, p. 508).

The content examination of trauma narratives generally concentrates on analyzing the frequency of certain words such as pronouns, emotion words, cognitive processing words, and also overall word count. Alvarez Conrad et al. (2001) reveal that using more cognitive processing words in narratives predicts better outcomes after the treatment for the patients who have been diagnosed with PTSD. Several studies (Byrne, Hyman & Scott, 2001; Porter & Birt, 2001) emphasize that people with PTSD use more words indicating their emotions in their trauma narratives compared to their narratives regarding other autobiographical events. The same difference seems valid for comparing people with PTSD and people who experienced traumatic events but were not diagnosed with PTSD regarding the frequency of emotion words in their narratives (Berntsen et al., 2003). Crespo and Fernandez-Lansac (2015) reviewed the literature on researches focusing on the relationship between traumatic memory and narrative. They concluded that individuals who explicitly respond avoidantly to emotions after traumatic events become more prone to the development of PTSD. On the contrary, the invested mental effort (cognitive processing) to integrate traumatic memories with other non-traumatic memories is found to be correlated positively with the capability of adjustment after the traumatic experience. On the other hand, using a lower number of self-referential pronouns predicts poorer outcomes for the treatment of individuals with PTSD (Jaeger et al., 2014). These content components will be identified and discussed in detail in the LIWC section of the next chapter.

1.5. TRAUMA AND REFERENTIAL PROCESS IN CLINICAL SETTING

The aforementioned psychoanalytical understanding of trauma fundamentally relies on the psychic differentiation between primary and secondary processes, which was articulated by Freud in The Interpretation of Dreams (1899). According to Freudian theory, the primary process is consisted of non-verbal functions within the unconscious. On the contrary, the secondary process is linked to the verbal functions of conscious thought. In the traumatic encounter, the individual copes with the trauma by repressing or dissociating relevant memories. Therefore, the secondary process thinking turns out to be mostly inactive. It becomes difficult for the individual to represent what happened before through language. In that sense, the goal of the treatment is "replacing a system with another" by making unconscious repressed material of traumatic experience conscious and representable by means of language. (Perrella et al., 2016, p. 167).

Bucci (1997) attempts to improve and reformulate the Freudian differentiation regarding psychic processes in the light of the remarkable converging advancements in cognitive science and neuroscience without being incompatible with psychoanalytical concepts and views. According to Bucci (2007), reformulation is needed for "understanding the psychological mechanisms underlying adaptive and maladaptive patterns of response to stressful events" (p. 169). From this point of view, Bucci (1997) defines the multiple code theory, which is "a psychological theory of emotional intelligence and processing of emotional information, regarding the interactions between different processes and the nature of sensory, motor, somatic, cognitive and language representations" (Perrella et al., 2016, p. 166). In that sense, the goal of the treatment is reinforcing the adaptive patterns to emotional stress and reconstructing emotion schemas that are dissociated due to stress.

As distinct from the Freudian understanding of the primary process, the theory suggests that the unconscious material can be verbal and nonverbal. Instead of preserving the two-folded structure, Bucci (1997) posits three systems for processing

emotional information, which are essential but not fully integrated with each other. These systems are defined as subsymbolic, symbolic nonverbal, and symbolic verbal. The system of subsymbolic is mainly nonverbal and refers to "an intuitive and implicit elaboration that sometimes occurs without intention or attention" of the individual (Perrella et al., 2016, p. 166). Bucci (2008) considers the difficulty of describing the system technically due to its nature. It involves emotional and bodily information comprised of kinesthetic, sensory, and motoric components. The processing of subsymbolic information is continuous and analogic. It is not possible to symbolize the information with discrete entities (as riding a bike or differentiating the taste of a vegetable from another). Like the unconscious processes, subsymbolic processes function covertly and unintentionally. However, unlike the unconscious processes, which are chaotic, driven by the unrealistic urges of the id, subsymbolic processes are comprised of rational and organized forms of thought "functioning with its own rules, outside of the symbolic mode" (Bucci, 2007, p. 171). As Bucci states, it allows the individual to communicate emotionally without using any discrete symbol.

The symbolic nonverbal system includes symbols representing imagery in any sense form. But, the visual modality is more common in mental images. Although these images are discrete symbolic entities, it is not possible to translate them directly into verbal symbols (words). On the other side, the symbolic verbal system includes words as discrete symbolic entities. Language mainly depends on this system by allowing the individual to communicate verbally and relate to other people. Subsymbolic and symbolic systems function independently, and there is an inherent disjuncture between them, which is different from the escalated dissociations between them in psychopathological circumstances. Despite the presence of the disjuncture, these systems are continuously connected to each other through the referential process. The coordination and the integration between subsymbolic and symbolic systems are necessary to function adaptively for the individual. The referential process and the emotion schemas are the crucial means for this purpose. Through the referential

process, symbols get connected to non-verbal, analogic information, enabling "putting sensory, visceral and emotional experiences into words" (Murphy et al., 2015, p. 80).

Bucci (1997) suggests that there are three major phases within the referential process, arousal, symbolizing, and reorganizing. In the arousal phase, indescribable material in the subsymbolic form gets aroused. During that time, it is not possible to think of or describe it in verbal terms yet. What is triggered may include "bodily sensations, or plans for motor action" (Murphy et al., 2015, p. 80). In the clinical situation, it is not possible for the individual to represent the arousal in words which may lead her to get stuck in a cycle of associations. It is expected that language reveals the phase with repeated disfluencies and hesitant expressions out of context. As Kingsley (2009) suggests, this phase is also defined with affective expressions which do not have specific valence. Allowing the indescribable sensation to perform its work without attempting to prevent it, is necessary for the process of symbolization to start.

In the symbolizing phase, the indescribable material is preliminarily processed and transformed into a symbolic form without being verbalized. In the clinical situation, the individual may envision an image, a fantasy, or recall an event, a dream, a memory. In the latter part of the phase, the envisioned symbolic material gets expressed in language which tends to be "more specific, will focus on describing a single idea or frame, will refer more to the concrete or sensate properties of things, and will tend to evoke imagery in the listener, or reader" (Murphy et al., 2015, p. 81). The crucial aspect is that the individual cannot grasp the meaning of symbolized and expressed material for the moment, but the nonverbal (bodily and emotional) experiences of the prior phase find words and images to express themselves. The language turns out to be clear, evocative, more fluent with minimal usage of repetitions (Kingsley, 2009). The style of the language, which is used to establish connections between nonverbal experience and the words, has been defined as referential activity. While considering clarity, specificity, imagery, and concreteness of the language, referential activity is rated by a scoring system developed by Bucci and her colleagues (2004). As Murphy and his colleagues (2015) posit, several clinical studies which

concentrate on the referential activity within sessions in single-case designs proved that "measures of the referential process are meaningful predictors of good psychotherapy process and outcome" (p. 81).

In the reorganizing phase, the expressed material can be reflected on and reorganized. In the clinical situation, the individual may reconstruct the dissociated emotional schema by revisiting and reorganizing the connections between the subsymbolic components and symbolic nonverbal or verbal material with the therapist's lead. The phase assures "psychological development, and can begin the referential process anew by raising new questions, thoughts or feelings in response to revelations that have occurred" (Murphy et al., 2015, p. 81). In other words, it refers to the emerging or increasing capacity of self-reflection. In this phase, the language of the individual contains "references to cognitive processes, logical operations, and reasoning" (Murphy et al., 2015, p. 81). The usage of disfluency and repetition is also diminished in this phase (Kingsley, 2009).

The aforementioned multiple code theory and the referential process provide valuable context for understanding psychopathology and, specifically, the traumatic process. According to the multiple code theory, psychopathology emerges from "a malfunction of the referential process that regulates communication between the three levels" and an exacerbated "dissociation of the emotion schemas" (Perrella et al., 2016, p. 167). According to Bucci (2007), the lasting dysfunctional caretaking and acute external traumatic events are two vital sources for emerging dissociation within the emotion schemas which do not only lead the individual to perceive events of life ineffectively but also lead her to evaluate new life events in a distorted manner, causing new information to reinforce the distortion instead of reorganizing it. However, Bucci (2007) also underlines that trauma is not the only pathology that can be accounted for by "attempts at managing the affect of a dissociated schema and providing some symbolic meaning for the subsymbolic response" (p. 178) with symptoms. Other emotional disorders may be considered presenting similar processes independent of whether or not a specific trauma is present.

In the situation whereby "arousal is overwhelming, or the caretaking is dysfunctional, effective mechanisms of self-regulation do not develop" (Bucci, 2007, p. 173). More than that, the caretaker may be a terrifying threat (such as the cases of lasting physical, sexual or emotional abuse) for the life of the child. This situation provokes the incompatibility about the schema of the caretaker and overwhelms the child. On the one hand, the caretaker is the one who provides protection for the child; but on the other hand, the child has to face the caretaker as posing a danger to the well-being. In order to deal with the threat, the child can attempt to avoid the fact that the caretaker is the primary source of the threat. Thus emotion schemas turn out to be dissociated within.

In the situation of acute external traumatic events, which is not restricted to childhood, it is possible to observe "the processes of avoidance and dissociation in response to aversive threatening stimuli as having their roots in generally expected organismic responses to such events" (Bucci, 2007, p. 175). Fight, flight, or freezing responses have been identified as the most common reactions to threat. In other threatening situations or other life circumstances, these responses may emerge from "arousal of the subsymbolic components of the affective core" without even noticing the object or the event as the trigger of the arousal. This process indicates the emerging dissociation within emotional schemas, which may also lead to dissociations between schemas.

Perrella and her colleagues (2016) mention three levels of dissociation in the emotional schema by identifying that the last two are more common in the clinical situation. In the first level of dissociation, the connection between bodily reactions and verbal representations fails. The individual is aware of the bodily symptom, but she is unable to recognize it as an instance of the self and represent it with words. In clinical practice, somatosensory responses may be approached in that sense. In the second level, the individual has a sense of consciousness regarding the object or the event in the present, but she cannot extend consciousness by attributing it to the autobiographical memory. Unlike the first situation, the individual recognizes it as an

instance of the self, which elicits feeling, but she cannot comprehend its emotional significance. In the last level, there is a splitting between components of the experience, which leads to a complex situation. On the one hand, some components seem to have extended consciousness with accessible emotional significance, leading the schema to be integrated. However, other components are blocked or split off without activating consciousness.

In the situation whereby there is a malfunction within the referential process and a dissociation within or between emotional schemas, the individual may employ several regulatory and control strategies ranging from "the apparently effective modes of resilience to the myriad forms of emotional disorders, from neurotic to severe posttraumatic ones" (Bucci, 2007, p. 177) to be able to contain and give meaning to the unrepresentable experience of arousal and agitation. In the state whereby control strategies are maladaptive for the traumatized individual, treatment needs to point out the maladaptive strategies of self-regulation and also "the source of the initial threat" without avoiding the fact that these strategies may be "damaging in current life, were the means that enabled the person to survive in the past; they have become components of the person's self-schema" (Bucci, 2007, p. 317).

In general, Bucci suggests two main therapeutic strategies for the treatment. The first one is attempting to "enable more adaptive means of affect regulation without addressing the initial sources of the dissociation" (Bucci, 2007, p. 179). The psychotropic medications, meditation, behavioral and supportive treatments may be effective in line with this purpose by regulating the arousal response. The second one involves working "towards the integration of the schema; this would necessarily involve some reactivation of the initial threat" (Bucci, 2007, p. 179). According to Bucci (2007), psychoanalytic treatment is possible to offer the change in the emotion schemas in a specific way by "enabling registration of new information concerning the individual's interpersonal world and his self in relation to this; to identify the triggering mechanisms; to enlarge the range of affective experience, including painful affect, without being overwhelmed" (p. 317). It also enables to separate threats that are real

from ones that are no longer influential for the current interpersonal situation of the individual. It is expected that the individual will enact components of the dissociated schema within the therapeutic relationship and also bring this material to sessions with dreams, memories, or fantasies without capturing the connection with the schema. Here the change in the maladaptive schemas and the referential process may be possible with the safe interpersonal space that the therapeutic environment provides.

1.6. ASSESSMENT OF LANGUAGE USAGE IN PSYCHOTHERAPY

Language is the main tool of communication between the psychotherapist and the patient. The patient expresses herself mainly through language. In response, the psychotherapist listens to her to be able to understand her and intervene by using the means of language to give rise to psychological change. The communication between the therapeutic dyad is not limited to the means of language. Nonverbal communication is just as crucial in therapeutic effectiveness (Schore & Schore, 2008). Throughout the psychotherapy process, language has two crucial aspects. On the one hand, the patient has to gradually express herself verbally through language to represent what cannot be cognitively or emotionally comprehended and verbalized. The patient becomes aware of what is bothering her and cognitively process it while starting to articulate them in the sessions (De Shazer, 1994). On the other hand, the degree of the psychological change can be tracked down through the qualities of language used by the patient. As mentioned in the section on trauma narratives, both structure and content features of the patient's language constitute an important source for assessing and predicting the psychological state of the patient. As Pennebaker and his colleagues (2001) state, the particular way of using language reveals crucial information regarding the personality, emotional, social, and cognitive states of the individual.

The language usage of the patient and also the therapist during the psychotherapy process may be analyzed both quantitatively and qualitatively. For the scope of this study, the quantitative analysis of language will be the focus of attention.

Pennebaker and Stone (2003) suggest that computerized text analysis programs were effective in terms of bypassing the challenges of examining the linguistic features of textual data from a psychological perspective by manual methods which required experts to evaluate the language usage by reading texts and designate certain linguistic categories by agreeing on them. Reading and evaluating texts manually was a time-consuming and psychologically exhausting method; it was also tricky for raters to agree on designated categories and to score in that sense.

General Inquirer was the first computer-based text analysis program developed by Stone and his colleagues (Stone, Dunphy, & Smith, 1966). In the light of several established dictionaries and psychoanalytical theories, the General Inquirer aimed to analyze the content of textual data by identifying the recurrent patterns within the communication of the individual. The program has been regarded as useful in identifying mental disorders and evaluating dimensions of personality. The main limitation of the program is that it has "relied on the manipulation and weighting of language variables that were not visible to the user" (Tausczik & Pennebaker, 2010, p. 26).

Weintraub (1981) developed the first fully transparent program of text analysis (Tausczik & Pennebaker, 2010). In order to track down the functioning defense mechanisms and psychological state of the individual through the usage of language, Weintraub analyzed the transcripts of everyday speeches according to predetermined linguistic categories. His model has also been used in the psychotherapy context to assess and predict the outcome of the process. His most striking observation was that the usage of first-person singular pronouns was reliably correlated to the individual's level of depression (Tausczik & Pennebaker, 2010).

Therapeutic Cycle Model (TCM) was developed by Mergenthaler (1996) with the aim of identifying crucial moments in the processes of psychotherapy from the transcripts of psychoanalytic sessions. The main focus of the model is patterns of emotion-abstraction and also narrative style, which enables the researcher to locate key moments within the transcripts of the sessions. Thus the program measures these

constructs in the light of predefined linguistic categories (emotionally toned verbs, adjectives, use of suffixes, etc.). According to Mergenthaler (1996), the change in psychotherapy arises from the dynamic interaction between cognitive mastery (abstraction), affective experiencing (emotion), and also narration which constitutes key moments within the sessions. The increased usage of emotion and abstraction within language means that the patient can access challenging themes to face emotionally and reflect upon (Gelo & Margenthaler, 2012).

Computerized referential activity is another analysis model developed by Mergenthaler and Bucci (1999) to measure style of language rather than the content of the verbal material through the Weighted Referential Activity Dictionary (WRAD). The prioritization of language style over content differentiates computerized referential activity from the aforementioned models of linguistic analysis, which focus on the content of the material. Referential activity is defined by Bucci and Maskit (2007) as a psychoanalytical construct concerning "the degree to which speakers (or writers) are able to access nonverbal, including emotional experience, in their own minds and to express this verbally in a form that is likely to evoke a corresponding experience in the listener" (p. 1366). Referential activity includes four components to assess texts: clarity, concreteness, imagery, and specificity. In the context of trauma, Bucci (1995) proved that high referential activity in psychoanalytical therapies is correlated with better health outcomes. On the other hand, there are several studies on trauma (Goldfine, 2010; Grayson, 1995) that contradict what Bucci (1995) revealed. Goldfine (2010) observed high referential activity scores of traumatized individuals whose trauma has been labeled as unresolved. Halfon (2012) suggests that referential activity cannot differentiate the evocative language from the language of trauma (p. 33). In that sense, it is possible for an individual who has not been traumatized by any condition to have a referential activity score as higher as the score of a traumatized person by only using evocative language.

Linguistic Inquiry and Word Count (LIWC) is the most prevalent computer-based analysis program which Pennebaker developed in 1993, and since then, three

revised versions have been released: LIWC2001 (Pennebaker et al., 2001), LIWC2007 (Pennebaker et al., 2007), and LIWC2015 (Pennebaker et al., 2015). The main principle of the program is based on counting words from text files of any form and matching them to the established linguistic categories of the dictionary database. These categories are not merely limited to identifying function words (e.g., pronouns, articles, adverbs), but also content dimensions (e.g., social, personal), time orientation (e.g., past, present), and several processes (e.g., cognitive, perceptual, affective) that words imply. In that sense, LIWC provides a basis for researchers to objectively analyze relations between the percentage of words in a text and various psychological states according to established linguistic categories.

Pennebaker and his colleagues did not exclusively center their research on investigating patients' usage of language in psychoanalytically oriented therapies. However, their research provided valuable insight for psychoanalytical treatments by proving that systematic attempts of symbolization through writing about emotions lead the patient to create a narrative that enables her to process the disorganized experiences both cognitively and affectively. A coherent narrative includes an increased usage of emotion and cognitive processing words, which at the same time improves both the psychological and physical well-being of the individual (Pennebaker & Tausczik, 2010).

In the context of psychotherapy research, there are various studies that track down relations between patient’s and therapist's usage of language and the progress of symptoms over the process through the medium of LIWC. Moreover, the changes in language usage are also studied as a predicting factor for the outcome of psychotherapy for various disorders. Apart from the context of psychotherapy research, LIWC is also used for the purpose of assessing the use of language in oral or written narratives. The usage of LIWC in trauma research will be discussed in the method chapter.

Although LIWC has been identified as a valuable tool for examining language usage, it is also criticized in some respects. Unlike the computerized referential activity, LIWC is ineffectual in assessing the style of language by solely focusing on the content

of texts. Crespo and Fernández-Lansac (2016) take attention to another weakness of LIWC that is ignoring the context of narratives and suggest the usage of computerized text analysis programs to be "enhanced with complementary valuations by raters that take into account different language connotations" (p. 154). Another dimension that LIWC cannot evaluate is idiomatic, ironic, and sarcastic usages due to the strong variability in language, which again necessities complementary measures to be used by the researchers. Kaati and her colleagues (2016) recommend using "word space models and detect words that are occurring in similar contexts" (p. 7).

CHAPTER 2
CURRENT STUDY

This chapter presents the design of the current study and the procedures that are employed for obtaining and analyzing data. In the first section, the scope of the study will be clarified. In the next section, the method of the study will be disclosed by discussing the characteristics of data and the instruments used to analyze it according to established procedures.

2.1. SCOPE OF THE CURRENT STUDY

The vast literature reveals that effects of traumatic experience manifest in language by leading narratives to be incoherent (disorganized and fragmented) and referential process to be malfunctioning with a decreased capacity of abstraction (Bucci, 2017). In response to the impact of trauma on the psyche, it is necessary for any type of long-term psychotherapy to aim at constructing a coherent narrative and functioning referential process for the resolution of trauma and successful outcome. Therefore, this study aims to explore the language usage of a traumatized patient throughout the process of psychoanalytically oriented long-term psychotherapy in having reviewed the relevant literature.

The impact of trauma on language has been generally examined in studies by focusing on linguistic characteristics of trauma narratives without specifically involving the context of psychotherapy. In the design of these studies, psychotherapy is mainly used as a part of after-treatment to trace potential linguistic alterations in trauma narratives. This study considers psychotherapy as presenting a narrative in each session with its transcribed verbal material. From the first to the last session, the predetermined linguistic categories identified as significant in the context of trauma will be described and examined in the narratives of the patient.

The psychotherapy process of the patient will be explored through a single-case design. Although single-case designs are not adequately effective in predicting direct causal relationships between variables and providing generalizability of the conclusions regarding populations, they are highly instrumental in studying the psychotherapy process in depth by being responsive to contextual factors. Time-series analysis within a single-case design makes it possible to describe the process with regard to the course of variables. The degree of change in linguistic variables, which will be determined and represented further in the LIWC section, will be identified through regression curve estimation. In order to make sense of the course of linguistic variables throughout the process and determined significant changes in them, the content of several sessions will also be examined qualitatively.

One hypothesis was formulated prior to analyses. Studies on trauma narratives identify several linguistic categories related to trauma and predict specific courses for these categories in processing trauma with narrativization. After the treatment, the disorganized and fragmented narratives are expected to be coherent with a functioning referential process. This study aims to explore narrative coherency by describing the changes in the usage of language throughout a long-term psychotherapy process in related categories and whether these changes are consistent with what the abovementioned studies on trauma narratives suggest. Therefore, it is expected that the symbolization and reorganization capacity of the patient will increase significantly over the process of psychotherapy. In contrast, values of the linguistic variables representing the arousal phase will be expected to diminish significantly. Lastly, what these quantitative analyses can and/or cannot suggest will be evaluated qualitatively by considering the context and the therapeutic relationship through several sessions.

2.2. DATA

The data used in this study to analyze contains 43 transcribed sessions of psychodynamic psychotherapy with a 17-year-old patient in Turkey. For a research

project in the Istanbul Bilgi University Psychological Counseling Center, the sessions were recorded as audio with the written consent of the patient, Ms. C., and her parents. The researcher of the project and the thesis advisor gave consent for data to be shared.

The 43 sessions were conducted as one session per week, but several emergency sessions were scheduled according to the needs of the patient. These sessions do not contain intake and family sessions due to the fact that they are structured and differ from others explicitly. There are two missing sessions in the study which were unavailable due to technical difficulties.

The psychotherapist of Ms. C. was a trainee clinical psychologist at the Psychological Counseling Center of the Istanbul Bilgi University and conducted psychodynamic psychotherapy with the support of supervision throughout the process. Due to the decision of the therapist to move abroad at the end of her internship, the process was terminated enforcedly. The therapist revealed her decision to Ms. C. in the 36th session and referred her to another psychotherapist later by arranging a meeting for them.

Ms. C. comes from a conservative family with low socioeconomic status and lives with them. The application of Ms. C. for counseling was made by her mother with the complaints of acute depressive symptoms, unwillingness to go to school, paranoid thoughts, visual hallucinations, and uncontrollable anger. Throughout the process, she often talked about suicidal thoughts together with her depressive symptoms. The therapist referred her to the psychiatrist of the counseling center at the beginning of the process. Ms. C. regularly attended meetings with the psychiatrist and used anti-depressants prescribed to her. The psychiatrist diagnosed her with Major Depressive Disorder.

Although it was not explicitly defined as traumatic by Ms. C., her complaints emerged with the traumatic experience of losing her grandfather when she was 14 years old. After the death of her grandfather, she was left alone at home by her family for a while. Shortly after, her mother had to leave her with her father and brother during that summer. In that sense, the experience of losing a loved one merged with the absence

of her mother. In the first sessions, it also appeared that she had a similar experience at the age of 9 when her grandmother passed away, and her family decided to go to her village. For a while, she struggled to live by herself with the decision of her family to leave her alone at home. These traumatic experiences turned out to be triggered by feeling excluded in her school and led her to desire to quit school. At the same time, she was also highly anxious about losing her mother and wanted to stay near her mother.

In the 11th session, she revealed that before she started school, she was sexually abused by her cousin, who was much older than her during the event. This adverse experience leads her to be disgusted and feared by the looks or behaviors of men towards her in her adolescence. She also feels even more guilty for recalling that she took pleasure during the event. Thus, she attempts to avoid and be distanced from her sexuality which became evident in adolescence. In order to be safe in an outside world that is full of danger, she feels obliged to be a child rather than an adult by being torn between the conflicting desires of disappearance and recognition, regression and separation-individuation.

2.3. INSTRUMENTS

2.3.1. Linguistic Inquiry and Word Count (LIWC)

LIWC (Pennebaker et al., 2015) is a computer-based textual analysis program for examining "emotional, cognitive and structural aspects of verbal and written speech" (Ilkmen & Halfon, 2019). The basic principle of LIWC includes analyzing every word in a given transcript and placing these words in 66 predetermined categories by comparing them to its dictionary. Moreover, it allows the researcher to detect the length of the narrative by counting words. Pennebaker and his colleagues (2007) revealed the results of several studies that validated LIWC for assessing psychological outcomes with its related linguistic categories. LIWC dictionary has been fully or

partially translated into other languages, including Chinese, French, Italian and Turkish. For the scope of the study, it is important to underline that LIWC is the only computer-assisted linguistic analysis program with an established Turkish dictionary.

In the context of current trauma research, LIWC has been used to detect and validate the relevant linguistic categories which may capture early signs of PTSD (Alvarez-Conrad, Zoellner, & Foa, 2001; Kleim et al., 2018) or predict the symptomology progress and health outcomes (Marshall et al., 2017; Zasiekina, 2020) or reveal the characteristics of language that people with PTSD use (Crespo & Lansac, 2016, Papini et al., 2015)). These studies are mainly based on verbal or oral narratives of people who have been either diagnosed with PTSD and other persistent psychopathology related to trauma or not diagnosed with PTSD despite the presence of traumatic reactions. In other words, researchers aimed at revealing correlations between particular uses of language and traumatic reactions. On the other hand, only a few case studies (Ching, 2020; Dicterow, 2011) make use of LIWC to assess linguistic markers of trauma in the context of the psychotherapy process. There may be two explicatory reasons why LIWC has not been used in this field. First, there are other established measures to examine linguistic aspects of transcripts, specifically in the context of psychotherapy research. These measures are mentioned in the last chapter, but their dictionaries are not translated into Turkish. Another reason is that studies in this field that use LIWC as an instrument to assess verbal accounts of traumatized people are generally designed to focus on given oral or written trauma narratives. These narratives are not taken within the process of psychotherapy which is solely used in related studies as a part of the treatment.

In this study, LIWC will be used to assess Ms. C.'s use of language within the transcripts of sessions to track down the relations between trauma and language. Several linguistic categories of LIWC are selected to examine these transcripts according to two main factors. First, the linguistic categories of this study are selected from frequently examined ones in the researches mentioned above on trauma narratives. It is important to underline that these studies rely heavily on the relations

between linguistic markers and PTSD. Though the aim of this study does not involve focusing on the relations between language and PTSD, these studies provide guidance to discuss traumatic reactions in the context of a psychotherapy process through the usage of language. Another factor is that these markers are designated theoretically to align with the multiple code theory and trace the three phases of the referential process (Bucci, 2007). Somatosensory detail (perceptual processes, body words) and nonfluencies are selected to investigate the arousal phase, emotion words (positive and negative) for the symbolizing phase, and cognitive process words for the reorganizing phase. Internal reliability coefficients are .69 for nonfluencies, .55 for perceptual processes, .87 for body words, .64 for positive emotion, .55 for negative emotion, and .92 for cognitive processes (Pennebaker et al., 2015).

Somatosensory detail. The somatosensory detail may be examined through two categories: perceptual processes (see, hear, feel) and body states. The increased usage of somatosensory detail has been observed in trauma narratives (Alvarez-Conrad, Zoellner, & Foa, 2001), particularly when the traumatic event happened recently (Beaudreau, 2007). Trauma narratives with more references to body states indicate poorer adjustment and severe PTSD symptoms (Beaudreau, 2007; Marshall, 2016). From sensory details, tactile ones (feel, touch) have been found related to PTSD symptoms (Ng et al., 2015). The relations between PTSD symptoms and the usage of somatosensory details in narratives are not established thoroughly in the relevant literature (Crespo & Fernandez-Lansac, 2015), and further research is needed (Marshall et al., 2017). As mentioned before, bodily sensations are triggered in the arousal phase, and it is not expected these sensations to be described elaborately yet.

Nonfluencies. Nonfluencies as another linguistic indicator of the arousal phase have been observed in trauma narratives with voices like hm, umm, er. In studies of trauma narratives, nonfluencies are "conceptualized as structural measures of disorganization and fragmentation" (Jaeger et al., 2014 p. 477). In his study on the modality of disclosure in trauma narratives, Roberts (2007) explores whether taking a written or oral makes any difference on the linguistic markers. For nonfluencies,

Roberts came to the conclusion that orally disclosed narratives contained more nonfluencies than written ones. By comparing daily and trauma narratives in terms of linguistic constructs related to disorganization and fragmentation, Jaeger and his colleagues (2014) proved that they do not differ significantly from one another on nonfluencies. In sum, the literature does not suggest that nonfluencies are strong indicators of incoherence in trauma narratives. However, disfluencies are theoretically and clinically significant to examine the effects of trauma on language. In that sense, this category will be used for explorative purposes to observe its course throughout the psychotherapy process.

Emotion words. LIWC categorizes positive emotion (love, nice) and negative emotion words (hurt, ugly) under affective processes as separate entities. The literature presents mixed results regarding the relations between emotion words and trauma symptoms. In their meta-analysis on studies of trauma narratives, Crespo and Fernandez-Lansac (2016) suggest that the use of negative emotion words is related to severe PTSD symptoms. In line with this study, Eid et al. (2005) revealed that the dominance of negative emotions in narratives is directly related to trauma-induced symptoms. On the other hand, Jaeger and his colleagues (2014) reveal that using both positive and negative emotion words in trauma narratives leads to lower rates of reexperiencing symptoms of PTSD. In the same vein as Jaeger et al. (2014), Wardecker et al. (2017) found out that "participants who used more positive and negative emotion language had better psychological outcomes, especially when the abuse was more severe" (p. 628), according to their study on adults who are survivors of childhood sexual abuse. In other words, the increased capacity for symbolization directly influences the well-being of the individual. Although Pennebaker and Tauszcik (2010) did not center their study on trauma narratives, their findings suggested that the improvement of mental health reveals itself with increased usage of positive emotion words and a decreased usage of negative ones.

Cognitive Process Words. Cognitive processing (Pennebaker, Mayne, & Francis, 1997) or abstraction (Mergenthaler, 1996) are crucial for the improvement of

mental health and the succession of therapeutic outcomes. According to various therapeutic approaches, it is necessary for the traumatized individual to cognitively process what has happened and thus construct a coherent narrative. Cognitive processing mainly relies on the capacity of the individual to think insightfully and causally (Tausczik & Pennebaker, 2010). The LIWC category, which evaluates cognitive processing, comprises six different subcategories: insight, causation, discrepancy, tentativeness, certainty, and differentiation. Several studies (Jaeger et al., 2014; Papini et al., 2015) suggest that increased usage of cognitive process words (cause, know, think) is negatively related to the severity of PTSD symptoms. On the other hand, D'Andrea et al. (2012) examine relations between the usage of cognitive process words and PTSD symptoms of students who have been traumatized following September 11th at two different times; immediately after the event and six months later. The result of this study contradicts the widely accepted understanding of cognitive processing in relation to trauma by proving that lasting PTSD symptoms of students were "predicted by greater use of cognitive process words in their narrative produced a week after the traumatic event" (Marshall, 2016). As Marshall suggests, the difference in outcome may be due to the study's specific focus on symptom change instead of severity. Another study by Kleim et al. (2018) finds out that "trauma narratives with fewer cognitive processing words predicted greater PTSD symptoms at six months" (p. 1). Unlike the study of D'Andrea et al. (2012), they conducted the study after controlling for "early symptom severity and verbal intelligence" (Kleim et al., 2018, p. 1).

2.4. PROCEDURE

Since the sessions have been transcribed, including dialogues of both sides, speeches of the psychotherapist are removed from the transcripts of sessions. The verbal material of the patient is detached for each session and converted to separate files. These files are analyzed by using LIWC to determine values in selected linguistic

categories (nonfluencies, body words, perceptual processes, negative emotion words, positive emotion words, and cognitive processes) for each session. The descriptive statistics of these categories over the course of sessions are presented. After the description, two different methods are used for the analysis. Regression curve estimation is used to observe trends of change within sequences of values of these three constructs over the psychotherapy process. Then, significant peak and decline moments in the psychotherapy process are established and described statistically. Lastly, the results of quantitative content analyses are examined qualitatively by focusing on several sessions, which include significant peak and decline moments in the course of linguistic variables throughout the psychotherapy process.

CHAPTER 3
RESULTS

The trends of change in the linguistic variables were examined. The sessions which contain significant peak and decline points in the change trends of variables are established. The excerpts from these sessions are translated into English to discuss some remarkable features of the clinical content.

3.1. DESCRIPTIVE FINDINGS

The descriptive statistics of the linguistic variables are presented in Table 3.1.; indicating mean, standard deviation, range, and minimum and maximum values of the distribution.

Table 3.1.

Descriptive Statistics for All Variables

	M	*SD*	*Min*	*Max*	*Range*
Arousal					
Body Words	0.98	0.34	0.34	1.74	1.40
Perceptual Processes	2.11	0.53	1.08	3.67	2.59
Nonfluencies	0.39	0.23	0.07	1.11	1.04
Symbolization					
Negative Emotion	4.51	1.07	2.75	7.76	5.01
Positive Emotion	2.02	0.62	1.02	3.49	2.47
Reorganization					
Cognitive Processes	19.07	1.73	15.56	22.35	6.79

In Table 3.2., the same dispersion indices are descripted for three constructed categories (Arousal, Symbolization, and Reorganization). For the operationalization of the Arousal phase, mean values of its subcategories are averaged; and for the Symbolization phase, mean values of its subcategories are summed up. Mean values of the Reorganization phase are the same with cognitive processes.

Table 3.2.

Descriptive Statistics for Variables of Three Phases

	M	*SD*	*Min*	*Max*	*Range*
Arousal	1.16	0.22	0.76	1.70	0.94
Symbolization	6.54	1.02	5.10	9.62	4.52
Reorganization	19.07	1.73	15.56	22.35	6.79

The descriptive statistics reveals that Body words (M = .98, SD = .34) and Nonfluencies (M = .39, SD = .23) are used less frequently in comparison to other categories by the patient throughout the sessions. Perceptual Processes (M = 2.11, SD = .53) are vastly dominant between the variables of the Arousal Phase. The words representing the Arousal Phase (M = 1.16, SD = .22) are observed to be used least frequently between the three phases.

For the Symbolization Phase (M = 1.16, SD = .22), Negative Emotions (M = 4.51, SD = 1.07) are more visible in comparison to Positive Emotions (M = 2.02, SD = .62) across the process of psychotherapy. In terms of Reorganization (M = 19.07, SD = 1.73), the words signifying Cognitive Processes (M = 19.07, SD = 1.73) are used by the patient most frequently.

3.2. TRENDS OF CHANGE IN LINGUISTIC VARIABLES

The variables that measure arousal, symbolization, and reorganization are continuous. Therefore, trends of change in these variables were examined through curve estimation regression. Before conducting regression analysis, the unit root test was necessary to understand if the variables were stationary or not. Through the Dickey-Fuller Test, it turned out that all linguistic variables are stationary.

3.2.1. Trends of Change in Three Phases

Each phase variable in the study was measured across the process of psychotherapy. The results revealed a significant quadratic relationship for the Reorganization Phase but no significant linear or quadratic relationship for Arousal Phase and Symbolization Phase. Thus, a follow-up study was conducted by examining trends of all variables without grouping them under three constructs.

As mentioned above, a significant quadratic relationship ($F = 3.44$, $p = 0.05$, $R^2 = .15$) was detected for Reorganization Phase. Figure 3.1. reveals the slight increase in the capacity of the patient for reorganizing along with the first sessions, then it decreases severely at the second half of the process with a notable variance. Table 3.3. indicates the model summary and parameter estimates of the distribution.

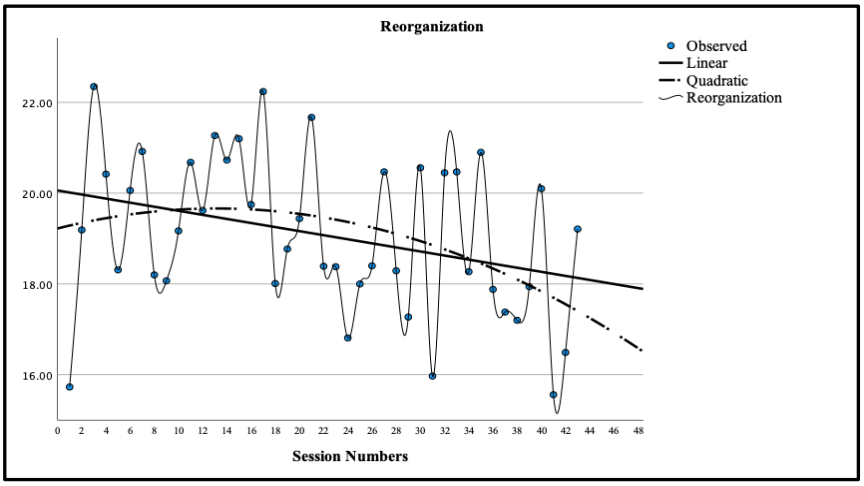
Table 3.3.

Model Summary and Parameter Estimates for Reorganization

	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.105	4.82	1	41	.034	20.06	-.045	
Quadratic	.147	3.44	2	40	.042	19.22	.067	-.003

Figure 3.1.

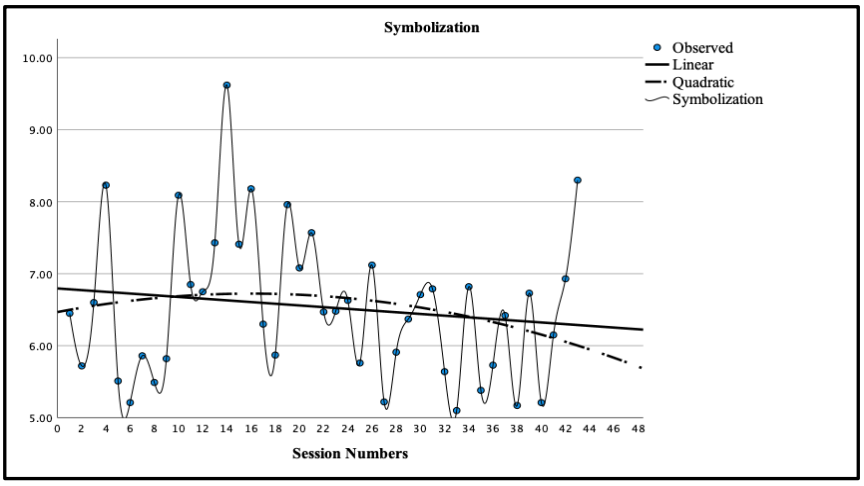
The Distribution of Reorganization over the Process



For the Symbolization phase, the analysis did not reveal a significant trend over the process. However, there was a noteworthy decrease trend after the 21st session, as seen in Figure 3.2.

Figure 3.2.

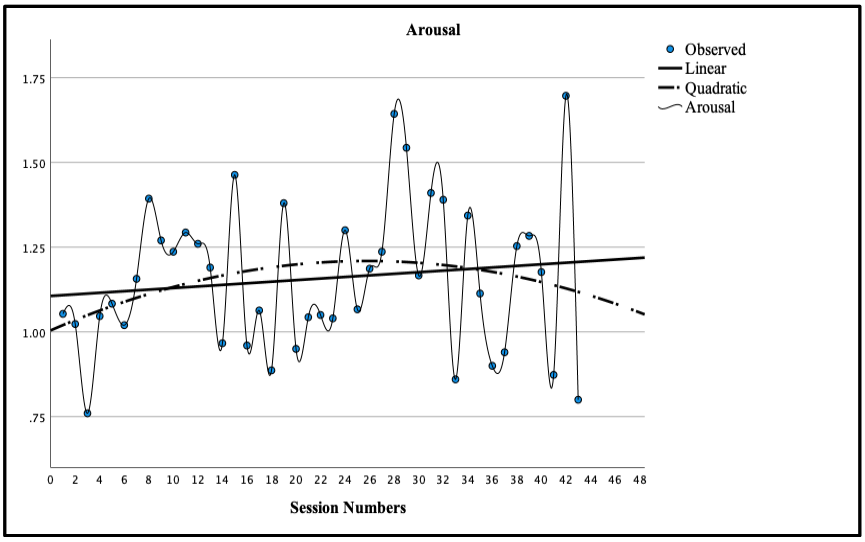
The Distribution of Symbolization over the Process



For Arousal Phase, a significant linear or quadratic relationship was not observed. Figure 3.3. presents that a slight increase is visible as sessions progressed, although it is highly fluctuated. The graphs for Symbolization and Arousal phase are presented for exploratory aims.

Figure 3.3.

The Distribution of Arousal over the Process



3.2.2. TRENDS OF CHANGE IN ALL VARIABLES

A follow-up study was conducted by analyzing trends of change in all linguistic variables without clustering them into three constructs due to the statistically insignificant results of preliminary analyses. The results demonstrated that Perceptual Processes, Negative Emotion, Positive Emotion, and Cognitive Processes revealed significant trend analysis. Although Nonfluencies and Body Words did not reveal significant trends, a considerable quadratic relationship was observed for Body Words. The graphs of Nonfluencies and Body Words are presented for explorative purposes.

For Perceptual Processes, a significant quadratic relationship (F = 3.40, p = 0.05, R^2 = .145) was detected. Figure 3.4 indicates that a slight increase was observable until the first half of the process, and then the increase slowed down in the second half with a highly fluctuating trend. Table 3.4. demonstrates the model summary and parameter estimates of the distribution.

Figure 3.4.

The Distribution of Perceptual Processes over the Process

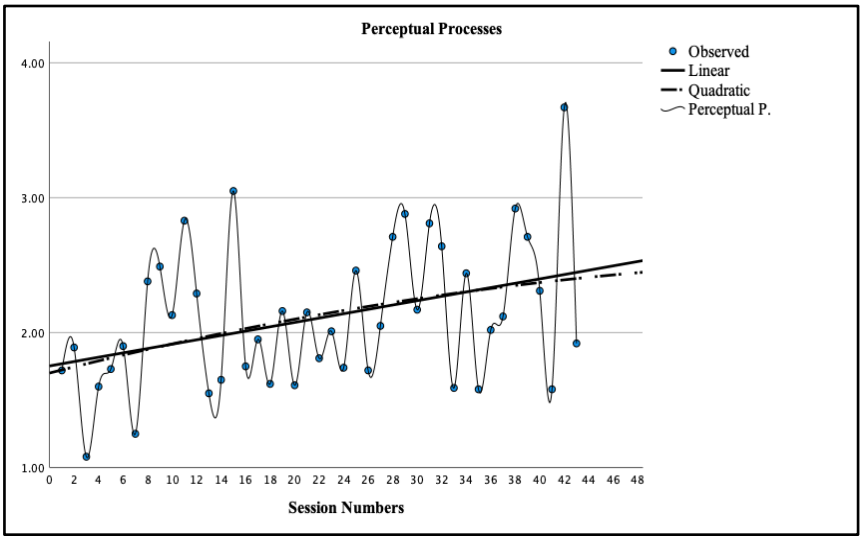


Table 3.4

Model Summary and Parameter Estimates for Perceptual Processes

	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.144	6.877	1	41	.012	1.753	.016	
Quadratic	.145	3.402	2	40	.043	1.701	.023	.000

A significant quadratic trend was observed for Negative Emotion (F = 5.63, p = 0.05, R^2 = .22). According to Figure 3.5., a slight increase was noticeable until

nearly the middle of the process. Both the variability and the level of Negative Emotion decreased sharply as sessions progressed. Table 3.5. demonstrates the model summary and parameter estimates of the distribution.

Figure 3.5.

The Distribution of Negative Emotion over the Process

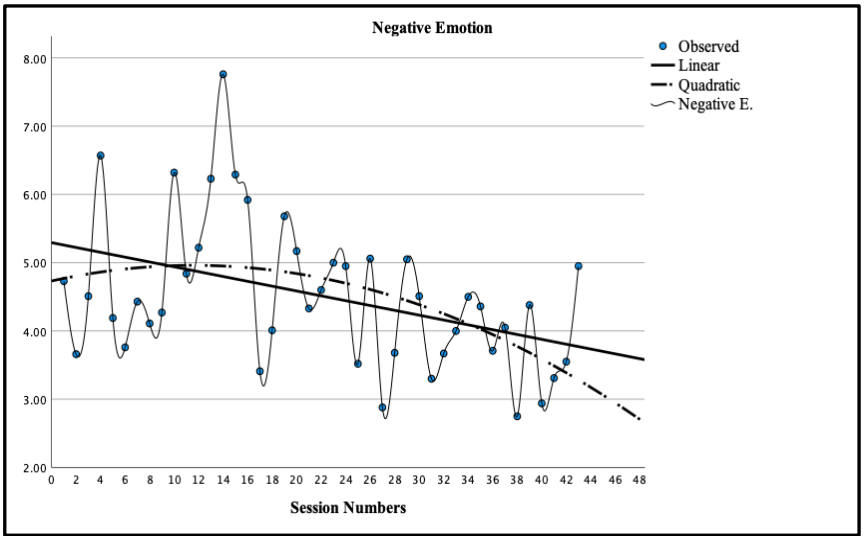


Table 3.5

Model Summary and Parameter Estimates for Negative Emotion

	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.171	8.461	1	41	.006	5.294	-.035	
Quadratic	.220	5.629	2	40	.007	4.732	.039	-.002

Regarding Positive Emotion (F = 6.76, p = 0.05, R^2 = .25) , a significant quadratic trend was observed. As seen in Figure 3.6., a slight decrease was observable until nearly the middle of the process. Both the variability and the level of Positive

Emotion increased sharply with the progress of sessions. Table 3.6. demonstrates the model summary and parameter estimates of the distribution.

Figure 3.6.

The Distribution of Positive Emotion over the Process

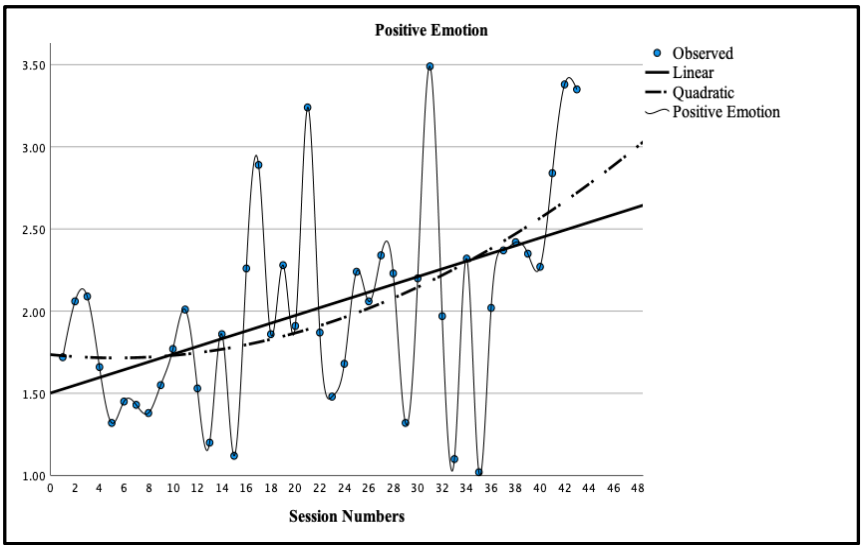


Table 3.6

Model Summary and Parameter Estimates for Positive Emotion

	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.227	12.062	1	41	.001	1.502	.024	
Quadratic	.253	6.757	2	40	.003	1.736	-.008	.001

A significant quadratic trend was noted for Cognitive Processes ($F = 3.44$, $p = 0.05$, $R^2 = .15$). As mentioned in the Reorganization Phase, there was a slight increase until the middle of the process. Then, the level of Cognitive Processes decreased sharply with an increased variation, as seen in Figure 3.7. Table 3.7. reveals the model summary and parameter estimates of this distribution.

Figure 3.7

The Distribution of Cognitive Processes over the Process

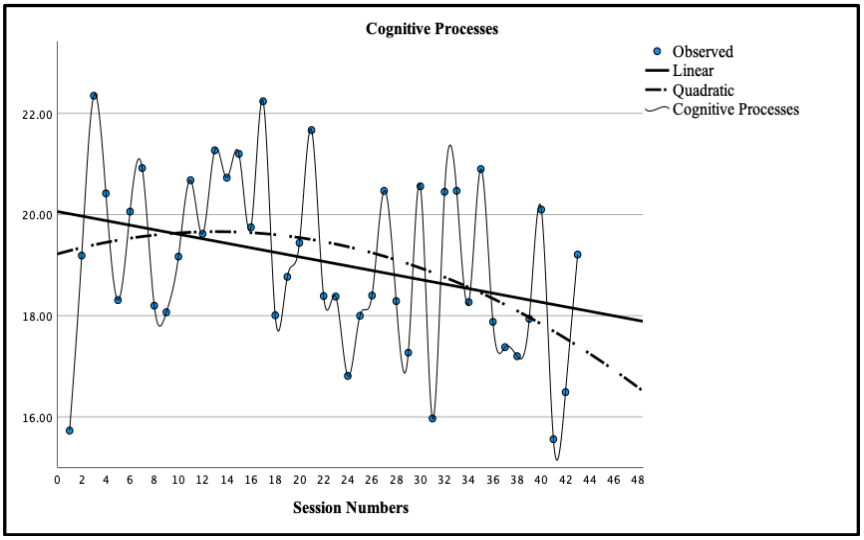


Table 3.7

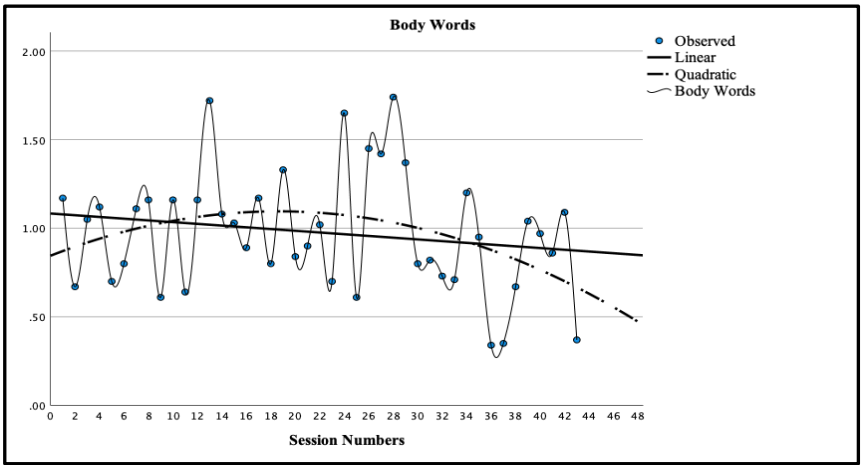
Model Summary and Parameter Estimates for Cognitive Processes

	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.105	4.824	1	41	.034	20.060	-.045	
Quadratic	.147	3.441	2	40	.042	19.223	.067	-.003

For Body Words, a significant linear or quadratic trend was not detected. Although the trend was not statistically significant, it had a considerable quadratic function, as seen in Figure 3.8. There was a slight decrease until the middle of the process, and then, the level of Body Words decreased sharply.

Figure 3.8

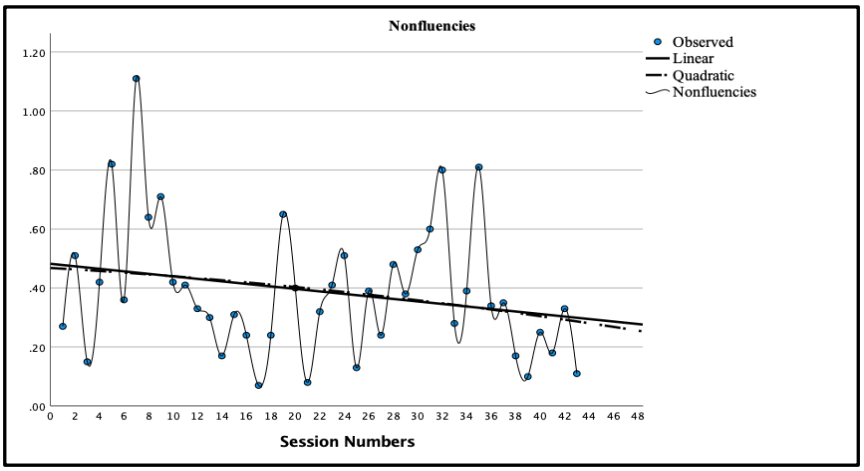
The Distribution of Body Words over the Process



Regarding Nonfluencies, a significant linear or quadratic trend was not noted. As seen in Figure 3.9., there was a trend of slight decrease as sessions progressed, although highly fluctuating.

Figure 3.9.

The Distribution of Nonfluencies over the Process



3.3. DESCRIPTIVE PEAK AND DECLINE POINTS OF TRENDS

The abovementioned results of analyses revealed that a quadratic trend was present for all variables excluding Nonfluencies across the psychotherapy process. The middle phase of the process turned out to be noteworthy to be examined further because of the fact that it includes peak or decline points for the quadratic curves of all variables. Thus, the sessions between 20th and 30th, representing the middle phase, were selected to focus on and identify sessions that include peak and decline points for all variables, excluding Nonfluencies in this time period. The middle phase may be considered the work phase of the psychotherapy process. In this phase, processing takes place with an increased capacity for symbolization and reorganization.

For all variables, peak and decline points between 20th and 30th sessions were determined by noting particular sessions with one standard deviation above or below mean values from general averages of these variables. For Body Words, the peak point was identified by searching for two standard deviations above the mean due to the fact that there were many points that were one standard deviation above the mean. There was no peak point for Negative Emotion, which is one standard deviation above the mean. Therefore, the session that had the highest point in terms of Negative Emotion value was taken into consideration. The quadratic curve of Positive Emotion has an opposite direction compared to other variables' curves. As mentioned before, there was an increasing trend of the curve following a decrease as sessions progressed. Therefore, a decline point of the trend was searched for instead of a peak point. Table 3.8. presents the sessions, which include peak or decline points according to the abovementioned calculations.

Table 3.8.

Descriptive Statistics for Peak and Decline Points of Trends

	M	*SD*	*Peak*	*Decline*	*Session Number*
Body Words	0.98	0.34	1.66		28
Perceptual Processes	2.11	0.53	2.63		28-29
Negative Emotion	4.51	1.07	5.58		20
Positive Emotion	2.02	0.62		1.4	29
Cognitive Processes	19.07	1.73	20.80		21

28th session as a peak point for Body Words, 28th and 29th sessions as peak points for Perceptual Processes, 20th session as a peak point for Negative Emotion, 29th session as a decline point for Positive Emotion, and lastly 21st session as a peak point for Cognitive Processes were identified within the middle phase of the process. These sessions will be explored in the next section and discussed qualitatively in the next chapter further to understand the processing in the middle phase with peak and decline points.

3.4. CLINICAL CONTENT OF THE SESSIONS

The quantitative trend analyses revealed that the hypothesis of this study is incorrect. It was expected for the linguistic variables to increase or decrease significantly with a linear relation as the sessions progressed. However, excluding Nonfluencies, these variables presented significant quadratic trends with the process. In these quadratic curves, the middle phase of the process was identified as having remarkable peak and decline points for the linguistic variables in four sessions. Some excerpts from these sessions will be presented below to be able to analyze their content in the next chapter.

Session 20. In session 20, a peak point was observed for Negative Emotion in the middle phase of the process. Another observation suggests that Nonfluencies in this session is at the highest point within the middle phase. Moreover, there is a sharp increase in Body Words. Considering these features, this session will be examined in detail to make sense of underlying processing. The session begins with the patient mentioning her fear and shame. The whole session is dominated by the aggression of the patient against herself, particularly her body and others which leads her to feel sad, guilty, incompetent, and hopeless about her future. On the one hand, she desires to be an independent adult; but on the other hand, she is afraid of the separation and perceived responsibilities of adulthood like marriage. The therapist encourages her to symbolize her feelings by recognizing, appreciating, and interpreting them. At the same time, the therapist leads her to verbalize her own feelings apart from what other people think or feel about her to support her in the process of individuation.

Ms. C.: ...Then the teacher turned around and said, what are you doing here. I was afraid I could not answer. He said: "Do you think the exam has started?" I said I do not know. He said again: "Do you think it started?" I did not answer. You know, he closed the booklet, and he got angry like that. Then, they laughed at me and stuff. I mean, I was embarrassed, pretty scared, excited. It was like that at that moment; I wanted to run away from there. People are laughing at me, being scolded, not being able to answer that... It really affected me there. I got out of there before the end of the exam anyway.

T: You went through many things, fear, excitement, shame...

Ms. C.: ...And then that typical silly kid over there laughing at me. In other words, it is very strange that people unconsciously criticize and shout. It makes me very

sad. I could not even feel if I was just going to be there and live later, uh. I mean, it will always be like this in life. Maybe I will always be scolded by someone. But I will not be able to answer. It made me very sad. I disappointed my mother again.

T: Yourself?

Ms. C.: I also upset myself. It is too bad to fail. Not being able to do something... Another failure. I could not do anything in this life; I have no success. This makes me so sad. However, it also brings fears subsequently.

T: So it is like you had a weekend that you gave away to despair.

Ms. C.: ...Then I thought, what can I do for my mother? I cannot do anything for my mother. I cannot do anything for her happiness. Because I also make her upset. I was very upset, but then I thought, I said, what are you even doing for your mother? I said, you always make her sad. I said that it is normal for people to upset her so much while you love her more than her own life and can upset her so much.

T: So it is like you cannot do anything, you also make your mother sad...

Ms. C.: ...When I try to do something, I am afraid that I will not be able to do it. Even when washing a dish... So, it will not be clean. Or when I am washing dishes, I think about something, if this is not our house but another house, I wonder if the owner of the house, the people I stay at, would like my washing dishes. It does not matter. Or when I get married or something, I think about this while washing the dishes, you know, if I get married when I get married, which I do not think so in these circumstances, will my mother-in-law like my way of washing dishes, will she

gossip behind my back, or will she yell at me? Will she make me angry? Will I be incompetent?

T: So, your mind is always occupied with what those around you will think, whether they will be angry or not, whether they will like it or not. What do you think about yourself? About all these things you are talking about?

Ms. C.: I cannot think of anything about myself. Nothing. It is always about people. I live for what they are going to say.

T: So the things you anticipate they will say are perhaps some of the things you will say to yourself. You will be angry, and you will not like yourself.

Ms. C.: Huh. I do not like myself; I do not like it. My appearance, my posture, my demeanor, my speech. I feel sorry for myself when I look in the mirror.

...

T: I mean, the situation you are talking about, hurting someone when she should be helped, being told such things are things you sometimes experience as well. You were saying why they do not help me, why am I living all this alone. You were mentioning that you were feeling alone in your inner world because you feel like this about the fact that no one helps you, not because you are really like this. Like I said, true or not, really, but what you are feeling is in your inner world, and it might be causing anger there too. And with that anger, maybe you do not want to do anything. So you do not even want to wash a dish.

...

Ms. C.: So it hurts so much to live. I feel tortured every time I breathe. Because it seems impossible to live. And I am afraid of everything. I am afraid of animals when I go out. I am afraid of people. When I go to the hospital, it feels like the doctor is going to kill me; I am afraid of the doctor. I am afraid of the slightest thing; I make it a big problem, I become afraid of it. All forms of life scare me. It is very difficult to live with these fears. For example, you watch a horror movie; when you are extremely scared, you turn off the television if necessary. But I cannot turn myself off. I cannot go on living my life. Every moment passes like I am watching a horror movie.

...

T: Standing in the same place all the time and waiting for something else to happen is a bit contradictory. Standing in the same place, thinking the same things, doing the same things... It is like something that makes it difficult to add something, to change something. Like helping it.

Ms. C.: Yes.

T: What do you think?

Ms. C.: I do not have the courage to do something new, to do something new, to think about something new. Like I said, my fears take precedence over everything else. So, I say, go out today, gather your courage, wander around, do whatever you want. But then I become afraid. What if something happens to me when I go out? What if people look at me badly? What if I get lost?

...

Ms. C.: ...Because seriously, if I yell, there is going to be a pretty big storm.

T: Those storms are blowing inside you right now. Those storms can blow here.

Ms. C.: Shall I shout here? (laughs)

T: If you feel like shouting, yes. In other words, when shouting comes, we can talk about it, talk about what happened.

...

Ms. C.: I have very intense emotions. I do not know if I can express that intensity here.

T: You wonder if I understand that intensity? Coming from you to me...

Ms. C.: I think you understand. But I do not know; those thoughts come to my mind; I mean, can I explain those thoughts? I have very intense fear. So living with these fears has become really unbearable. I am afraid of everything. If it rains, I am afraid of the rain; if it is dark, I am afraid of the weather. I am afraid in the night; I am afraid of the dark.

Session 21. In Session 21, a peak point was observed for Cognitive Processes. Nonfluencies in this session is at the lowest point within the middle phase. There is also a sharp increase in the Positive Emotion variable. After the dominance of negative feelings in the last session, the patient again begins by speaking of her aggression and fears. With the support of the therapist, she manages to comprehend cognitively and verbalize her main need that is the presence of others who will have a desire to recognize and understand her feelings. For the first time in the process, the patient talks about her feelings for a significant other with hope and despair at the same time. Despair about imagining a relationship with a significant other may be understood in

relation to her traumatic experience. It may be considered as part of her emerging desire to individuate and relate to other people sexually, even if her desire is unrealistic in terms of imagining another dependent relationship to be better. Throughout the session, she oscillates between the desires of dependence and separation, between regressive and individuated positions. The therapist encourages her to differentiate between fantasizing and acting in the real world in response.

Ms. C.: For example, I am very comfortable here; I could have acted the same way around him. You know, having someone who understands me would give me such strength and morale. For example, yesterday, I had a crying crisis, but everything changed when I came here. It is like I find peace when I tell someone when someone understands me.

...

Ms. C.: A person who can understand me and value me. You know, I was so affected by that happiness that I had dreams about it for a week.

T: It is like a dream that can distract you from those bad feelings. In other words, since dreaming is actually in one's own hands, it can distract one from reality. She can think of everything as perfect; she can set it up exactly as she wants it to be. But then, when you compare it with what actually happened, it would be a disappointment. So it happens to everyone. Because dreaming is in one's own hands, we can think how we want. But in reality, when someone else is involved, things may not go as one wants. When that happens, you know, disappointment, anger may emerge, "I do not want it to be like this; I want more." Such an imbalance, such a

distinction, happens to everyone. It can turn into something that may distract one from what could really happen. Real things can also be tasted and enjoyed. As you see them, as you experience them... As the relationship is established, over time...

...

Ms. C.: I do not know how to behave with a man, how to communicate with a man. And I have my fears on top of that. I told you, I am afraid of men, I am afraid of having a relationship with a man. I do not know, I am afraid, I have many fears. I thought he was the person I could overcome.

...

T: So, two extreme points appear in your mind; one is that something happens that makes you think that you are very happy, mutual love, and then suddenly something happens, and you think that you will die alone. It is like, instead of going on that journey, let us see what will happen, whether something will happen to each other or will someone else... You come to the decision that it will not happen, then you build something that you actually want to happen in your dream. Otherwise, someone likes someone, someone dislikes someone, it may be mutual or not, these are all possible things.

...

T: You talk about not being able to tell people; it is like that is the only problem. It sounds like you would say, oh, if you told someone.

Ms. C.: If I could explain it if I could figure out what it was... I cannot. I cannot find where the problem is originating from.

T: But you are looking; we are searching, trying to understand.

...

Ms. C.: At the moment, it seems like sunlight actually exists for me, but that is also impossible. As I said, I feel uncomfortable even when I say his name, but it feels like I will be able to be happy and enjoy the sunrise. If I live a little of my dreams, it is like I will fly into the air. My hopes will rise again. I will have a resource in life that I can struggle with. I will be able to have fun. I do not know how to heal this part of me; I cannot help myself; I am constantly looking at his photos. He looks very sympathetic, not a very handsome man, but I do not know; I can feel the sparkle in his eyes.

T: There is something about him which is good for you.

Ms. C.: Yes.

T: It is good to talk to him; it is good to see him. And most importantly, you talked about how you can be yourself next to him. So it is as if you will not do anything to make him like you; you can already be yourself.

Ms. C.: Yes. He sees me as normal. When I went to see him, he told me that you look normal, you are like a normal person, that made me very happy. I cannot be like that with other people, except you. Because I can explain the depression inside of me, I get relieved. But not so with others. The more I try to look good, the more I stumble. I falter more. I can act naturally with you.

Session 28. In this session, a peak point was observed for Body Words and Perceptual Processes. Cognitive Processes and Negative Emotion decrease sharply in this session which may indicate that she has difficulty symbolizing and reorganizing her feelings and thoughts with increased attention to body and senses. The patient begins the session by talking about shameful events in which she was exposed to physical contact with others. Her thoughts on her hair reveal her feeling stuck between her desire to stay as a child who feels safe by being desexualized and therefore not attracting men's attention and her desire to be a woman aware of her sexual desires. This situation indicates her oscillation between the desires of dependence and individuation while at the same time expressing the ambivalence of adolescence as wanting to be a child and an adult at the same time. While talking about her emerging sexual desires, she also draws attention to the physical damage she has done to her genitals. The idea of being a woman with sexual desires is quite scary for her, and she wants to make herself invisible in the bodily sense by silencing her desires. It may be related to her traumatic experience, of which reality is questioned by the patient in this session. Throughout the session, the therapist supports her in expressing the contradictions she experiences about her body and sexuality. Disfluencies seem to increase when she talks about her sexuality.

Ms. C.: ...Then I fell into someone's lap. I went down alone without looking at the man. I am embarrassed again. So that happens a lot. I laugh at myself sometimes, but I think I am pathetic.

...

Ms. C.: The baby's hair is beautiful, isn't it? I do not know why I wish I had hair like this. Normally, girls want something like this. I wish I have cool hair, full; I do not know. Picture the girls in those shampoo commercials. So I like that too.

...

T: You have had some thoughts about your hair for the last few sessions. You get angry; you want to cut it. You feel like a man when you collect it. You want to open, you collect. That hair is important for you; it has meanings.

...

T: That hair also has an effect on being a woman, being a girl, being a boy. Maybe leaving that hair bare is making you look bigger and more like a woman. You feel like a man when you collect it.

Ms. C.: Let me give an example of something. Your hair is collected right now; my father did not say anything. But your hair was like this last week; it was pretty nice. So now you are also very beautiful. I love bulk hair, in fact. For example, my father calls you teacher; he said that the teacher's hair is very beautiful. At that moment, I formed a relationship in my head. Revealing female things seems nicer to other people. However, that is how I love it. So I love you anyway. More comfortable, freer. When my hair is open, I shrink and get depressed.

T: So when that femininity comes out a bit...

Ms. C.: Yes, actually it is. For example, when I open my hair, my hair always comes in front of me while walking on the street. I already have some problems with my hair that I cannot get over with. For example, I cannot do it like this. I cannot touch my hair just in case the guy next to me thinks she is signaling me.

T: It also has some sexual meaning. It can carry messages.

Ms. C.: I was normally a very naive thinking person. My mind was clean. I cared about my own thoughts. Then, when I start to understand the thoughts of men and start to hear, I speak by choosing even the smallest words from my environment.

T. So, somehow, this topic of sexuality is quite alarming. The further away you keep it, the better.

...

Ms. C.: I was crying. I started to cry more; my fears of life are in this direction. That is why I am afraid of men when I go out. There is another reason why I am afraid of women. That is why I am afraid of men. ...

T: So it comes back to sexuality. It is like the more you want to keep it away, the closer you find sexuality.

...

Ms. C.: So I do not think I am different from them. To live by caring what people may say; I want to die, because when I die, no one will talk about me, they will not guide me, I will either go to heaven or hell, I will either burn on my own or live a comfortable life on my own. I am tired now. I do not know what to do on the way; I wonder if someone will see and say something. My father says relax, you say relax, but that word is empty in your language. If I make an extreme move, you block it; you set a barrier in front of me. Well, where is the comfort? How can I be comfortable? I do not know how to act anymore.

...

Ms. C.: He always says you should know where to sit and get up. When you sit, do not let your back be seen; cover it with something, do not sit loose. I sit hunched or sit upright. I am like a robot. Do I have an open back rather than being comfortable when I sit down? Am I straight? I also have a habit of pulling my clothes. How do I look? Is there something wrong with me? How do my feet look? So now I am like a robot.

...

Ms. C.: ...I have a cardigan on, I have a shirt on, and they burned the gas to the end because I am cold, but I still shiver as those thoughts come; I mean, thoughts constantly appear in my head. When I cannot control them, I constantly tremble next to them. ...

...

Ms. C.: When they ask what is wrong, I cannot tell them about it; maybe if I tell them when they ask, they will understand my fear towards men. Sometimes I wonder if even that is a lie in my head, I wonder if I saw a dream. Because that scene appears in my head, I ask myself how something like this could happen.

T: Maybe a part of you wanted it to be a dream at that moment, maybe one way or another, as one remembers, you wish it was a dream if it had not been lived.

Ms. C.: I wish... I wish I could prove it to everyone; if I had proof, I would tell everyone about it. I would not be ashamed of it because it is not my fault; he should be ashamed. For whatever goes through his mind for a child of that age, he should be ashamed. Sometimes I say, was it something innocent? But he could have done

this in front of my mothers if it was an innocent thing that even my mother and father had not kissed me on the lips until now; he would not argue that it was a good thing or I cannot even say it. I am disgusted, ashamed. Why did he take me to bed?

T: These are very confusing. It is really hard to know the answer, especially at that age.

Ms. C.: I do not remember if my grandmother came early. I do not remember because I was very young. I do not know in my memory to be able to say it for sure... So that scene comes to life in my eyes. It cannot be a dream because I forget the dream I had yesterday, but that scene has not left my mind for years. A year or so after it happened, I remember looking at his face for a reaction when we went to the village. I would not remember them if it was a dream.

...

Ms. C.: I am too embarrassed to say it, but I will say it, in case it means something; I play with myself a lot. I sit by touching my genitals, just watching TV. Of course, when I am alone, I cannot do it when someone is around.

T: This is quite normal, with the activation of this sexuality...

Ms. C.: But it is not because I feel anything; it is always like that.

T: How?

Ms. C.: I do not know, I keep it like this. I am embarrassed

T: It is a difficult topic to talk about.

Ms. C.: I do not see people that way at all. I do not see the potential to do what I do. It attracts my attention; I examine it by touching it with my hand. I cut it with a razor yesterday.

...

Ms. C.: Sometimes it is normal because I feel safe, sometimes it is like that, I feel safer when I hold it like that. I cut that wound yesterday; I cut it above the swelling; I had fun, I was relieved.

...

T: All these are very important issues that scare you from growing up, transitioning from being a girl to being a woman, and being a woman there that hurts you and prevents you from progressing in a way that makes you feel bad. The most important thing is to be able to notice and talk about these things before they come to the point of harming themselves in some way. It is like there is a pain there, and you can only relieve it by cutting it. The part that shows we are women is our genitals, and you cut it off. And you cut it a few times later. On the one hand, you said that you feel safe when I hold it. On the other hand, there is both a protection situation and a very extreme point of destruction. It was very important that you shared this.

Session 29. In this session, a peak point was observed for Perceptual Processes and a decline point for Positive Emotion. After the last session, there was also a slight decrease in Cognitive Processes and a sharp increase in Negative Emotion. The patient begins the session by mentioning her aggression towards others and its expression on her body by harming herself physically. The decline in Positive Emotion and the sharp

increase in Negative Emotion may be understood with her inability to process the negative feelings and the thoughts after being left alone by her parents. The whole session is dominated by her anger, and talking about aggression which emerges with feeling left alone, leads her to recall and try to symbolize her traumatic experience with increasing sensual references. The fact that she recalls taking pleasure during the event confuses her, and she tries to understand how the event has happened, whom she has to be angry with, and whom she should blame. On the other hand, the therapist appreciates and verbalizes her anger towards herself by constantly emphasizing that the responsibility is on the other side.

Ms. C.: I am getting very angry; I am getting incredibly angry. I get angry very quickly at even the smallest thing, I want to hurt the other party, but I do not want to do it, so I hurt myself. ...

T: So it is like it will not go away if I do not cut it.

Ms. C.: Huh... I am trying to reflect that pain there.

T: I wonder if there is another way to experience that pain?

Ms. C.: How?

T: Without somehow hurting yourself. Something so deep and so intense that you want to see blood, you want to hurt yourself. And that makes you laugh.

...

Ms. C.: ... Because I cannot stand it when someone says something to my mom. I came that day; I cried a lot, I am having a crisis, I came, and there is another scratch. When I press it, I feel comfortable when it hurts like this.

T: So she does not get angry; you get it, you experience that anger. As if what was done to your mother was done to you.

...

T: It is like you are going through periods like when you were first alone before. It was so intense back then that it is a bit worrisome now, maybe.

Ms. C.: Actually, it has always existed, but when at least one of my parents was with me, the thoughts did not come to the surface much. I was experiencing it, but somehow I got through with them. I was going out and talking.

T: You need them to be with you physically.

...

Ms. C.: Like my friend. We talk, I tell her my memories. Like my dream friend. No matter what I say, she does not say it is nonsense. We are having fun; she never talks, she always listens to me, of course, when I am talking about something. But she asks the questions. I am telling him about the boy I fell in love with for the first time, I told him yesterday.

T: It is a bit like a relationship similar to our relationship here. Usually, you tell me, I ask questions from time to time, and I listen.

Ms. C.: Maybe, I never thought of it that way, but it is true.

T: Maybe you need a little more to meet, talk, be listened to.

...

T: At this time, it seems like you introspect quite a lot with being alone. You are looking at yourself, how you are looking, how you are walking. You seem to be more interested in yourself right now.

Ms. C.: But it also happens when there is someone. It was happening when I was coming with my father. I was not alone when I came today, I had my mother, but still, I have that feeling.

T: It seems to have increased with your mother starting work.

Ms. C.: There was already, but of course, it may also have an effect. I am actually trying to get used to being alone.

...

Ms. C.: ... My mother bought me shorts; I sweat a lot in hot weather. Anyway, I am normally a person who sweats a lot. I was going to wear it to bed yesterday; we have a bed, anyway our house is small. My cousin and I slept in that bed. I thought of that moment when I went to bed in shorts. I was with a singlet; I probably had underwear; I do not remember what it was. That is how I was walking around the house. My mother was making me walk like that. Was I sick? There was something. As if my skin was touching each other, that moment came to mind.

T: This situation has been quite significant for you. The way you look at men, the way you keep that anger inside. You have a very intense, very severe anger that you have been carrying ever since. Anger that does not know how to get out.

Ms. C.: At that moment, I cannot figure out what I was thinking about while doing it. I am embarrassed at the scene, but this is how it happened. My mother and brother

went somewhere. He came; he normally lives in City X. I am just walking around with an athlete or something; I am young. Our house has two bedrooms. I cannot remember how he took me from the room with the TV; he took me to that room, we slept in our room, and then he kissed me on the lips; I do not remember why or how he kissed me. Then what I did was anyway getting on my nerves. There were kissing scenes like this in TV series, my God. I said, you cannot kiss like that; I said it is like that. I showed him. I did not know what it was like, what it meant.

T: In fact, you may have liked it without realizing it.

Ms. C.: I do not know; it is getting on my nerves. At that age, I did not know what it meant.

T: It is not very clear what it is, but in fact, sexuality is something that has existed since a very young age. You have to grow up to understand this, but those feelings are there. You might have liked it. You may have wanted it somehow. Children are curious; they imitate and want to do what they see.

Ms. C.: I thought he loved me.

...

Ms. C.: When there is a contact, the child looks with curiosity, so every child looks. Something like that happened because I did not know what it meant. What he did was important; after all, he was a teenager. Way older than me. He is currently married and has a child. For what purpose he did it. Maybe something had happened to him since I was walking around with an athlete. He has a sister my age and a sister a year or two older than me.

...

T: You are interested in what is on his mind, what is on your mind? So what is the thing that is so important to you?

Ms. C.: Men's thoughts make me sick to my stomach. I wonder if he felt the same for me when he was that age.

T: Sexual issues make you nauseous... What you are talking about now is actually mutual. First, you talked about what he did, then what you showed him in the way you see it in the series. So both can be effective in your current thoughts, feelings. You may be angry with yourself for doing this.

Ms. C.: I am angry. I am very angry at how I did such a thing.

T: But the curiosity at a young age, wanting to do the things you see, to try, all these things are very normal.

Ms. C.: Well, I did not want it to be like that. There is another issue I will tell.

The examination of these four sessions containing peak and decline points for the linguistic variables indicates that the middle phase of the psychotherapy process is where the processing of compelling emotions and thoughts especially about traumatic experiences takes place for the most part. Thematically, the conflicts between desires of separation and dependence, sexualization and desexualization, recognition and regression are identified as common in these sessions. Furthermore, it is found that the therapeutic relationship is mostly based on positive transference and countertransference as in the whole process which facilitates the therapeutic work and good outcome. On the other hand, it is observed that there are noteworthy negative

transferential and countertransferential moments in these sessions. These findings will be discussed further in the next chapter.

CHAPTER 4
DISCUSSION

This study primarily focused on examining the trend changes in several linguistic categories, which were selected considering the relevant literature, over the process of long-term psychodynamic psychotherapy with a traumatized patient. The relevant literature revealed that the language usage of a traumatized patient was not usually explored through the psychotherapy process. The language usage of a traumatized patient has been examined in the literature by particularly focusing on the written narratives of traumatized samples in terms of the discourse and the linguistic categories. By conducting quantitative single-case research and considering the psychotherapy process, this study aimed at addressing this gap in the literature. The results of the quantitative analysis were detected and examined further qualitatively to be able to discuss the content of several sessions while mainly paying attention to the relational context of therapeutic work and the verbalization of the traumatic experience.

According to the results of the study, the model constructed in line with multiple code theory did not present significant changes in trends over the psychotherapy process. The follow-up study revealed that all linguistic variables excluding Body Words and Nonfluencies showed statistically significant quadratic trends. In the first section of this chapter, trends of change for these variables will be discussed further. The sessions, which included peak and decline points on the quadratic curves of the linguistic variables, were identified for the content analysis. In the second section of this chapter, these sessions within the middle phase of the process will be delved into by considering above stated clinical excerpts. The final two sections will discuss the limitations of this study and suggestions for future studies and its clinical implications.

4.1. TRENDS OF CHANGE

The results of this study revealed that all variables excluding Nonfluencies and Body Words presented statistically significant quadratic trends over the psychotherapy process. Although it was not statistically significant, Body Words showed a considerable quadratic trend of change. These quadratic trends will be discussed in detail for each variable to capture their individual trajectories over the process by virtue of the literature regarding trauma narratives and the psychoanalytic theory, which were discussed above elaborately.

In their article, Hayes et al. (2007) pay attention to the common assumption in researching the psychotherapy process, suggesting that change is linear and continuous. This assumption reveals itself in the statistics and research designs determined to observe whether change occurs over the psychotherapy process, not how it happens. By giving reference to relevant literature on post-traumatic growth and dynamical systems theory, Hayes et al. (2007) highlight "the significance of nonlinear and discontinuous change across areas of psychology" (p. 715). According to their study, change in psychotherapy can be linear and gradual as commonly expected, but also nonlinear and discontinuous. The reason behind this is that psychotherapy presents "a stable environment and increases patients' readiness and resources for change, but also introduces a variety of interventions to interrupt, challenge, and destabilize old patterns" (p. 717). For studying these nonlinear and discontinuous change patterns, it becomes necessary to conduct "multiple assessments over time" and examine "individual trajectories of variables rather than group averages" (p. 717). It allows the researcher to comprehend how change occurs over the process. As Schiepek et al. (2003) suggest, change in the form of discontinuous transitions occurs following destabilization and critical fluctuations in the psychotherapy process.

In line with the study of Schiepek et al. (2003), Tedeschi and Calhoun (2004), in their study on post-traumatic growth, highlight the period of destabilization and distress, which is hypothesized to be followed by increasing comprehension and

positively reinterpretation of the traumatic experience. Nishith, Resick, and Griffin (2002) utilized the curve estimation regression to trace the type of change over the cognitive-processing psychotherapy process of a sample of women who have PTSD due to rape. Although they examined the curves of PTSD-related symptoms' course, they found out that the curvilinear pattern provided the best explanation for the course. At the beginning of the process, PTSD-related anxiety increased and then decreased significantly. In this study, the linguistic variables were not constructed to assess symptom reduction over the psychotherapy process. But, the individual trajectories of these variables indicate a similar nonlinear pattern for each of them, excluding Nonfluencies, over the process.

Body Words and Perceptual Processes, which are variables representing the arousal phase of the referential process, increase until the middle phase of the process with considerable fluctuations. As Murphy, Maskit, and Bucci (2015) proposed, bodily sensations are triggered in that phase. In line with their study, Alvarez-Conrad, Zoellner, and Foa (2001) observed the increased usage of somatosensory detail in trauma narratives. After the destabilization period, the fluctuations decrease sharply in the middle phase of the process. The stabilization of Body Words and Perceptual Processes in the middle phase means that these bodily sensations are worked on, and the indescribable material gets processed with its symbolization and reorganization over the process. In the last phase of the process, they decrease again with considerable fluctuations, which may be explained by the approaching termination. On the other hand, the fluctuations throughout the sessions can be evaluated together with the characteristics of the adolescence in which emotional and physiological instability turns out to be common (Bailen et al., 2019). The fact that these variables tended to decrease after the middle phase can be seen as a part of the good therapeutic outcome suggesting the patient managed to work the subsymbolic material.

As mentioned before, Nonfluencies is the only linguistic variable that does not present a significant quadratic relationship. Thus, it is possible to argue that the patient experiences the arousal phase mainly in the body and the perception, instead of

disfluencies of the language or feeling of emptiness. Two factors may be explanatory for this situation. First, the childhood adversity that the patient experienced is sexual harassment which includes the invasion of bodily integrity. As van der Kolk (2014) stated, the traumatic experience leaves an imprint on the body, comprised of fragmented emotions and senses. Ensink et al. (2017) pay attention to the fact that sexual abuse has a negative impact on the mentalization capacities of children. In that sense, the affective regulation and mental processes get disrupted, and the effect of the traumatic experience turns out to be reflected in the body. Thus, the subsymbolic material which gets aroused in the arousal phase is dominated by bodily sensations instead of hesitations within the language. Another factor is that the patient is an adolescent having difficulties in the individuation and separation process which is one of the essential developmental challenges of adolescence (Blos, 1967). As an adolescent, the patient experiences subsymbolic processes mainly in the body and senses with the hormonal changes that adolescence elicits.

Negative Emotion has a trend of increasing until nearly the middle phase with fluctuations. The fluctuations indicate the destabilization regarding the negative emotions in the first phase of the process. Destabilization can again be evaluated together with the emotional instability that adolescence brings. In the middle phase, both the level and the variability of Negative Emotion decrease, which indicates that negative emotions are worked on to be contained and symbolized. In their study on trauma narratives, Wardecker et al. (2017) suggested that the presence of negative emotion language in narratives predicted better psychological outcomes. So, the fact that Negative Emotion tended to increase until the last phase of the process can be evaluated as an indicator of a good therapeutic outcome suggesting that the patient revealed her negative emotions to be able to make sense of them. It is also important to note that the patient works on the traumatic experience in this phase. In the last phase of the process, the level of Negative Emotion decreases with lesser fluctuations. The decrease can be understood by taking account of the forced termination and the struggle that the patient experiences regarding separation. The negative feelings which were

evoked by the fact of the forced termination lead the patient to hide them unconsciously to be able to separate from the therapist. It is worth noting that these feelings increase significantly in the termination session.

Positive Emotion has a trend of slight decrease until the middle phase with limited fluctuations. From the middle phase to the end of the sessions, there is a trend of increase in positive emotions, although highly fluctuating. Destabilization throughout the process indicates the emotional instability and the affect dysregulation that adolescence elicits. On the other hand, the traumatic experience may also be evaluated as disruptive for the affect regulation by leading the patient to adapt maladaptive strategies for self-regulation (Bucci, 2007), such as self-cutting. The relative stabilization in the middle phase indicates that both negative and positive emotions are worked through over there. It is also worth noting that the curves of negative and positive emotion function as opposed to each other. The trend of increase after the middle phase can be interpreted in two ways. On the one hand, it can be understood with the presence of the forced termination and the struggle of the patient regarding separation. In other words, the patient may be trying to give an impression that she feels good with increased positivity to be able to separate from the therapeutic relationship by repressing negative feelings. On the other hand, several studies (Jaeger et al., 2014; Wardecker et al., 2017) on trauma narratives suggested that using more positive emotional language predicts better psychological outcomes. In that sense, the increase in Positive Emotion can be evaluated as an indicator of a functioning therapeutic work with affects getting symbolized.

Cognitive Processes has a slight increase trend until the middle phase of the process. In the middle phase, the variation also decreases with an observed stabilization. This stabilization indicates that there is a continuous effort for cognitively comprehending and processing the bodily and affective material which were triggered in the therapeutic process. After the middle phase, the fluctuations between sessions increase sharply with a decreasing trend. With the fact that the termination approaches, it turns out to be more challenging for the patient to process her feelings and thoughts

cognitively. In other words, it is possible to argue that the patient struggles to use cognitive mechanisms continuously with the emergence of overwhelming emotions or bodily sensations, especially in the last phase of the process. Cognitive processing is highlighted by many researchers (Murphy et al., 2015; Pennebaker, Mayne, & Francis, 1997) as crucial for the good outcome of any therapeutic process, including working with trauma. Thus, the general decrease trend in cognitive processing may be evaluated as reflecting the unsuccessful outcome of this process. That is exactly why the content analysis is needed to look closely at the psychotherapy process to be able to evaluate the findings of trend analyses with a particular focus on the middle phase of the process.

4.2. CONTENT ANALYSIS

Four sessions that contain significant peak and decline points for the linguistic variables were selected from the middle phase of the process, and excerpts from them were presented to discuss their content in detail by particularly focusing on trauma and the therapeutic relationship. The middle phase is identified as noteworthy for the content analysis due to the fact that it contains transition points that are "marked by discontinuities in individual symptom trajectories" and "likely to reveal factors that mobilize and inhibit change and to client change processes" (Hayes et al., 2007, p. 721). Before beginning to examine these sessions, the trauma of the patient and the therapeutic relationship will be presented briefly by considering the whole psychotherapy process.

The initial traumatic experience of the patient is that in her childhood, she had been abused sexually by her cousin, who was much older than her. With the end of the latency stage and the beginning of adolescence, the memory of this initial event which was not comprehended and assimilated by the patient at that age, turns out to be triggered by the losses that she experienced recently and the fear of being alone and excluded by others. As suggested by Freud (1895) with the concept of Nachträglichkeit, the traumatic memory becomes available for her by a "deferred act

of understanding and interpretation" (Leys, 2000, p. 20). Throughout the sessions in which she begins to narrate the traumatic event, she tries to make sense of this experience by repeatedly describing it with a similar plot and the same words. Although this type of repetition may be considered passive in nature with duplicating traumatic memory in the sessions without aiming toward resolution, the containing therapeutic relationship becomes useful for her in restructuring and contextualizing the traumatic experience through the process. Thus, it is possible to argue that these passive repetitions, with the help of containing therapeutic relationship, become active by aiming to represent multiple aspects of the experience and trying to understand and symbolize perspectives of others, including the perpetrator, instead of having a single and unified narrative about the event. At the same time, the expansion of the perspectives about the experience through the psychotherapy process suggests that the patient switches from the metonymic testimonial mode to metaphoric testimonial mode to represent the experience (Amir, 2016).

Throughout the sessions, the therapeutic relationship is based on positive transference and countertransference with a solid therapeutic alliance. Because the patient is in the adolescence period with being unable to reach the object constancy, she cannot integrate the good and bad aspects of both internal objects and external relationships. By hiding negative feelings for the therapist and being defensively positive, the patient idealizes the therapist to "preserve the need for a good object and an expelling of the bad "self-object" core via the mechanisms of splitting and projection in an attempt to externalize the hate and aggression" (Tuttman, 1984, p. 42). The traumatic experience may also be considered effective in the intensification of a bad object and bad self. In that sense, the preservation of the therapist as a good object and a good self in relation to that can be taken as indicating progress through the psychotherapy process even though it is idealized.

As mentioned in the previous chapter, Session 20 contains a peak point within the psychotherapy process for Negative Emotion. The most common affect in the session is aggression. The anger of the patient is two-sided: to himself and others. On

the one hand, she is angry with others who only recognize her to make fun of her or get angry, and also with her relatives who cannot notice or understand her problems. On the other hand, she is angry with herself because of being incompetent as a fearful person, not being able to stand on her own two feet, and disappointing her mother.

Throughout the session, the therapist attempts to recognize, contain and verbalize her feelings, including her aggression. The therapist makes an important intervention in this session. While the patient talks about her disappointment at upsetting her mother, the therapist asks her to express how she feels as an individual, independently of her mother's feelings. Thus, the therapist aims to lead her to recognize the presence of her feelings and question her inner world, independently of her mother and also others. At the same time, the therapist encourages her to express how she wants to be in the future to lead her to explore her desires as an individual. Since the separation and the individuation means jeopardizing the symbiotic relationship with the mother (Pine, 2004), her fears increase during the session drastically.

The fears of the patient as an independent individual in a world that is felt to be dangerous and the aggression against others who are unable to recognize her feelings can be considered in relation to her traumatic experience. On the one hand, she feels insecure in the outside world, especially because of male violence resulting from the traumatic experience. On the other hand, her anger resurfaces against the parents, who could not protect her from the traumatic experience. The fact that the therapist manages to create a safe space where all emotions, including anger, can be discussed explains the increase in Negative Emotion in this session. The issues that triggered the unprocessed material regarding trauma may also be considered another factor explaining the increase.

In terms of the therapeutic relationship, there is a dominance of positive transference and countertransference, which may also be evaluated as a factor for encouraging the patient to express and work on her negative feelings in the session. Although the therapist contains and provides meaning for her aggression throughout the session, it is possible to argue that the therapist becomes overwhelmed by

containing her anger from time to time which is reflected through the changes in her tone of voice and her insistence on confrontation towards the end of the session. This can be seen as the emergence of negative countertransference.

As mentioned in the previous chapter, Session 21 contains a peak point for Cognitive Processes and a sharp increase for Positive Emotion. It may be meaningful to consider this session together with the last session to make sense of the discontinuities in variable trajectories. The despair emerging from the negative feelings that dominated the previous session is attempted to be extinguished defensively by activating cognitive processes and positive affect. The phantasy about a significant other who suddenly appeared in this session can also be interpreted as a part of the defensive process.

Although the patient begins the session talking about her fears and aggression against others who are unable to recognize her feelings, her positive emotions seem to increase significantly while mentioning her teacher, who makes her feel valued. It allows the patient to comprehend cognitively and verbalize what she needs in her life, which is the presence of others who may understand her.

As mentioned before, her emerging desires for a significant other get experienced by the patient with hope and despair at the same time. On the one hand, phantasies about a significant other reveal her desire for separation and individuation. At the same time, it is possible to argue that she imagines the presence of another relationship with whom she may transfer her feelings regarding her therapist, who is willing to understand her. On the other hand, the patient has a hard time imagining a realistic relationship with a man which will involve sexuality. Therefore, she dreams of a distant possibility which makes her feel hopeless about the future. The despair of imagining a relationship with a significant other can be understood considering the impact of her traumatic experience. The fact that she had been sexually abused in her childhood leads her to be afraid of men and disgusted by sexuality which is a common reaction after sexual victimization (Badour & Feldner, 2016).

The emerging desires for separation and individuation with imagining a close relationship may be considered an explanatory factor for the increase in Positive Emotion. The therapist challenges her throughout the session to question the difference between fantasizing unrealistically and acting in the outside world. The confrontative effort of the therapist encourages the patient to process her feelings and thoughts cognitively, which may explain the peak point in Cognitive Processes.

In terms of the therapeutic relationship, there is again a dominance of positive transference and countertransference, which enables the patient to disclose her emerging desires and comprehend them cognitively. The therapist is observed to be overly occupied with the fact that the phantasies of the patient are unrealistic. On the one hand, it allows the patient to process and reorganize her wishes cognitively, but on the other hand, the therapist cannot contain and reflect her desire regarding separation and individuation, which was emerged for the first time in this session. In that sense, the therapist struggles to process and contain aggression of the patient to separate, which in return manifests itself in the continuous effort of the therapist to force the patient to confront as a part of negative countertransference.

Session 28 contains a peak point for Body Words and Perceptual Processes. The sharp decrease in Cognitive Processes and Negative Emotion is related to the dominance of bodily and perceptual processes in the session. It turns out to be more challenging for the patient to comprehend and verbalize the arousal that she experiences during the session.

Throughout the process, it is observed that the patient has difficulty in processing feelings like shame, guilt, and envy. The dissociation defense mechanism comes into play when such feelings arise and cannot be processed at that moment. At the beginning of the session, she talks about embarrassing events containing involuntarily physical contact with other people. A momentary shift of consciousness is observed in the session when she cannot process the experience of shame that emerged with talking about these events. Her attention gets primarily focused on the doll's hair in the room and then on her own hair. The affect of the experience, which

cannot be processed and symbolized, becomes tolerated with an increased focus on the bodily and perceptual processes, which explains the peak points for related variables in one respect.

The increased attention on her own hair reveals her conflicting desires about individuation and dependence, sexualization and desexualization, not growing up and becoming an adult. The patient talks about her fears regarding men who may notice her body and recognize her as a woman. It leads her to attempt to avoid her emerging sexual desires and hide her femininity. These fears can be considered together with her traumatic experience, which not only impairs her sense of safety but also leads her to be distanced from her sexuality even to the point of wanting to annihilate it by cutting her genitals. Examining these issues during the session led her to talk about her traumatic experience.

The collaborative working on the traumatic experience to make sense of it leads her to question whether it really happened or not. As Boulanger (2007) states for the traumas of childhood, the patient has difficulties retrieving related memories with a continuous sense of self-doubt regarding the past. In that sense, the dissociative impact of the experience manifests itself in the isolated fragments of the memory consisting of affective states, bodily and sensory perceptions (van der Kolk & Fisler, 1995). Thus, the therapeutic effort for making sense of the traumatic experience by verbalizing bodily and sensory perceptions regarding the event turns out to be another explanatory factor for the increase in Body Words and Perceptual Processes. It is important to note that the patient experiences subsymbolic processes related to the traumatic experience mainly through bodily and perceptual processes. The fact that the patient is in the adolescence period while struggling between desires of separation and dependence and the sexual nature of the traumatic experience may be explanatory factors for the dominance of these processes.

In terms of the therapeutic relationship, there is a dominance of positive transference and countertransference, which may also be seen as a factor for

encouraging the patient to express and work on her bodily and sensory perceptions to organize the dissociated aspects of the traumatic memory.

Session 29 contains a decline point for Positive Emotion and a peak point for Perceptual Processes. There is also a sharp increase in Negative Emotion. As mentioned before, the patient begins the session by talking about her anger towards others which gets redirected onto herself in the form of self-harm. The therapist, together with the patient, explores alternative ways of experiencing the pain instead of harming herself. The negative feelings that the patient cannot regulate are attempted to be processed mainly through the body and senses. The increased attention on body and senses is one of the explanatory factors for the peak point in Perceptual Processes. It can also be interpreted as the continuation of the effort to process the arousal manifested in the last session while working on the traumatic experience. In other words, the attempt of providing symbolic meaning for the subsymbolic response (Bucci, 2007), which emerged in the last session, continues in this one.

The decline point for Positive Emotion is related to the loneliness that she experiences with her parents leaving the patient by herself. It can be said that being left alone triggers traumatic pain that has not been processed yet. The feeling of being left alone is related to traumatic pain in two ways. Firstly, the patient was left alone at home when she lost her family elders at a young age. Secondly, her parents were not there with her when she was sexually abused. Both situations make her afraid of being left alone and aggressive against others who left her alone in the face of atrocities.

The focus on her aggression during the session causes her to recall and question the reality of the traumatic event. In other words, the patient tries to construct a unified narrative about the event by reviewing how the event happened, how she felt during it, and why the perpetrator might have done such a thing. Remembering that she took pleasure during the event confuses her regarding whom she has to be angry with, herself or the perpetrator. As suggested by Boulanger (2007), self-doubt remains at the center of recalling the traumatic memory. It can be also claimed that aggression manifests itself with the feeling of disgust which may be considered as a reaction to

trauma (Hathaway et al., 2010), for both her sexuality and the perpetrator. Working on the issues related to pleasure and sexual desires can be seen as another factor explaining the peak in Perceptual Processes. On the other hand, the therapist emphasizes that it is normal for her to take pleasure during the event and the responsibility of the event is on the perpetrator while encouraging the patient to make sense of the aggression that she is hesitant to redirect to herself or the other.

In terms of the therapeutic relationship, there is a dominance of positive transference and countertransference, which facilitates the working on the negative feelings and the subsymbolic response of the patient related to the traumatic experience. However, it is possible for this session to claim that the patient transfers feelings of anger onto the therapist that she felt toward her parents due to being left alone. In one part of this session, the patient talks about the emergence of different voices in her inner world. One of them, as the therapist has also interpreted, takes over the role of the therapist when the patient is alone and not in the therapy room. In this respect, it can be said that in her current situation where she feels left alone, she transfers her anger onto the therapist, who disappears the moment she leaves the room, and embraces her as an inner voice with this anger. These feelings of negative transference are not getting verbalized in the session. In that sense, the unsymbolized feelings regarding the therapeutic relationship may also have an impact on the subsymbolic response of the patient, including perceptual processes.

4.3. CLINICAL IMPLICATIONS

The main clinical implication of the study is that the language usage of a traumatized patient is worthy of attention in terms of being able to represent the changes in the psychotherapy process. Another implication is that change in psychotherapy may not always be linear by pursuing discontinuous and nonlinear patterns, as seen in the quadratic graphs of linguistic variables within this study.

The nonlinear patterns of linguistic variables reveal the importance of the middle phase in the psychotherapy process. The intensity of therapeutic work in this study increases significantly in the middle phase of the process, as transference and countertransference issues get more complicated and memories of traumatic experiences emerge thoroughly to be worked upon and processed. In that sense, it is necessary for the therapist to be wary of transferential and countertransferential reactions, especially in the middle phase of the process. Recognizing and working on these issues while providing a safe therapeutic space for related feelings and thoughts to be emerged and be expressed is critical for the therapeutic outcome.

The patient experiences subsymbolic processes of the arousal phase mainly in the body and the perception, instead of with disfluencies or feeling emptiness. The experience of sexual harassment and the fact that the patient is an adolescent may be explanatory factors for the dominance of bodily sensations in the arousal phase. Thus, it may be clinically noteworthy to focus on bodily sensations while working with adolescents who have been harassed in their past.

4.4. LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

The first limitation of the study is that it only focuses on the language of a traumatized patient through the psychotherapy process quantitatively to track down the referential process and the changes in her narrative. Although the content analysis paid attention to the role of the therapist in the psychotherapy process, the language of the therapist may be examined quantitatively in further studies to explore the complex interaction between the language usages of both parties and identify the linguistic features of the therapist's discourse which may be influencing the outcome of the psychotherapy process.

The second limitation arises from the number of sessions conducted and analyzed in this study. Although quantitative and qualitative analyses of 43 sessions revealed meaningful results, statistically more meaningful analyses could have been

obtained if the number of sessions was higher. At the same time, it would have led this study to evaluate the outcome of the process more precisely.

Another limitation of the study is related to the abovementioned issue about the number of sessions. As mentioned before, the therapy process was terminated forcedly due to the decision of the therapist to move abroad. The forced termination might have affected the distribution of some linguistic variables. Thus, it may be argued that the results of the study may be influenced by this limitation. In that sense, it may be important for further single case studies on this subject to examine a long-term psychotherapy process that was organically terminated with an increased number of sessions.

Another limitation arises from the design of the research. As mentioned before, single case studies are useful in assessing and analyzing the psychotherapy processes in detail, but at the same time, they do not enable making generalizations from the results of one study. Although the aim of this study was not to present generalizable results, it may be useful for further studies to repeat this research model with an increased number of sample and sessions to comprehend the language of a traumatized patient better and generalize the results. Because the number of sessions is not high, the cross-correlations between linguistic variables were not examined in this study. Thus, further studies may examine them to predict significant relations between them influencing the outcome of the psychotherapy process.

Lastly, another limitation arises from the usage of the LIWC instrument in the study. As mentioned before, LIWC is not particularly designed for studying the psychotherapy process, with its categories being inadequate to detect the context and the complex interactions of the therapeutic dyad in their usage of language. In further studies, it would be better to use other models such as Computerized Referential Activity and Therapeutic Cycle Model, which were specifically designed for the investigation of the language in the psychotherapy process. For example, this study failed to present a significant result for Nonfluencies variable. On the other hand, these

different models offer a more advanced measurement for the disfluencies in the language by detecting repetitions.

Several suggestions were presented while discussing the limitations of this study. Within the framework of this study, six more suggestions can also be mentioned. First, some sessions were selected in this study to examine the clinical content qualitatively. Further studies may aim at analyzing the complete sessions qualitatively to discuss the clinical content and context with regards to the language usage of the patient in detail. Second, this study approached trauma globally by analyzing the changes in language usage through the whole psychotherapy process quantitatively. Further studies may approach trauma locally, as Brewin (2016) suggested for the analysis of trauma narratives, by explicitly marking the sessions in which the patient talks about her traumatic experience specifically, and then the changes in the linguistic variables while talking about trauma may be examined quantitatively in these marked sessions. Thus, the effectiveness of psychotherapy may be discussed in terms of the symbolization and reorganization of the traumatic experience through the process. Third, future studies may examine the same model for different traumatized patients who worked with the same psychotherapist. In that sense, the psychotherapist factor may be controlled. Fourth, this study was based on a long-term psychodynamic psychotherapy process. Future studies may examine the trend changes in the language usage of a traumatized patient in other psychotherapy processes, which are conducted according to different therapeutic approaches and theoretical orientations, such as exposure-based therapies. This would allow for observing the patterns of change in therapies with different approaches and orientations. Fifth, future studies may examine another single case with similar complaints and traumatic history to compare the results of this study by focusing on language usage. Sixth, this study mainly conceptualized trauma as an intrapsychic phenomenon. Future studies may prioritize a relational perspective to examine qualitatively both the therapeutic relationship by being attentive to ruptures and the relational aspects of the participant's traumatic experiences.

CONCLUSION

In this study, the language usage of a traumatized adolescent in a long-term psychodynamic psychotherapy process has been examined quantitatively and qualitatively. The results differ from the literature regarding trauma narratives in terms of patterns of change in linguistic variables, which are claimed to be linear. Instead of linear patterns of change, discontinuous and quadratic curves are estimated for the changes in linguistic variables, excluding Nonfluencies. The reason behind the differentiation arises from the fact that the studies on trauma narratives solely focus on written narratives of traumatized individuals at different times, whereas examining the narrative of a traumatized patient during the psychotherapy process requires considering other factors as well.

The results of this study indicate that unprocessed subsymbolic feelings, which are related to the traumatic condition and also transition into adulthood, are worked upon in the middle phase of the psychotherapy process with increasing symbolization and reorganization. With the approaching termination, these processes slow down with increasing positive feelings. These words of the patient in the last session represent the ongoing transformation within the inner world of the patient:

"Here is the rehearsal, the stage, I express myself here, I speak, I reveal my inner world, it's like I started doing this in normal life."

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