

## Semantic Expressions of the Body Boundary Personality in Person-centred Psychotherapy

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### Abstract

This study is based on the assumption that the exposure and internalisation of social values, and behavioural expectations represent the most important influence in the formation of body boundary finiteness (Fisher & Cleveland, 1958) and the development of psychological disturbances (Rogers, 1951, 1961). Given this relationship between body boundary formation and Roger's influence on the development of body psychotherapy, this correlational study examines the use of words and changes in body boundary finiteness of twelve patients attending person-centred psychotherapy. It does this by measuring the strengths of associations between barrier imagery, as measured using the Body Type Dictionary (BTD) (Wilson, 2006), and the general semantic content, as measured using the Linguistic Inquiry Word Count text analysis program (LIWC) (Pennebaker, Booth, & Francis, 2007), as well as progressive psychotherapy sessions in the verbal behaviour of low and high barrier patients. The findings of this study might benefit body psychotherapy practitioners to obtain a deeper insight into the body boundary and its regulatory function of inter- and intra-psychic processes.

*Keywords:* Body boundaries, psychotherapy, semantics, primordial cognition, person-centred psychotherapy

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This article aims to explore whether the clarification of internalised familial and social values would stimulate changes in patients' body boundary finiteness. Individuals typically differ in their body boundary awareness. Particularly, the exposure and internalisation of familial, stable and secure values and behavioural expectations are assumed to represent the most important influence in the formation of bodily boundaries (Fisher & Cleveland, 1958). Although exposure to a stable and secure family environment is typically perceived to be a fortunate occurrence, Rogerian person-centred theory (1951, 1961) states that the internalisation of values that are incongruent with the true self contribute to the development of psychological disturbances. Given the theoretical relationship between body boundary formation and Rogerian person-centred theory, patients should experience changes in their body boundary finiteness within an empathic psychotherapeutic process. Such changes in body boundary finiteness would represent some empirical support related to the effectiveness of psychotherapy to bring about changes in the body boundary awareness as well as indicating how body boundary awareness is embodied in the language patients use within the psychotherapeutic context. Out of this context, this study might be helpful to

practitioners of body psychotherapy to further their understanding of the intra- and inter-psychic functions associated with the body boundary personality.

### **Fisher and Cleveland's Body Boundary Concept**

Fisher and Cleveland (1956, 1958) observed that individuals vary in the appraisal of their body boundaries to the extent that there is considerable variation in the firmness or definiteness persons ascribe to their body boundaries. At one extreme is the individual who views his body as clearly and sharply bounded, with a high degree of differentiation from non-self objects and the opposite pole is the person who regards his body as lacking demarcation or differentiation. (Fisher, 1970, p. 155).

Fisher and Cleveland reasoned that individuals would project their phenomenological experience of their own body boundaries onto their environment. Therefore, individuals with more definite body boundaries would show a greater tendency to direct their visual attention to the protective and enclosing features in their environment, as opposed to individuals with less definite body boundaries.

In a series of empirical studies using projective tests, including the Rorschach inkblot test (Rorschach, 1921), Fisher and Cleveland developed a manual scoring system that measured the frequency of words that related to the definiteness and permeability of an individual's body boundaries. barrier imagery emphasised the protective and enclosing features of the boundaries of a definite structure and surface, whereas penetration imagery related to the fragility and permeability of definite boundaries. Based on this scoring system, a high frequency of barrier imagery corresponded to a high barrier personality, whereas a low frequency of barrier imagery indicated a low barrier personality. Examples of barrier responses were *"a striped zebra"*, *"a woman wearing a high-necked dress"*, *"a tower with stone walls"*, *"a man smoking a pipe"*, and *"a pregnant woman"*, and examples of Penetration responses included *"a man climbing though a window"*, *"an amputated arm"*, *"an open mouth"*, and *"a bleeding leg"*.

Most importantly, Fisher and Cleveland (1958) suggested that an individual's degree of body boundary finiteness is correlated to the social values and behavioural expectations learned from interactions in family environments. For example, mothers of high barrier personalities scored lower on maladjustment and rigidity scales than mothers of low barrier personalities. Based on this result, Fisher and Cleveland (1958, pp. 259-260) interpreted that individuals with definite body boundaries would have mothers that provided a secure model and strong values as well as the ability to maintain stable and intimate relationships, whereas individuals with less definite body boundaries would grow up in family atmospheres characterised by instability, insecurity and tension. Although high barrier personalities might be construed as a favourable personality trait compared to the low barrier personality, it has to be noted that Fisher and Cleveland's observation of high barrier patients with rheumatoid arthritis showed reservations in expressing negative emotions, such as anger and frustration. The focus on enclosing peripheries and the rigid appearance of bodily stiffness might, on a psychosomatic level, reflect a defensive function by containing and controlling these negative emotions that are perceived as unacceptable, overwhelming or threatening. The body functions, then, as an enclosing container "whose walls would prevent the outbreak of these impulses" (p. 55). If also not explicitly stated by Fisher and Cleveland (1958), the extreme development of high and low body boundaries might be perceived to result in defensive forms of affect regulation, whereas body boundaries in the middle range on the high-low barrier personality continuum might represent more functional forms of regulating emotions.

These findings are also consistent with psychodynamic theories that perceive early socialization experiences to represent one of the strongest influences on the formation of a coherent self and bodily schema (Ogden, 1989; Bick, 1968, Winnicott, 1971). Thus, individuals with coherent self and bodily schemas are assumed to communicate their internal mood states to their social environment, whereas the inhibition to express one's internal experiences is assumed to indicate dissociation from one's emotions and thoughts (Bollas, 1987). Based on the Freudian theory (1923) that perceives a relationship between the body and the unconscious, Cariola (2015) identified that autobiographical memories of high barrier personalities used more words associated to primordial mental activity, such as group references, somatosensory processes, and spatial references. In contrast, low barrier personalities showed increased use of semantic content related to conceptual thought, such as self-reference, as well as affective and cognitive processes. Primordial mental activity and conceptual thought represent similar concepts to the Freudian (1900) modes of cognitive functioning that differentiate between the primary and secondary processes. Primary process is concrete, irrational, unrelated to spatio-temporal constraints, and free from social and moral conventions. It is also the principal awareness of young children, and it has also been associated with the cognitive functioning of Altered States of Consciousness, including dream, meditative, mystical and drug-induced hallucinatory states. In contrast, secondary process is abstract, related to the principles of grammar and logic, time and space, social and moral conventions, and it is the cognitive functioning of older children and adults.

## **Rogerian Person-centred Psychotherapy**

### **Rogers' core conditions**

Person-centred psychotherapy employs a non-directive approach emphasising the therapists' use of reflection as a means to summarise what the client expresses about their feelings and thoughts, thus their phenomenological experiences are fully acknowledged by the therapist. Most importantly, Rogers (1961) stressed the notion of the psychotherapeutic climate as a pre-requisite for a deep understanding by the therapists of their clients and for the desired psychotherapeutic changes to occur. Through the psychotherapeutic processes that depend substantially on three core conditions — 1) the therapist's congruence or genuineness, 2) unconditional positive regard, 3) empathic understanding — patients will be supported to gradually assume more inclination to trust their intuitions, values, needs and desires. This growth enables patients to find their phenomenological self and develop a stable and healthy self-concept, in addition to recognising their personal worth that is independent of external approval.

### **Reich's Bodily Armour**

Rogers' (1951, 1961) person-centred approach to psychotherapy can be construed as a foundation for psychotherapies that use body awareness or movement, including body psychotherapy, gestalt psychotherapy, dance/movement therapy and bioenergetics. Body psychotherapy perceives the body, mind, internal and perceptual processes to be intertwined aspects of the self-experience and grounded intersubjective meaning that are explored and enacted within the psychotherapeutic relationships through direct physical contact and expressive behaviour (Röhrlich, Gallagher, Reuter, & Hutto, 2014). The mind-body focus of such psychotherapeutic approaches facilitates "a movement inwards" (Davis, 2012) as a means of being aware of and experiencing internal processes in the present rather than in the past; this inward focus is thought to facilitate an authentic experience of emotions and feelings as part

of a self-actualisation process (Behr & Becker 2012). In particular, Rogers (1961) emphasized that psychological changes would result in experiential shifts and physical loosening of the organism to the extent that the body would manifest patients' moments of self-actualization (Fernald, 2003). In this sense, Rogerian therapy influenced body psychotherapy in becoming person-centered by focusing on the experiential and embodied inner self situated within the here-and-now. Although verbal psychotherapists might assume a stronger theoretical level by focussing predominantly on patients' verbal content, as pointed out by Leijssen (2006), humans are essentially interacting bodies "and we are confronted with the body as a metaphor for the whole self; therapy with 'no-body' is impossible" (p. 127).

Consideration of the mind-body relationship in psychotherapy was first introduced and popularised by Wilhelm Reich (1897-1957) (e.g., Carleton, 2002). Consistent with Fisher and Cleveland's (1958) assumption that the body boundary would embody the sum of all social and behavioural internalisations, as well as representing a container that inhibits the externalization of unacceptable emotions, Reich's (1945) "*Character Analysis*" argued that the contracted musculature and hardened surface of body armour holds repressed instinctive processes, such as emotions and actions. These instinctive processes are perceived to be unacceptable in relation to societal moral expectations and values. According to Reich (1970), the body is comprised of three layers: the first layer relates to the expression of prevalent social values and conventions, such as conscientiousness and politeness; the second layer relates to an individual's unconscious and repressed drives, which are embodied in contracted musculature; and the third layer relates to the biological experiences and processes of the true self (see also Conger, 2005). Given the discrepancy among these layers, Reich (1945) argued that the hard body shell is the representation of these discrepancies, not only within the individual but between the individual and the outer world. The body armour provides a chronic barrier that wards off anxieties that are generated by the conflict between the repressed instinctual processes and the moral demands of the outer world. The resulting lack of awareness, or 'contactlessness', of these repressed instinctual demands is thought to be one of the most important contributing factors in the development of psychological disorders. Through Reich's psychotherapeutic process, the patient is able to trust the expression of repressed instinctual material, reduce the defensive structure, and dissolve the rigid body armour.

## Hypotheses

Given that previous research demonstrated that high barrier personalities use semantic content associated with primordial mental activity in the written narration of everyday and dream memories (Cariola, 2015), the first hypothesis (H1) predicted that barrier imagery would correlate positively with semantic content associated with primordial thought, such as group references (i.e., first-person plural pronouns and inclusion words), perceptual process (i.e., seeing, hearing and feeling), and spatial references (i.e., relativity, space and motion), bodily processes (i.e., body, health, sexual and ingestion) and references related to personal concerns (i.e., work, achievement, leisure, home, money, religion and death). barrier imagery would be negatively correlated with semantic content related to conceptual thought, such as self-reference (i.e., first-person singular pronouns), verb forms (i.e., common verbs, auxiliary verbs, present tense, past tense and future tense), affective processes (i.e., positive emotions and negative emotions) and cognitive mechanisms (i.e., insight, causation, discrepancy, tentativeness, certainty, inhibition and exclusion words) in the combined spoken psychotherapy transcripts. Correlations of semantic content consistent with the research

hypotheses would then demonstrate external validity in which an association between barrier imagery and primordial mental activity can be generalised to naturally occurring language behaviour and to experimentally derived autobiographical memories. In relation to body psychotherapy, the statistical relationships between these semantic items and barrier imagery might also be indicative of a patient's increased or reduced bodily armour (Reich, 1946).

Additionally, psychological theory proposes that the internalisation of social and behavioural values, or the lack thereof, influence the development of the body boundary formation (Fisher & Cleveland, 1958; Rogers, 1967). Considering that person-centred therapy aims to support patients to trust and become consciously aware of their organismic experiences and values, the second hypothesis (H2) predicted that progressive psychotherapy sessions would be correlated positively with barrier imagery in low barrier patients but correlate negatively with barrier imagery in high barrier patients. In this sense, this study is based on the assumption that the expression of the true self as well as the formation of the body boundary lies in the middle range rather than the extreme ends on the True- False Self and high-low barrier personality continuums.

## Method

### Data

Patients' verbal behaviour in psychotherapy transcripts were sourced from the online 'Counselling and Psychotherapy Transcripts' database (2012) which provided the data for this study. According to the accompanying 'Counselling and Psychotherapy Transcripts' handbook (2012), the psychotherapy transcripts were provided by practicing therapists who adhered to the American Psychological Association's Ethics Guidelines, and were selected by an editorial board of distinguished practitioners and academics. The transcript database of the Rogerian person-centred approach to psychotherapy, however, is the most comprehensive because it offers a range of transcripts of individual therapies based on twenty consecutive sessions, with the twentieth session representing the final session. In contrast, the transcripts of the other psychotherapeutic modalities were often provided with only a few consecutive sessions. Out of this context, the transcripts selected for the purpose of this study were based on patients that attended twenty psychotherapeutic sessions.

The psychotherapy transcripts used in this study were based on 12 patients (7 men and 5 women) who attended 20 consecutive once-weekly Rogerian person-centred psychotherapy sessions. The demographic information of the patients, including age range, sexual orientation and marital status, can be seen in Table 1.

*Table 1:*

*Demographics of patients' age range, sexual orientation and marital status*

Gender	Age Range			Sexual Orientation		Status		
	11-20	21-30	31-40	Heterosexual	Bi-sexual	Single	Engaged	Married
Male (N = 7)	1	5	1	6	1	6	-	1
Female (N = 5)		4	1	5	-	3	1	1

The 12 person-centred psychotherapy transcripts had a total text length of 1,699,534 words with a mean of 3,836.42 words per psychotherapy transcript ( $SD = 3,057.79$ ). The therapists' verbal behaviour had a total text length of 358,137 words, with a mean of 1,577.70 words per psychotherapy session transcript ( $SD = 678.36$ ). The patients' verbal behaviour had a total text length of 1,341,397 words with a mean of 6,210.17 words per psychotherapy session transcript ( $SD = 2,773.22$ ).

### Measures and Analysis

The Body Type Dictionary (BTD) (Wilson, 2006) is a computer-assisted dictionary that calculates the frequency of semantic items categorised as barrier imagery and penetration imagery, based on Fisher and Cleveland's (1956, 1958) scoring system of body boundary awareness (Cariola, 2014a, b). In total, the BTD contains 551 words for barrier imagery, 231 words for penetration imagery, and 70 exception words that prevent the erroneous matching of ambiguous word stems that are assigned to 12 semantic categories (Wilson, 2008).

The Linguistic Word Count Inquiry text analysis program (LIWC) (Pennebaker, Booth, & Francis, 2007) calculates the frequencies of predefined types of semantic content. The LIWC is based on approximately 4,500 words and word stems that are assigned to 80 semantic categories. The LIWC dictionary is hierarchically organised so that one word can be ascribed to different main categories and sub-categories. The semantic categories are based on the following categories: 'Function Words', 'Psychological Processes' and 'Personal Concerns'. Each of these categories has sub-categories. For example, as noted by Tausczik and Pennebaker (2010, pp. 27-28), the 'function words' category includes to the 'articles' sub-category, which is made up of three words (i.e., a, an, the). Grammatically based categories are based on the classification of semantic items that relate to objective grammatical conventions; however, the semantic content of other categories, such as 'emotions', is made of semantic items that rely on the researchers' subjective judgment.

For the computerised content analysis, the BTD and LIWC were applied to the texts using the PROTAN content analysis software program, which measures occurrences of category-based lexical content in texts (Hogenraad et al., 2003). The PROTAN computes the frequency rate, which indicates how many total lexical items match the dictionary categories (Wilson, 2008). The frequency rate used in this study for both linguistic and grammatical variables was based on the following formula:

To contextualize a better understanding of the quantitatively derived results, samples of patient's verbal behaviour were selected randomly to demonstrate the use of semantic content within the psychotherapeutic settings and to assess how the semantic content aligned to existing psychotherapeutic theories and constructs.

### Statistical analysis

Initial descriptive statistics regarding the frequencies of barrier imagery revealed that the first sessions of the psychotherapy transcripts had a mean 1.72 of and a median of 1.69 ( $SD = .66$ ). By drawing on the methodology applied by Fisher and Cleveland (1958), the median value of 1.69 for the barrier imagery frequency of the first psychotherapy session was used to divide the psychotherapy transcripts into two patient groups that used high and low frequencies of barrier imagery at the beginning of their therapy. Therefore, psychotherapy beginnings with barrier scores less than the median value ( $< 1.69$ ) were categorised as

'low barrier patients', whereas barrier scores greater than the median value ( $> 1.69$ ) were categorised as 'high barrier patients'.

After the psychotherapy transcripts were divided into two equal parts, the descriptive statistics showed that the low barrier patients ( $N = 6$ ) had a mean of 1.13 ( $SD = .24$ ) and that the high barrier patients ( $N = 6$ ) had a mean of 2.30 ( $SD = .29$ ) for the barrier frequencies in the first sessions of the psychotherapy transcripts. As a result of this median division, 6 of the 12 patients were classified as high barrier patients and 6 were classified as low barrier patients. The high barrier patients were 3 men aged 11 to 30 years and 3 women aged 21 to 40 years. The low barrier patients were 4 men aged 21 to 30 years and 2 women aged 21 to 40 years.

A Spearman rank correlation coefficient (Spearman, 1904) was used to explore the strengths of association between barrier imagery and the semantic content of the LIWC in the patients' overall verbal behaviour. The test was also used to explore the strengths of associations between the progression of sessions and barrier imagery in the psychotherapy transcripts of low and high barrier patients.

### Results

Consistent with the first hypothesis (H1), the results demonstrated that barrier imagery correlated positively with semantic content associated with primordial mental activity (Tables 2 and 3).

*Table 2: Positive Spearman rank correlation coefficients of positive correlations between barrier imagery and semantic content of the patients' verbal behaviour in the combined psychotherapy transcripts. Notes: \*  $p < .05$  level, \*\*  $p < .01$  level:*

Linguistic variable	barrier imagery
1 <sup>st</sup> plural pronouns	.275**
3 <sup>rd</sup> singular pronouns	.194**
Articles	.396**
Prepositions	.235**
Family	.251**
Anger	.221**
Inhibition	.138*
Inclusion	.191**
Swear words	.182**
Biological processes	.324**
Body	.348**
Health	.202**
Ingestion	.337**
Work	.270**
Leisure	.383**
Home	.519**
Money	.444**
Death	.224**
Relativity	.446**
Motion	.367**
Space	.395**
Time	.223**

Table 3: Negative Spearman rank correlation coefficients between barrier imagery and semantic content of the patients' verbal behaviour in the combined psychotherapy transcripts. Notes: \*  $p < .05$  level, \*\*  $p < .01$  level:

Linguistic variable	barrier imagery
Pronouns	-.278**
1 <sup>st</sup> singular pronouns	-.226**
Impersonal pronouns	-.356**
Verbs	-.326**
Auxiliary verbs	-.328**
Present tense	-.180**
Negations	-.353**
Affective processes	-.363**
Positive emotions	-.376**
Anxiety	-.179**
Cognitive processes	-.422**
Insight	-.408**
Causation	-.160*
Discrepancy	-.158*
Tentativeness	-.257**
Exclusion	-.241**
Perceptual processes	-.268**
Feeling	-.316**

Group references, such as first-person plural pronouns (e.g., we, us, and our), and inclusion words (e.g., and, with, and include) showed a weak positive association with barrier imagery. The use of collective group references resonates with a lack of self-other differentiation and over-inclusive thinking. In this sense, self-expectations and internal experiences are over-generalised in relation to others, such as the patients' therapist and partners, which can be observed in the following phrases [Patient 3]: "*Are we supposed to sit here and just tell anything that comes to my mind?*" or "*Well we were both more or less elated because we both want to get this problem resolved, so we are quite hopeful*".

In contrast, barrier imagery was weakly negatively correlated with personal pronouns (e.g., I, them, and her) and therefore indicated an emphasis on conversational topics that relate to the self rather than others. Particularly, the weak negative correlation between barrier imagery and first-person singular pronouns (e.g., I, me, and mine) implies a reduced self-focus. By drawing on person-centred psychotherapy (Rogers, 1967), a reduced self-focus would be indicative of a blocked interpersonal communication, or so-called defence mechanism of denial, in which patients are unaware of their feelings. Here, conversations maintain a superficial tone, referred to as phatic conversations (Malinowski, 1972), and contain a restricted level of self-disclosure by focusing on objects and, in relation to the psychotherapeutic context, problems that are non-immediate and external to the self (Rogers, 1961). An increased self-focus emphasises internal mental processes that relate to affective and cognitive states and changes, whereas an increased usage of group-references and non-immediate others associated with barrier imagery, relate to interpersonal material processes (Halliday, 1985). Consistent with this view, there was a weak positive association between barrier imagery and third-person singular pronouns (e.g., she, her, and him), indicating an increased non-immediate, or extended, other-focus related to the patients' exploration of their personal relationships. A high prevalence of third-person singular

pronouns might also represent a staging strategy to regulate their discomfort of being the focus in the conversational situation (McCarthy, 1991) as well as to justify their feelings and concerns. This strategy indicates reduced personal responsibility and dissociation from statement ownership (Hancock et al., 2008) within the psychotherapeutic context, which can be observed in the following example [Patient 6]:

COUNSELOR: *“And that leads you to be very - well you said skeptical - I guess also leery about what’s going to happen here”.*

PATIENT: *“Well yeah well part of my experiences comes with working as a counselor with myself. Which I am doing now. And I am working in state and in hospitals and so forth. And realizing that these guys that I am working with are you know my superiors. Do not know me. Or know every little. And like just the resident psychiatrist I went to last year I knew damn well I knew more about physiology or just about people than he did. He did not - he would give me back the next week what I had tried to tell him the week before completely reversed. Completely ignoring what I had meant. And just I guess being basically insensitive. Which just makes me feel like I am not getting ahead of things just unwinding. Not exactly or continuing my therapy”.*

Person-centred psychotherapy assumes that psychological disturbances are acquired through the process of familial and social introjects that are incongruent with the values and experiences of the phenomenological self. This process precedes the embodiment of these values within the body boundary (Fisher & Cleveland, 1958). Therefore, a weak positive association between barrier imagery and family-related references (e.g., daughter, husband, and aunt) highlights the inflated focus on family related themes, as demonstrated in the following patient’s statement [Patient 11]:

*“Because I was already invited by Jodie’s mother over to dinner. See, it was almost like - and I sat down and thought about, tried to think about that, too. And, I was thinking...because I felt this before, that my mother might have rejected me, like my mother did not really care. You know I think I told you that last week”.*

Barrier imagery correlated moderately positively with home references (e.g., apartment, kitchen, and house), which mirrors a focus on the immediate and intimate social environment and indicates an emphasis of container-schematic precepts — e.g., [Patient 110]: *“And, I guess what happened was, some kids had rung this old lady’s doorbell, so she had come up from the basement to answer the door, and her husband had seen the kids running away from the door, and so he knew who they were and so he told her, and she came over and told my neighbour. And, the neighbour got all mad, and she was sitting there yelling at two of her own kids and one of the people across the street’s kids, and she screamed at him about, oh, maybe she sent him home”.*

A weak to moderate positive correlation between barrier imagery and references to personal concerns, including work (e.g., job, majors, and Xerox) and money (e.g., audit, cash, and owe) relates to a materialistic and achievement orientated focus, e.g., [Patient 124] *“I - although I enjoy sort of basking in the accomplishments - well, based on when I go back home. Like, I have spoken quite a few times to my - well, the old high school keeps inviting me back. I was the first graduate in class”, and in relation to monetary references, “So, I remember I went out and I bought her something from K.M. Hightower’s...like I spent like a whole part-time pay check, which is like 15 bucks. It’s, well...but I mean it was still a substantial amount for just like a small housewarming gift for somebody who is not even a relative or really that close”. This materialistic and goal-orientated focus could possibly relate to being socially positively evaluated by others based on superficial values rather than on personal inter-personal qualities. Conversely, a weak positive correlation between barrier imagery*

and leisure words (e.g., cook, chat, and movie) is consistent with the creative expression and unstructured behaviour associated with primordial mental activity — e.g., [Patient 2] “*So, I read his psychology book. However, he does not because I do not do it that much. I am not interested in that much, you know. I like to read, but I like to read novels historical novels, and he does not*”.

As expected, barrier imagery was weakly to moderately negatively associated with affective processes (e.g., happy, cried, and abandon), including positive emotion (e.g., love, nice, and sweet) and anxiety words (e.g., worried, fearful, and nervous) that are related to the reduced conscious awareness of both positive and anxiety-related emotional experiences and the communication to the therapist. Although a heightened primordial mental activity typically relates to reduced affective processes, barrier imagery showed a significant weak positive correlation with anger words (e.g., hate, kill, and annoyed) and swear words (e.g., damn, piss, and fuck), which indicate an emphasis of anger-related experiences associated with a body boundary finiteness within the psychotherapeutic context. These anger emotions can be directed towards the self in the form of references related to self-harming, e.g., [Patient 6]: “*And, you know, it was like really stupid, but it was like about the third night within the last week that I woke up and wanted to cut myself, which is just really. Like I before that had gone through a fantastically long time*”, or the feeling of anger in relation to others, e.g., [Patient 27]: “*Well, I think to be worried about that is, it makes sense to me because I just I feel like if you are angry and you are angry while somebody is saying something to you, you ought to be able to tell them you are angry or express it or say something or do something*”.

According to Rayner (1995), aggression involves the actual or simulated activation of muscular movements associated with primordial mental activity to bring about a negation and separation as well as a reaction of perceived threats and a self-preservation function. Considering that high barrier individuals introjected their parental social and behavioural values, such as the socially unacceptable expression of rage and anger (Fisher & Cleveland, 1958), the expression of anger within the therapeutic context would facilitate an essential cathexis to explore interpersonally distressing experiences that result in a gradual resistance to maladaptive parental and social introjects (Fenichel, 1945; Freud, 1905). A resistance may be then perceived as an adaptive manifestation of the patient embodying an agent of change (Coghlan, 1993; Nevis, 1987) in which the patient would resist the learned masochistic submission to parental demands as a means to avoid interpersonal rejection, as well as the harsh criticism of the internalised sadistic parental super-ego (Freud, 1923).

Given that the inhibited expression of anger-related emotions has been associated with the stiffening of the body musculature in high barrier personalities (Fisher and Cleveland, 1958), the positive correlation between barrier imagery and aggression words might represent a psychotherapeutic feature of the previously repressed anger and the loosening of the conditioned punishment-reward behaviour to avoid socially rejecting and disapproving social judgment (Pennebaker, 1989; Pennebaker & Beall, 1986; Traue & Pennebaker, 1993). Accordingly, there was also a significant positive correlation between barrier imagery and inhibition words (e.g., block, constrain, and stop), which might be related to the inhibited expression of high barrier patients’ thoughts and feelings. In contrast, the weak negative correlations between barrier imagery and verbs (e.g., walk, went, and see), including auxiliary verbs (e.g., am, will, and have) and present tense verbs (e.g., is, does, and hear) indicates a reduced reality-based behaviour and now-and-here concern associated with primordial mental activity (Robbins, 2011).

Barrier imagery also showed a weak positive association with death-related references (e.g., bury, coffin, and kill), such as self-directed aggressive behaviour in the form of suicidal ideation, e.g., [Patient 6]: “*Well, when I tried to kill myself about two years ago or whenever it happened, and I saw*

a psychiatrist where I was when I got out of the hospital". Given the relationship between destruction and anger, as noted in the psychoanalytic literature (see Hurvich, 2003), the use of anger words and destructive death-related references might also be indicative of the presence of annihilation anxieties, such as through the use of death-thematic fantasies, e.g., [Patient 32] "I cannot conceive of it, and yet, personally — if everyone I knew now died, I think my life would be completely different because I would not have any expectations to live up to their expectations". Particularly, and consistent with Fisher and Cleveland's (1958) observation, Bowlby (1980) conceptualised death-related fantasies to represent patients' unconscious revenge and desire to hurt their parents. Such revenge would be motivated by parental rejection of the patients' authentic self.

Similar to affective processes, cognitive processes (e.g., cause, know, and ought), including insight words (e.g., think, know, and consider), causation words (e.g., because, effect, and hence), discrepancy words (e.g., should, would, and could), tentativeness words (e.g., maybe, perhaps, and guess) and exclusion words (e.g., but, without, and exclude), and negations (e.g., no, not, and never) were weakly to moderately negatively correlated with barrier imagery. Specifically, the reduced use of insight words, tentativeness and causation words indicate a lower presence of self-reflection and the sense-making processes of the content that is being explored within the therapeutic context. Similarly, low frequencies of discrepancy words and exclusion words indicate a reduced presence of complex cognitive processes to produce accurate accounts of experiences and insights. To some extent, the reduced usage of semantic content that is classified to measure cognitive processes may indicate a lowered neurotic defence mechanism of intellectualisation in which patients would avoid unconscious conflicts through the process of reasoning and logic (Freud, 1936).

Furthermore, barrier imagery was weakly to moderately positively correlated with biological processes (e.g., eat, blood, and pain), including references related to the body (e.g., cheek, hands, and spit), health (e.g., clinic, flu, and pill) and ingestion (e.g., dish, eat, and pizza), e.g., [Patient 3]: "She would be sleeping (Body) and wake (Body) up the next morning, I am dead tired (Health) because I laid there and worried all night about something I really did not need to be worried about. I used to chew (Ingestion) my finger nails (Body) clear back to the quick ...". The moderate to strong positive correlations with relativity (e.g., area, bend, and exit), including references related to motion (e.g., arrive, car, and go), space (e.g., down, in, and thin) and time (e.g., end, until, and season), as well as prepositions (e.g., to, with, and above), further reflect the psychosomatic characteristic and somatosensory impressions associated with primordial functioning (Robbins, 2011) — e.g., [Patient 124]: "How will I interact now (Time)? Why should I have done that? Why should not I have just come (Motion) in (Space) here and be honest? I hope I am being honest. However, just the thought that...". barrier imagery was also moderately positively associated with articles (e.g., a, an, and the), which correspond to the tendency of objectification, which reflects the concreteness in primordial mental activity (Bucci, 1997; Loewald, 1978; Mergenthaler & Bucci, 1993) and a heightened focus on surface-defining objects — e.g., [Patient 11]: "Not that I care about the fellow. It is just the point of the thing".

Conversely, barrier imagery was weakly negatively correlated with perceptual processes (e.g., observing, heard, and feeling), including feeling words (e.g., feels and touch), indicating a reduced receptivity to environmental sensory stimuli and lowered sensitivity of the external skin body boundary in spoken therapeutic discourses compared to written autobiographical memories (Cariola, 2015). This low activation of perceptual processes typically relates to conceptual thought (Robbins, 2011). Based on cognitive psychology, a deflation of sensory processes has also been identified as a marker of memory inaccuracies (Hernandez-Fernaud & Alonso-Quecuty, 1997;

Johnson et al., 1980; Schooler, et al., 1986). Within the therapeutic context, a reduction of perceptual processes might relate to discursive themes that are based on patients' fuzzy memory representations of their inter- and intra-psychic experiences that form part of their personal truths (Brainerd & Kingma, 1984; Reyna & Brainerd, 1998; Spence, 1982). A reduction of perceptual process is also consistent with the Rogerian (1961) assumption that individuals would defensively exclude insights that are inconsistent with their internalised value systems. Lower frequencies of perceptual process in heightened barrier awareness would then indicate patients' dysfunctional ability to acknowledge their internal and external reality, as well as their lowered ability to understand their own or others' implicit or explicit mental states. This decreased ability indicates a limited capacity to engage in self-reflective and mentalisation processes (Fonagy & Target, 1996).

### **Strengths of association between psychotherapy sessions and semantic content**

A Spearman rank correlation coefficient showed that in high barrier patients, progressive sessions were weakly negatively correlated with barrier imagery,  $r = -.216$ ,  $p < .05$ , but progressive sessions were not significantly correlated with barrier imagery in low barrier patients,  $p > .05$ . Therefore, the second hypothesis (H2) was only partly confirmed.

The reduction of barrier imagery in high barrier patients suggests that a supportive therapeutic environment that enables patients with previously heightened body boundary finiteness to clarify their parental and social introjects that were incongruent with the phenomenological self. The empathic and non-judgmental therapist allows patients to explore and reflect on their emotions and thoughts, including frustrations and traumatic experiences. This factor results in the lowering of the encapsulating body boundary. Particularly, the absence of punishing interpersonal judgment would result in the reduction of muscular sensitivity associated with a socially conditioned punishment-reward response (Fisher & Cleveland, 1958).

Given that body boundaries develop as a response to the internalisation of social values that are to some extent inconsistent with the patients' phenomenological self (Fisher & Cleveland, 1958), the nurturing and empathic environment of the person-centred therapeutic environment would encourage functional forms of self- and other-relating, as well as facilitating the patient to formulate values and behavioural responses that are congruent with the needs of their phenomenological self. A reduced body boundary embodies a functional self-other differentiation that might enable patients to acknowledge their feelings and rely on their own judgments and values, in addition to a greater capacity to trust others and to engage with their experiences. This functional body boundary would further allow patients to fulfil the potentials of their whole self.

### **Discussion and Limitations**

The results of this study confirmed some of the research hypotheses. Consistent with the first hypothesis (H1), barrier imagery positively correlated consistently with semantic content associated with primordial mental activity, such as group-references, biological processes, relativity and personal concerns. barrier imagery correlated negatively with semantic content associated with primordial thought, such as self-references, verbs, cognitive and affective processes. Because the correlations of barrier imagery in relation to the patients' verbal behaviour were consistent with the semantic tendency of the written narratives of everyday memories (Cariola, 2015), the results indicate an external validity of the semantic behaviour associated with barrier imagery. Therefore, the relationship between body boundary finiteness and semantic tendencies can be generalised to, both elicited written autobiographical memories, and naturally occurring psychotherapy-based language behaviour. Conversely, barrier imagery correlated positively with anger words,

which are typically associated with conceptual thought (Cariola, 2015). Given that the body boundary is assumed to represent a container of unexpressed anger and negative emotions (Fisher & Cleveland, 1958), such an inflation of anger words in relation to body boundaries might provide some evidence of the patients' frustrations of internalised parental values that constitute a thickening of the body boundary. The person-centred therapeutic approach would then represent a process in which the patient can express their anger and frustrations within a safe environment.

The results also demonstrated that barrier imagery was reduced in high barrier patients and that barrier imagery did not increase in low barrier patients (H2). This change in barrier imagery suggests that the empathic and unconditional acceptance of the therapeutic relationship in person-centred interventions enable patients to explore their emotions and insights in addition to ridding themselves of inauthentic values that are not congruent with the phenomenological self or their personality predispositions. This psychotherapeutic process resulted in changes of body boundary finiteness.

### Summary

The results provided some confirmation of the research premise that person-centred psychotherapy would clarify patients' social value systems and behavioural expectations that are embodied in the increased body boundary finiteness. In relation to Reich's (1945) concept of body armour, the results of this study indicated that individuals with a harder body shell tend to differ in their semantic expression from patients with a softer body shell. In this sense, the use of linguistic features may enable therapists to differentiate between patients with hard and soft body armours, and changes in linguistic features may indicate defensive mechanisms that are associated with the hard body shell being dissolved through the psychotherapeutic process.

Future research should also explore the relationship between patients' and therapists' verbal behaviour. One of the most important premises of the person-centred approach for a successful personality change is based on the functional therapeutic alliance that is characterised by empathy, unconditional positive regard and congruence (Rogers, 1951, 1961). In the role of an active and empathic listener, the therapist concentrates attention towards the patient and conveys in her or his mode of communication, such as the content and tone of voice as well as facial expressions and gestures, a cooperative and helpful attitude by understanding the patients' feelings (Fitzgerald & Leudar, 2010; Rogers, 1957).

Despite the theoretically grounded decisions that determined the methodological and statistical approaches, this study presented some methodological limitations, such as the effect size and sample selection. The notion of effect size represents a statistical weakness that impinges on the reliability of the results and the validity of their interpretation. Thus, the effect sizes used to explore the semantic differences between barrier personalities were often only small to medium, irrespective of the high levels of statistical significance. In this sense, the small effect sizes identified in this study highlight the importance of effect size values as statistical measure to assess differences between the experimental and null hypotheses (e.g., Gigerenzer, 2004; Michalczyk & Lewis, 1980). low effect sizes, however, represent an inherent and general problem in content analysis research and are thus not unique to the study.

Another weakness of the study is related to the data sample selection. The text samples used in these studies were to some extent opportunistic; for example, the online '*Counseling and Psychotherapy Transcripts, Client Narratives, and Reference Works*' database (2012) happens to contain a comprehensive set of person-centred psychotherapy transcripts. Thus, future studies should explore the behaviour of body boundary imagery and other semantic content in a wider

range of psychotherapy modalities, such as body psychotherapy, psychodynamic therapies, and gestalt psychotherapy, to mention a few. By investigating a wider range of modalities, the extent to which changes in body boundary awareness and semantic content might be more broadly generalisable. Given that this study is based on person-centred psychotherapy transcripts, the results of these studies cannot indicate the extent to which changes in verbal behaviours might be attributed to the patients' attendance to body psychotherapy sessions, but rather to the Rogerian modality.

## Conclusion

As shown in this study, patients with high body boundaries would benefit from the psychotherapeutic encounter to explore their authentic emotions and internal processes, whereas patients with low body boundaries might be able to internalize the supportive structures that are offered in the psychotherapeutic setting and thus to establish better forms of self -and other-relating. For example, high barrier patients would use more words that enable them to communicate their emotions and thoughts to the environment that are congruent with the phenomenological experience of the true self. In contrast, low barrier patients would use gradually more social references reflecting their increase sense of self-worth and a greater trust to engage in social interactions that are not a threat to the self but are perceived as reasonable caring social relations. Although this study theoretically aligns Fisher and Cleveland's (1958) body boundary concept with Reich's (1945) body armour, future studies should assess the relationship between body boundaries as measured using the BTM and the presence of bodily armour as assessed through body psychotherapy. A positive identification between these personality concepts would then also enable body psychotherapists to apply Fisher and Cleveland's (1958) body boundary concept as a diagnostic tool and a measure of therapeutic outcomes.

## BIOGRAPHY

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## WRITING ABOUT BODY PSYCHOTHERAPY

An invitation to write for us, with us, with support along the way. Your writing can contribute to and enrich the 'body' of critical and reflective content, as well as to the clinical expertise, in the 'field' of body psychotherapy.

### Whom can you write for?

We suggest that – for a professional article – you consider:

The EABP/USABP peer-reviewed **International Body Psychotherapy Journal** (for original work only): [www.ibpj.org](http://www.ibpj.org)

The peer-reviewed journal of Body, Movement and Dance in Psychotherapy (for original work only): [www.tandfonline.com/toc/tbmd20/current#.VBfpFS6wJRU](http://www.tandfonline.com/toc/tbmd20/current#.VBfpFS6wJRU)

**Or:** (for German language authors) **körper – tanz – bewegung**; Zeitschrift für Körperpsychotherapie und Kreativtherapie: [www.reinhardt-verlag.de/de/zeitschrift/51830](http://www.reinhardt-verlag.de/de/zeitschrift/51830)

(You will find the necessary “instructions for authors” on their various websites.)

**Or:** for something a bit more conversational: **Somatic Psychotherapy Today**:

<https://www.SomaticPsychotherapyToday.com>

**Or:** Something for a newsletter of your particular professional association, modality association, or national association in psychotherapy;

**Or:** A comment or a thread in one of the **Somatic Perspectives LinkedIn** group discussions, facilitated by Serge Prengel: [www.linkedin.com/somaticperspectives.com](http://www.linkedin.com/somaticperspectives.com)

**Or:** Possibly, a chapter for an edited book, on a particular theme, possibly like one of the series being published by Body Psychotherapy Publications (**BPP**):

[www.bodypsychotherapypublications.com](http://www.bodypsychotherapypublications.com).

**Or:** Something to be published somewhere else, at some other time, in a different medium; or for a personal internet blog; or . . . maybe just for your personal journal.

### What can you write about?

You can write about attending a recent Congress, or seminar, or about attending a different event; - or about your student thesis; - or your experience of writing your student thesis; - or a special or particularly interesting case history; - or an aspect of your personal therapy; - or about working with a particular client group; - or about a development of theory or practice; or - even about your reflections on the field of Body Psychotherapy.

### How to get started writing professionally?

There is an article in the journal of Body, Movement & Dance in Psychotherapy [www.tandfonline.com/doi/full/10.1080/17432979.2010.530060#.VBfsNC6wJRU](http://www.tandfonline.com/doi/full/10.1080/17432979.2010.530060#.VBfsNC6wJRU) (You can also find a free copy here.)

And there are some recent guidelines about how to write a professional Body Psychotherapy Case Study: [www.eabp.org/researchcase-study-guidelines.php](http://www.eabp.org/researchcase-study-guidelines.php). There are also many articles on the Internet (in different languages) about how to write.

If you want any further assistance with where to publish, or with the process of editing, or re-editing, or with the complications of the publication process, the following people may be able to offer you some help.

They are all professional body psychotherapists, editors and writers:

Nancy Eichhorn: [Nancy@NancyEichhorn.com](mailto:Nancy@NancyEichhorn.com)

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Sincerely,

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## **Squaring the Circle: Bridging the Gap Between Research and Practice About the EABP Collaborative Practice Research Network (CPRN)**

The awareness of the importance of fostering different models of research, particularly those linked more closely to the actual practice of body psychotherapy and those encouraging a two-way communication between researchers and practitioners, has led to the creation of the EABP Collaborative Practice Research Network.

This is an exciting new initiative to provide a forum for dialogue, debate and the development of innovative and creative research methods and projects that assist clinical practice and help body psychotherapy (and/or somatic psychology) to develop an empirical underpinning of its professional practice.

The aim is to broaden knowledge of the field of body psychotherapy through communities of practice and clinical research. It explores how a CPRN can transform perceptions of psychotherapy research and practice, strengthen connections between members, and encourage continuous development and co-creation among participants. This important initiative is an opportunity to make a significant difference within our profession and to develop – together – the foundations of both scientific and clinical practice research.

Specifically, we are planning to explore and develop, at local and international levels, a variety of strategies to support practitioners' research and look at what types of research potentially provide a broadening of our understanding and practice of psychotherapy, and how various types of research advance, improve and extend our knowledge of body psychotherapy. We will do this by bringing together practitioners and researchers from around the world, both online and face-to-face, to discuss ways of bridging the gap between clinical practice and research.

The committee has organized two symposiums in conjunction with the 2012 and 2014 EABP Congresses. The next symposium will be held during the 15th European Congress of Body Psychotherapy in Athens Greece, 13-16th October 2016.

We would like to invite you to join us and become part of this exciting and innovative initiative. If you are interested please contact Sheila Butler and Herbert Grassmann - [cprn@eabp.org](mailto:cprn@eabp.org)

EABP Science and Research Committee - Sheila Butler, Herbert Grassmann (chairperson), Frank Röhrich, Maurizio Stupiggia, Joop Valstar, Courtenay Young and Jennifer Tantia [www.eabp.org/research-scientific-committee.php](http://www.eabp.org/research-scientific-committee.php)

### **Strengthening links between practitioners and researchers at every stage of the process**

#### **News:**

The Society for Psychotherapy Research (SPR), an association devoted to the development and dissemination of research on psychotherapy has some exciting upcoming SPR events:

- *The International Annual Meeting in Philadelphia, USA* in June 2015 from 24th to 27th June.
- *The European Conference on Psychotherapy Research* in Klagenfurt, Austria, September 24th to 27th, 2015, and the planned 2016 International Meeting in Jerusalem, Israel in June 2016.

You might also like to browse the Psychotherapy Research Journal pages, especially the Special Issues and the online resources; there is a lot of information on the integration of theoretical, empirical and clinical knowledge in psychotherapy. See <http://www.psychotherapyresearch.org>

# INTERNATIONAL BODY PSYCHOTHERAPY JOURNAL

## THE ART AND SCIENCE OF SOMATIC PRAXIS

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