ABSTRACT. Production of meaning in the dialogical self emerges from the movement and combination of I-positions. In that sense, psychotherapy is a preferential setting for such processes to occur. Dialogical Valence (DiaV) is suggested as a novel measure of the promptness of I-positions to combine in the dialogical self. Derived from the Personal Position Repertoire, DiaV is intended to reflect the dynamics of the dialogical self. The study compared people under psychological treatment with controls on DiaV and neuroticism. Neuroticism did not yield significant differences, whereas DiaV was lower in the psychotherapy group. Findings are discussed in terms of the potential movements of the dialogical self in psychotherapy. The DiaV measure allows for data summarizing, between-subjects comparisons and assessment of psychotherapeutic process otherwise impracticable with standard dialogical self approaches.

Keywords: dialogical self, dialogical valence, psychotherapy, personal position repertoire (PPR)

Historically, conceptions of the self have shared some characteristics, such as the idea of a centered, static and individual structure, divorced from external objects and without reference to alterity. More recently, the idea of a decentralized, context-embedded and dynamic self structure has gained space. The dialogical self model (Hermans, 2001a, 2001b, 2002, 2003; Hermans & Kempen, 1998; Hermans, Kempen & Van Loon, 1992) figures prominently in that contemporary perspective.

Hermans et al. (1992) defined the dialogical self as “a dynamic multiplicity of relatively autonomous I positions of the self in an imaginary landscape” (p. 28). The self circulates among these spatially distributed positions, and imaginatively endows them with voice, allowing for dialogue between them. Each voice, like a character, can establish its respective narrative about me, and that dialogue constitutes a continuous, multifaceted, narratively structured, and decentralized self (Hermans, 2001a).

Despite a decentralized and potentially dynamic aspect of the self, transitional moments of unity are posited, not as a priori properties, but as provisional states (Hermans, 2001a). The transience of relationships between positions follows some patterns, implying the existence of hierarchies. The dialogue between positions is marked by relations of power and domination, thus causing the momentary existence of hier-

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archies. Relations between the positions can also become stereotyped, with the exclusion of some of the dialogue, which happens if "I" cannot move between them. Monitoring of positions leads to the emergence of a meta-position. At certain times, it is possible for me to take a position with such characteristics that it contributes more than another position for the integration and unity of the repertoire of positions of the self (Hermans, 2001b). Among the features of that position is the acquisition of a certain distance compared to the rest of the repertoire, which enables the interconnection of positions as part of the history of the individual. A meta-position also allows for a glimpse of the direction of change within the self, and to evaluate the importance of positions within a teleological perspective. There is a separation in the flow of experience, which places the individual as the author who sees himself as an actor in various situations of life. The development of a meta-position occurs through training, psychotherapy and other forms of self-reflection in daily life.

**A novel measure of the dialogical self**

In the dialogical framework, the self may be regarded as a system operating dynamically through the dialogical relations between its positions, although this state is not expected to be permanently maintained once achieved. In other words, a fully functional, optimum structure of dialogical self will be one that allows for movement among positions, and for dialogue between their multiple voices.

In that direction, we propose a novel measure, Dialogical Valence, that might contribute to the empirical exploration of dynamic aspects of the dialogical self model. Dialogical Valence, is hypothesized to account for the promptness of I-positions in an individual's dialogical self space to combine with one another. It is based on the Personal Position Repertoire (PPR), an instrument developed by Hermans (2001b) as a tool for mapping the relationships between positions in the dialogical self.

In order to support the rationale for the present study and its hypotheses, we next consider Valsiner’s (2002) conception of catalytic features of the dialogical self as a system aimed at re-combining elements. We then characterize the Dialogical Valence measure and introduce the psychotherapy as a context where the movements of the dialogical self might be evidenced.

**Valsiner and the auto-catalytic function of the dialogical self**

With an emphasis on human development, Valsiner (2002) suggested a model for the dialogue between positions of the self. According to the model, the self can initially produce hetero-dialogue, with real or imagined people, as well as self-dialogue. For Valsiner, these forms of dialogue occur in what he calls "the heart" of the dialogical self, the here-now-I system, or SEA. The SEA involves the union of the temporal (now), spatial (here) and agency (I) aspects of the self. From experience, the system provides an area within the field of dialogical self for the construction of meaning that will be used at
a given time. Thus, a restricted semiotic mediation within the field is available, but dependent on those experiences in the self realization. The self alternates between moments without hierarchic positions, producing a polyphony of voices, and moments in which the further differentiation between positions results in a growing organization. That qualifies it as a self-organizing system.

One of the most important concepts introduced by Valsiner (2002) is that of the dialogical self as a form of auto-catalytic system. In other words, the components of the self (I-positions) produce themselves while dealing with the flow of experience. Borrowing the notion from chemistry, Valsiner states that the production of meaning in the self occurs by the combination of elements. Two elements, however, do not combine without the help of a catalyst, a third element that serves to mediate the process. Thus, element A combines with the catalyst C, with the new pair combining with B later. A and B are combined, and then C disconnects, leaving behind a new element. The presence or absence of catalyst ends by showing which elements are combined. The result is the emergence of new positions in the self, characterizing a meaning-making process.

Continuing with the chemistry analogy, Valsiner (2002) postulates the synthetic production of new positions. The term means combining two parts into a whole that is new. The conditions for the occurrence of the synthesis reside between the polyphony and monologue. The author offers a typology of relations between positions in the dialogical self as an attempt to explain the process of development. Two types of relationships are linked to the stability of the self: mutual reinforcement, in which opposing positions reach a dynamic equilibrium, and polyphony, that results in proliferation and dispersion of positions. In the case of polyphony, there is an illusion of complexity, because of the large number of positions not significantly differentiated, but the actual result is lack of structure.

**Dialogical movements of the self in psychotherapy**

Psychotherapy might be one main link between theory and practice in dialogical theory. The psychotherapeutic process is conceived as a reorganization of the repertoire of positions of the patient’s self, allowing for greater flexibility and movement, toward reorganization. Reorganization of the repertoire can be facilitated by the innovation of the self, the construction of a dialogical space and the establishment and strengthening of a meta-position (Hermans, 2003).

The dialogical movement and reconfiguration of I-positions may consist of three procedures: 1) the introduction of a new position in the system, which necessarily implies a reorganization of the self; 2) the change of the accessibility of a position in the self, transforming the internal hierarchical relationships and providing the position with a more prominent voice; and 3) the formation of coalitions or clusters of positions, reinforcing one another and forming subsystems that lead to innovation.
Construction of a dialogical space involves the establishment of a relationship between psychotherapist and patient that fosters mutual reflection. A necessary condition for this is the existence of symmetry between the two sides, preventing the professional from dominating the conversation with his ideas. Note that the psychotherapist becomes, by definition, a new external position is presented to the patient’s self. Therefore, the professional occupies the role of a meta-position, especially earlier in the process.

**Dialogical Valence**

The existence of different voices implies the design of a space (where the voices move), and the consequent likelihood of dialogue between them. The dynamics of moving positions and voices in that space is central to the concept of Dialogical Valence (referred to as DiaV from this point on). Valence is here generally taken as the capacity of something to unite, react, or interact with something else. In that case, it will be the capacity of a person or thing to react with or affect another in some special way, for attraction or facilitation of a function or activity.

The dialogical self framework offers an attractive opportunity to examine the dynamic conditions of the self, that is, the self in motion. A condition par excellence for studying the self in motion is psychotherapy. This study takes the dialogical self model as a basis for understanding and coding personal positions as an indirect way to assess the experience of psychotherapy. It is oriented by one general question: Is the PPR a sensitive tool to assess the dynamics of the therapeutic process? According to the literature, it was expected that the PPR would be sensitive to the therapeutic process. Other specific questions include the following: Can the proximity or distance among the I-positions be measured? Do the relations of proximity and distance between internal and external positions reflect the stage of the treatment? Is there a correlation between an individual's neuroticism and patterns of relations among the voices of self? In order to answer such questions, we are suggesting a way to account for the dynamics of the dialogical self exploring new possibilities in the PPR. The suggested measure (DiaV) allows for comparisons and hypothesis testing regarding a relevant aspect of dialogicity, namely the promptness of I-positions to combine.

**METHOD**

**Participants**

Participants in this study were 40 Brazilian nationals between 20 and 45 years of age, sampled by convenience. They were divided into two groups: 1) Psychotherapy, and 2) Control group. The Psychotherapy group included participants who were in psychotherapy, for at least six months and no more than one year, at the time of data collection. The Control group comprised participants who had never held psychotherapeutic treatment. Table 1 presents a summary of sociodemographic data from the sample. Mean age of participants was about 30 years in both groups, with similar
standard deviations. The range was as small as possible within the scope of the sample. Participants were mostly female, especially in the Psychotherapy group (20% of men and 80% of women). Distribution in the Control group (40% men, 60% women) was as similar as possible to that in the Psychotherapy group. Level of education showed a similar distribution. While the Psychotherapy group had 10% of participants completed high school, 30% with incomplete higher education and 60% with a higher education degree, participants in the Control group had respectively 15%, 20%, and 65%.

Instruments

We used two instruments: The Emotional Adjustment/Neuroticism Factorial Scale (NFS) and the Personal Position Repertoire (PPR). The NFS is a scale based on the Big Five Personality Inventory, validated for the Brazilian population by Hutz and Nunes (2001). The scale consists of 82 items to be answered on a seven-point Likert scale. Dimensions assessed are: vulnerability (experience of suffering regarding being accepted by others), psychosocial maladjustment (aggressiveness, risky behavior), anxiety (emotional instability, mood variations) and depression (as a pattern of interpreting life events). The result is considered a measure of an individual’s psychological distress. The standard procedure for evaluating the NFS involves the sum of scores for different items divided into four sub-areas, resulting in four separate scores that are summed and then compared with sample means obtained in the validation and standardization of the instrument in Brazil (Hutz and Nunes, 2001). Examples of items are: I get stressed out easily; I often feel blue; and I change my mood a lot.

The NFS assumed two roles in this study. The first was to estimate neuroticism of participants, considering it has been a factor associated with various mental disorders (Costa & McCrae, 1992; Liebowitz, Stallone, Dunner, & Fieve, 1979). Moreover, the NFS was used as an aid to differentiate the two study groups, in addition to the initial
condition prescribed (being in psychotherapy for at least six months and not more than one year).

The Personal Position Repertoire (PPR) was developed by Hermans (2001b) and adapted to the Brazilian context by DeSouza, DaSilveira & Gomes (2008). The PPR is a tool devised for mapping the dialogical self and it is divided into two parts: Matrix of Internal and External Positions and Matrix of Valuations and Affect.

The first part is constituted by a list of 50 internal positions e.g. I as woman, I as man, I as professional, I as freedom seeker, I as sexual, I as idealist, my conscience, the child in myself) and 41 external positions e.g. my husband/partner, my wife/partner, my mother, a figure in my dream, somebody who is dead, a group in society to which I belong, my house) and asks the respondent to select those positions in which he or she recognized herself and which played some role in life. The participant could also add some positions he or she formulated. Next, the participant was invited to estimate the extent (on a 0-5 Likert scale, ranging from 0 = not at all to 5 = very considerably) to which in his or her experience a particular internal position is prominent (in a positive or negative way) relative to a particular external position. The result is a matrix of internal positions (rows) and external positions (columns) with the prominence ratings (extent of prominence) in the entries. In the second part, the Matrix of Valuations and Affect, the participant is set free to select two positions to tell a story from each one about her or his life, following a semi-structured interview protocol with questions for eliciting valuations. The second part of the PPR was not analyzed for this study.

The procedure was recorded in audio. Participants were asked to speak aloud what they were thinking while responding to the instrument. That specific procedure is expected to enhance researchers’ access to movement within the self. DeSouza, DaSilveira & Gomes (2008) highlighted limitations of the PPR to capture the movements of the dialogical self, suggesting that recording participants’ speech during the procedure could complement the standard results.

Procedure

Participants were recruited from psychological services (Psychotherapy group) and university classrooms or workplace (Control group). The instruments were administered individually at the service or on the premises of the Federal University of Rio Grande do Sul. Contact with each participant lasted from one to two meetings. The instruments were administered in the PPR-NFS order.

RESULTS

For this study, only quantitative data from the first PPR matrix were analyzed. The NFS scores showed a normal distribution, allowing for parametric tests. Analysis involved the comparison of means between the groups in overall score, as well as in dimensions of vulnerability, psychosocial disturbance, anxiety, and depression. Group
Table 2 Scores on the NFS and its four subscales, with t statistics by group (n=40)

<table>
<thead>
<tr>
<th></th>
<th>Psychotherapy (N=20)</th>
<th>Control (N=20)</th>
<th>t (38)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>97.17</td>
<td>14.66</td>
<td>95.29</td>
</tr>
<tr>
<td>Vulnerability</td>
<td>24.04</td>
<td>4.38</td>
<td>23.54</td>
</tr>
<tr>
<td>Psychosocial maladjustment</td>
<td>24.21</td>
<td>3.51</td>
<td>23.89</td>
</tr>
<tr>
<td>Anxiety</td>
<td>23.22</td>
<td>5.17</td>
<td>22.95</td>
</tr>
<tr>
<td>Depression</td>
<td>25.69</td>
<td>4.47</td>
<td>24.90</td>
</tr>
</tbody>
</table>

comparisons on the NFS are shown in Table 2. There were no significant differences between the groups, showing that the NFS measures, whether overall or in specific dimensions, did not distinguish between the psychotherapy and control groups in this sample. The means of the psychotherapy group, however, were somewhat higher, suggesting a small trend that could become clearer in a larger sample.

Given that each participant chooses his or her internal and external positions, standard PPR matrices are idiographic, seldom comparable across individuals. DiaV emerges from the PPR as a measure that can undergo quantitative analysis and summarize data from individuals and groups, yet saving the complexity of the PPR data. We used an average of the internal versus external positions ratings, obtained from the sum of ratings of each internal to external position value as used in the conventional PPR analysis. The computation can be expressed in the following formula:

$$\text{DiaV} = \frac{\sum (\text{IP} \leftrightarrow \text{EP} \text{ ratings})}{\text{XEP} \times \text{YIP}}$$

where DiaV is Dialogical Valence, IP refers to internal positions, EP refers to external positions, XEP is the number of external positions chosen by the subject and YIP, the number of internal positions. The places on the PPR matrix from where the values are taken are shown in gray in Figure 1.

The proposed DiaV measure provides values between zero and five and has two main features: first, it represents how the external and internal positions of the self are related in terms of their proximity, or their promptness to combine; second, it allows for comparisons between different participants, taking into account the variable number of positions chosen, and removing their weight from the value of the final measure. It is not
the intention here to reduce all the information generated by the PPR to a single variable, but to explore the many possibilities the instrument suggests, in an alternative, quantitative fashion. The overall score can also be used to represent parts of the matrix of the PPR. The researcher can choose certain items (for example, only characters that are part of the nuclear family, or those who relate to the individual in the workplace) and compute a score that represents that specific domain.

In the sample here analyzed, the distribution of DiaV scores tended to normality, allowing for parametric tests, as was the case of NFS. A t test compared the DiaV of psychotherapy and control groups, and its results are presented in Table 3. The control group ($M = 3.00; SD = 0.63$) presented a significantly higher DiaV mean ($p < 0.05$) compared to the psychotherapy group ($M = 2.54; SD = 0.79$).

Table 3 also depicts means and standard deviations of DiaV concerning close characters (CC) and distant characters (DC), a distinction made post-hoc in the course of analysis. We opted for a division involving kinship and proximity. CCs refer to figures closer to an individual, mostly external ones: my husband, my wife, my mother, my father, my brother, my sister, my grandfather, my grandmother, my children, my girlfriend, my boyfriend, somebody I love, my pet, and my house. DCs, in turn, comprise relatively distant figures, both in person and emotionally, such as my father-in-law, my mother-in-law, an acquaintance, fellow student, my teacher, my colleague, my child, my employer, my friend, a figure in my dream, a TV personality, a character in a book, a music personality, someone who is dead (participants were instructed to use this position only
Table 3

Table 3 presents the Dialogical Valence values for Psychotherapy and Control Groups, with t statistics (n= 40).

<table>
<thead>
<tr>
<th></th>
<th>Psychotherapy (N= 20)</th>
<th>Control (N=20)</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>t (38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialogical Valence</td>
<td>2.54</td>
<td>3.00</td>
<td>0.79</td>
<td></td>
<td>0.63</td>
<td></td>
<td>-2.02*</td>
</tr>
<tr>
<td>Close character</td>
<td>3.13</td>
<td>3.39</td>
<td>0.62</td>
<td></td>
<td>0.48</td>
<td></td>
<td>-1.38</td>
</tr>
<tr>
<td>Distant character</td>
<td>2.28</td>
<td>2.59</td>
<td>0.90</td>
<td></td>
<td>0.79</td>
<td></td>
<td>-1.04</td>
</tr>
</tbody>
</table>

*Note: * = significant at the .05 level (2-tailed)

for deceased persons who did not fit into another category), somebody in my imagination, somebody I admire, a problematic person, my ex-partner, someone I play sports with, my adversary, a group in society I belong to, a group to which I belonged in the past, another cultural group, my therapist, a supernatural being, and something in nature.

Mean DiaV for CCs was higher than for DCs in both groups, although statistical significance was not reached. That reflects a decomposition of the DiaV measure, suggesting a specific configuration of the relations among internal and external positions. CCDiaV is composed of a smaller number of positions, but those are more closely related to internal positions than those that make up DCDiaV.

Correlation between the NFS and DiaV granted no significant results for neuroticism along with its sub-scales and variables CCDiaV or DCDiaV. Predictably, CCDiaV and DCDiaV varied together, with a relatively high significant positive correlation ($r = 0.833; p < .01$). Correlation between total internal positions (YIP) and total external positions (XEP) chosen by the participants was also significant. That positive association ($r = 0.686; p < .01$) indicates that when the number of internal positions is high, the number of external positions also tend to be, and conversely, although less clearly that the correlation between CCDiaV and DCDiaV.

**DISCUSSION**

The general score of the NFS and the scores of its four dimensions did not distinguish among participants based on their condition (psychotherapy or control). That result can be interpreted in two ways: 1) the NFS was not sensible enough to reflect subtle variations among individuals; or 2) the NFS may have discriminative value for effects of dialogical contexts, but that would have been confounded by lack of a specific diagnosis of mental disorders of the participants in the control group. Nevertheless, it is possible that the NFS data would show clearer patterns in a larger sample.
The difference in DiaV between the two groups that the PPR is sensitive to the situation of psychotherapy, even with its results summarized to one relatively simplified measure. The higher means for the control group may be surprising, given the reasonable claim that psychotherapy is a way of enhancing movement in the dialogical self (Hermans, 2001b). Therefore, participants under psychotherapeutic treatment would be expected to present higher DiaV scores. We can advance two possible interpretations for the lower means in the psychotherapy group: 1) effects of participants being in an early period of treatment, in which changes in the self are still to come; 2) an indication of a rigidity of positions that makes some individuals more susceptible to general psychopathology and more prone to seek treatment; 3) psychotherapy does not provide the expected result of enhancing dialogicity. The latter is theoretically implausible, and the first two hypotheses could be further refined and tested by studies comparing individuals at different stages of psychological treatment, and by controlling for diagnosis.

Hermans (2001b) presented case studies in which changes in the repertoire of a client would occur over months or even years. Additional evidence for this interpretation comes from Lysaker and Lysaker (2002), which propose a specific structure of the self in schizophrenia, a psychopathology of often difficult and lengthy treatment. Thus, a low DiaV score might mean that individuals in psychotherapy are the most vulnerable, therefore more likely to develop psychopathology. The low DiaV score could suggest that the individuals in psychotherapy are presently in a vulnerable situation, more likely to disclose their sparse and rigid relations among positions of the self. In other words, a low score in DiaV may serve as an indicator of a situation in which psychotherapy is recommended, but has not yet lead to notable changes in the short term. At first sight, that proposition seems contrary to the theoretical underpinnings of dialogical self. However, we understand that progress in psychotherapy involves other issues not explored in the data, for example, modifying the configuration of the self, without necessarily implying an increase in overall relations among the different positions. In fact, that is what happens in the examples given by Hermans (2001b), where a position, first in prominence, becomes less linked to the others during treatment, while the others take a more prominent place in the configuration of self. This would lead to a homeostatic balance between positions, where compensation for some positions should leave the scene, opening space for others to speak.

Given the present results, one can also interpret that the obtained DiaV measure refers to a stable feature of the self. However stable a feature it might be, DiaV is theoretically related with the dynamic model of an auto-catalytic dialogical self advanced by Valsiner (2002). If the dialogical self is capable of change and innovation by means of rearrangements of I-positions, then a measure of the valence of those components (i.e.
their promptness to combine) may be useful in predicting outcomes of dialogical processes. After further explorations of its validity and sensitivity to dialogical contexts of change, such a measure will be valuable both in research and clinical applications focusing on dialogicity.

The difference between CCDiaV and DCDiaV also raises important considerations. It is present in the two groups and supports the idea of a hypothetical internal-external configuration in the dialogical self. The pattern consists of a self having some external positions highly related to several internal positions, and other external peripheral positions weakly related with few internal positions. Figure 2 illustrates it schematically, with the external positions “my wife” and “my children” as nuclear positions (a component of the CCDiaV score), linked to several internal positions, and “my boss” and “my co-worker” in peripheral positions (part of the DCDiaV score), linked only to a professional position.

The relational pattern between CCDiaV and DCDiaV shows a hierarchy among positions in the self. The pattern points to an organization that may have a central role in the functioning of the self. Lysaker and Lysaker (2002), when dealing with narrative structure in schizophrenia, suggest absence of a hierarchy of positions as a related disorder of the self. That absence would be responsible for cognitive disorganization in
individuals with schizophrenia. The data here discussed support the hypothesis of a hierarchy as inherent in the operation of the dialogical self. The positive correlations among the total of internal and external positions suggest a tendency of individuals to choose internal positions in an amount similar to external positions. It corroborates the hypothesis of the dialogical self as a network of positions, constantly fed by the environment and culture, a society of mind (Hermans, 2002). The positive correlation between CCDiaV and DCDiaV reinforces this idea, supporting the theoretical relevance of the pattern in Figure 2.

**Concluding remarks**

In this study we proposed a novel measure of an aspect of the dialogical self that would be of utter relevance in the clinical context, namely, Dialogical Valence (DiaV). In a preliminary attempt to establish construct validity of DiaV, we proceeded to test the extent to which it would be a sensitive index of the highly dynamic context for dialogical self movement that is psychotherapy. The measure did reflect the influence of the dialogical context of psychotherapy, even more effectively than a long established measure expected to do so, neuroticism. The issue of whether higher DiaV should be expected in the psychotherapy or in the control group claims for further exploration in future studies. There are no claims of generalization to the population, given the sample size and the convenience sampling criterion. However, the implementation of a quantitative analysis for comparisons between individuals and groups, pursuing a relatively homogeneous, quantitative representation of the dialogical self, seems to open a wealth of new possibilities in research and assessment of clinical processes.

**References**


