

## The Functions of Integration and Confrontation in Internal Dialogues

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**Abstract:** While integrative and confrontational internal dialogues (IDs) are often treated as opposing and numerous positive functions are ascribed to the former, this paper assumes that integration and confrontation are not mutually exclusive but independent processes. When exploring IDs that simulate social relationships and are described by different configurations of integrative and confrontational characteristics, canonical correlation analysis revealed that in *competitive dialogue*, the strong confrontational attitude of the dialogue's author is accompanied by the weak integrative attitudes of both ID parties. The more the ID is based on a rivalry between the parties, the lower the levels of bond, support, and insight functions are and the higher the level of substitution is. In *persuasive dialogue*, the confrontational attitude of the dialogue's author is combined with the integrative attitudes of both parties. The more the ID is based on persuasion, the higher the intensity of substitution, insight, bond, support, and self-guiding is. The findings suggest a synergistic effect of co-occurring integrative and confrontational attitudes in one ID.

**Key words:** internal/imaginary dialogue, integration, confrontation, simulation of social relationships, functions of dialogue.

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Imagine that your teenage child wants to do something you are against. You plan to have a serious talk with them and prepare by rehearsing the arguments you intend to use. Sometimes, you imagine your teenager's responses, which in turn elicits your further arguments and responses. This rehearsal is described in the literature using different terminology, for example, *inner speech*, *self-talk*, *imaginal dialogue*, or *internal dialogue* (ID). *Inner speech* can be conceptualized as the subjective experience of language in the absence of overt and audible articulation (Alderson-Day & Fernyhough, 2015, p. 931). *Self-talk* can be defined as the use of language to convey instructional or motivational content

addressed to oneself, but the language of self-talk may be spoken not only internally but also externally, or even written (Puchalska-Wasył, 2014, p. 375). The concept of *imaginal dialogues* refers to the situation of talking (aloud or silently) with somebody else who is objectively absent (cf. Watkins, 2000), whereas IDs can be addressed not only to an imagined other but also to a part of the self (e.g., I-idealist, I-pragmatist, I-optimist, I-pessimist). In this article we will use the latter term, assuming that a person engages in ID when they alternately adopt (at least) two different viewpoints, and the utterances formulated (internally/silently/in one's mind or externally/aloud) from these viewpoints

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respond to one another (Hermans, 2003; Puchalska-Wasył, 2016a).

The current study is limited to IDs reflecting social interactions. Typically in IDs simulating social relationships, the principal viewpoint/party is that of the participant who is imagining the conversation (the “author”), whereas the other viewpoint/party represents an (imagined) interlocutor.

How can an ID with your teenager be conducted? Let us consider two opposite cases. You can demonstrate that you are the person with the power and that your viewpoint is the most important. In this kind of ID, referred to in the literature as *confrontational*, you will develop your argumentation and at the same time you will not be interested in your child’s arguments; you will be uncompromising. You will strive to enhance your standpoint and depreciate the stance of your imagined interlocutor. At the end of this ID, your viewpoint and that of your interlocutor will become polarized. You will feel like a winner in this internal discussion and perceive your interlocutor as the loser. In the so-called *integrative* ID, by contrast, you will likely focus not only on your own argumentation but also on your interlocutor because your aim is not a victory but rather understanding the other party. In such ID, you might allow your teenager to develop his/her argumentation and to articulate his/her needs. Owing to your openness, you can better understand your interlocutor, and vice versa. Both your viewpoint and that of your partner will change to some degree. As a result, you will probably make an attempt to find the best solution to the problem—the solution that satisfies the needs of both parties.

Viewing integrative and confrontational IDs as extreme cases, one can ask: Is it possible that an ID can be both integrative and confrontational? Can I feel like a winner in the ID when I give in to my interlocutor to some degree and I partially modify my own stance, but I do it in order to gain the greater partner’s concession and when, consequently, we are both satisfied with the conclusion of the discussion? What functions would such an ID perform? To date, most studies have focused on the functions of

IDs (and similar phenomena) without paying attention to its integrative and confrontational characteristics.

Brinthaup and Dove (2012) identified four functions of self-talk. The “self-management function” refers to self-regulatory self-talk. The “self-reinforcement function” focuses on positive events, and “self-criticism” refers to negative events. Finally, the “social assessment function” is related to a person’s social interaction. The researchers showed that these four functions depend on age, family configuration, and having (or not) an imaginary companion in childhood. For example, people who had had an imaginary companion reported more frequent overall self-talk and, additionally, higher levels of self-managing and self-reinforcing self-talk than those without an imaginary companion.

Puchalska-Wasył (2006; Puchalska-Wasył, Chmielnicka-Kuter, & Oles, 2008) conducted a hierarchical cluster analysis of 24 specific functions of 649 internal interlocutors (identified by the participants as partners in their IDs) arriving at the following key functions of ID: support, substitution, exploration, bond, self-improvement, insight, and self-guiding. They will be discussed in greater detail below (see Measures).

In the other study, IDs categorized according to various criteria (e.g., interlocutors’ behavior) varied in the intensity of these key functions. For example, IDs based on the cooperation between the parties were characterized by higher indices of Support and Bond than IDs without cooperation. Additionally, if an interlocutor was identified as a cause of the problem, then the ID performed the function of substitution, whereas IDs free of reciprocal accusations were strongly connected with support and bond. The analysis also revealed that IDs simulating social relationships more often fulfilled substitution, whereas IDs between parties of the self (e.g., I-pessimist vs. I-optimist) served as a source of support (Puchalska-Wasył, 2007).

Studies have also investigated the relationship between ID’s functions and personality variables, such as traits, attachment styles, and empathy. A higher intensity of neuroticism

and anxious attachment with lower intensity of openness and the tendency to adopt an interlocutor's viewpoints were strongly associated with the function of substitution but weaker insight and support functions. The reverse configuration of personality characteristics intensified insight and support and minimized substitution (Puchalska-Wasył, 2016c).

There are only a few studies on the relationships between integrative and confrontational IDs and their functions. Borawski (2011) showed that integrative IDs enhance situational self-esteem and positive emotions. According to Młynarczyk (2011), integrative IDs conducted by a person preferring dialogical thinking can diminish discrepancies between their ideal and ought selves. Hermans's studies revealed that voicing different viewpoints about a problem and attempting to consider their arguments are conducive to well-being and more adaptive psychological functioning (Hermans, 2003; Hermans & Hermans-Jansen, 1995). It has also been found that integrative IDs perform support, bond, insight, and self-guiding functions to a greater degree than confrontational IDs (Puchalska-Wasył, 2016a).

In the above-mentioned studies, it is assumed that an ID is either integrative or confrontational. Is it true that integration and confrontation processes are mutually exclusive? Could integration and confrontation be independent processes where occasionally they have extremely different intensities (e.g., high integration and low confrontation, or vice versa), while in other situations both can have high or low intensity?

In fact, in the literature the integration and confrontation processes have been interpreted in two ways: first, as two extremes on the same continuum (Borawski, 2011; Nir, 2012); and second, as two independent dimensions of ID's description (Puchalska-Wasył, 2016a, 2016b, 2017). According to the former approach, processes of integration and confrontation are opposing. According to the latter approach, integration and confrontation are not mutually exclusive, but simultaneously present in each ID. Although both models allow us to differentiate between integrative and confrontational

IDs (in the latter approach it is possible by taking into account the difference in the intensity of integration and confrontation processes), the two-dimensional model will be followed in the present paper. The most important reason is that it distinguishes not only two independent processes of integration and confrontation in ID but also attitudes of the dialogue's parties, further referred to as *integrative and confrontational characteristics of ID*.

According to this model, integration between the ID's viewpoints concerns the level of agreement about an essential question of the discussion, while confrontation reflects the advantage of one party over the other in the ID. In brief, integration is related to ideas, whereas confrontation to dominance.

Integration is connected with openness to a partner's viewpoint, and with readiness to consider his/her arguments. The stronger a party's propensity for engaging in these behaviors, the stronger his/her *integrative attitude* is. The integrative attitudes of both parties contribute to general integration in an ID. The greater the general integration, the greater the chance of finding new, creative solutions to the problem discussed.

The *confrontational attitude* of a given party reflects their perceived advantage over the opposing party (treating themselves as the winner and the partner as the loser). Since confrontation is defined as disproportion in power between the winner and the loser in an ID, it is assumed that the greater the difference in the intensity of parties' confrontational attitudes, the greater the general confrontation is (Puchalska-Wasył, 2016a, 2016b, 2017).

This approach not only distinguishes two independent processes and attitudes of a dialogue's parties but also proposes a method of measuring them (see Measures). Therefore, it makes it possible to identify different specific patterns of ID's integrative and confrontational characteristics, and consequently, to explore functions of IDs described by such patterns (e.g., high intensity of integrative and confrontational attitudes of both parties). This knowledge about IDs could be especially important to better predict and influence the effects of

counseling or psychotherapy based on the client's/patient's internal dialogical activity (Hermans & Dimaggio, 2004).

In that context, the main question of the study was posed: What are the functions of IDs simulating social relationships, which are described by different patterns of integrative and confrontational characteristics? As this was an exploratory study, no hypotheses were formulated.

## General Method

### Participants

The test group included 119 people (61 women) with a mean age of 22.22 ( $SD = 1.42$ ) years. The average age for the women was  $M = 22.13$  ( $SD = 1.66$ ; range 20–30) years and the average age for the men was  $M = 22.31$  ( $SD = 1.13$ ; range 20–26) years. The participants were students of various majors (e.g., chemistry, physiotherapy, journalism, information technology, law, economics, rhetoric) at 16 Polish universities.

### Procedure

The participants learned about the research project from their friends or from departmental announcements (convenience sampling). Before testing commenced, they were informed that the study would be anonymous and voluntary and it would concern the functions of dialogues that people conduct in their imagination. Paper-and-pencil versions of all the measures were used.

At the beginning of the study, participants were instructed to think about a problematic issue of importance to them and then about a person who contributed to the occurrence of that problem. Next, they were asked to write down an imagined dialogue with that person about the problem. The instruction was as follows:

I would like you to think about an issue which is important, difficult, problematic for you. It can be a problem that has recently arisen. It can also be a problem coming from your distant past, however, it bothers you still and

you would like to talk about it or listen to something concerning this difficult issue ... If you find the problem, think about the person who contributed to the occurrence of that problem ... Now, try to conduct an imagined dialogue with that person about the problem. Please, conduct the dialogue and write it down simultaneously. You do not need to worry about the form of the dialogue. The most important thing is to follow one's own thoughts and not to modify statements that spontaneously arise during the conversation.

The time of writing the dialogue was not limited. The task took about 10–15 min on average. Taking the content of their own imagined dialogue into consideration the participants completed two questionnaires: Integration–Confrontation (ICON) and Functions of Dialogues (FUND). Based on ICON, the integrative and confrontational characteristics of a given dialogue (i.e., integrative and confrontational attitudes of a dialogue's authors and their interlocutors) were determined. FUND served to identify the functions of a given imagined dialogue. In fact, in this study the content of IDs was not analyzed.

### Measures

**ICON.** Created by Puchalska-Wasył (2016a, 2016b) and available upon request, ICON is a 13-item measure of an ID's integrative and confrontational characteristics, completed with a specific ID in mind. ICON is based on the assumption that integration and confrontation are two independent dimensions of ID description (see Introduction).

ICON consists of eight core items and five supplementary items. All the responses are rated on a 7-point Likert scale, with two anchors: 0 (*not at all*) and 6 (*very well*). On the basis of the first eight items, six indices are calculated. Four of them measure: dialogue's author's integrative attitude (INT\_aut), interlocutor's integrative attitude (INT\_int), author's confrontational attitude (CONF\_aut), and interlocutor's confrontational attitude (CONF\_int). Two additional indices, general

integration (INT) and general confrontation (CONF), consist of those above-mentioned indices, and they are computed as follows:  $INT = INT_{aut} + INT_{int}$ , whereas  $CONF = |CONF_{aut} - CONF_{int}|$  (to precisely calculate the remaining indices, see Puchalska-Wasył, 2016b). The supplementary items concern, for example, the author's similarity to the interlocutor, and the wishfulness of the dialogue. In the present study, none of the supplementary items was analyzed.

The reliability of ICON is satisfying (Puchalska-Wasył, 2016a). In the present study, only indices of integrative and confrontational attitudes for the author and interlocutor were analyzed. Cronbach's alphas for these indices were as follows:  $INT_{aut} = .71$ ;  $INT_{int} = .88$ ;  $CONF_{aut} = .77$ ; and  $CONF_{int} = .70$ . The validity of ICON was also confirmed (Puchalska-Wasył, 2016a, 2016b).

In two other studies (Puchalska-Wasył, 2016a, 2017) the correlation between indices of INT and CONF was non-significant and close to zero ( $N = 93$ ,  $r = -.048$ ,  $p = .648$ ;  $N = 125$ ,  $r = -.118$ ,  $p = .189$ ). In the current study, analogous analyses yielded similar results (Table 2). This supports the theoretically postulated independence of the integration and confrontation dimensions measured in ICON. However, it does not mean that the indices of integrative and confrontational attitudes ( $INT_{aut}$ ,  $INT_{int}$ ,  $CONF_{aut}$ , and  $CONF_{int}$ ) that contribute to the indices of general integration and confrontation (INT, CONF) cannot be positively or negatively correlated, especially if they are analyzed within subgroups of a general

population,<sup>1</sup> for instance, within ID subgroups that represent different types of IDs (see Results).

**FUND.** The FUND questionnaire by Puchalska-Wasył (2016c) is a measure of functions that a given ID may perform. It contains seven subscales corresponding to seven key functions of IDs. Each of the subscales consists of seven items rated on a 5-point Likert scale, from *strongly disagree* (1) to *strongly agree* (5). The psychological sense of the subscales and their internal consistency coefficients are as follows: (a) Support (a source of hope and meaning in life), Cronbach's  $\alpha = .85$ ; (b) Substitution (a substitute for real contact, argumentation practice, catharsis),  $\alpha = .75$ ; (c) Exploration (search for new experiences, escape from dull reality),  $\alpha = .77$ ; (d) Bond (experience of deep relation),  $\alpha = .88$ ; (e) Self-Improvement (warning against a mistake, a self-evaluation criterion),  $\alpha = .80$ ; (f) Insight (a way of gaining a new perspective and distance from a problem),  $\alpha = .80$ ; (g) Self-Guiding (a factor motivating action and development, guidance in setting new goals, a source of sense of control over the situation),  $\alpha = .80$ .

## Results

In the study, 119 imagined dialogues were collected. Their integrative and confrontational characteristics as well as their functions were reflected in the indices of the ICON and FUND questionnaires, respectively. Other characteristics of IDs were of secondary importance to the objective of the study, therefore the content of the IDs (topic, number of words, etc.) was not analyzed.

A preliminary data analysis comprised calculating the coefficients of descriptive statistics, including mean, standard deviation, kurtosis, skewness, and the Kolmogorov–Smirnov test (K-S) with Lilliefors correction for each construct (Table 1). The K-S indicated that only the Substitution and Exploration subscales of the FUND were normally distributed. The mean scores on the Self-Improvement, Insight,

<sup>1</sup>When specific subgroups are analyzed, a significant correlation can be sometimes observed between variables that are uncorrelated or slightly correlated in the general population. For example, according to Eysenck's theory, people with the Type A personality are characterized by both high neuroticism and high extroversion (Eysenck, 1990), whereas in the general population, those two variables are not correlated (for the Eysenck Personality Questionnaire-Revised [EPQ-R]:  $r = .02$  in a group of 408 men and  $r = -.07$  in a group of 494 women; for short-scale EPQ-R:  $r = -.09$  in a group of 408 men and  $r = -.10$  in a group of 494 women; Eysenck, Eysenck, & Barret, 1985, Tables 5 and 8).

**Table 1** Distribution of scores on variables

| Variable         | Min. | Max. | <i>M</i> | <i>SD</i> | Skewness | Kurtosis | K-S  | $p_{K-S}$ |
|------------------|------|------|----------|-----------|----------|----------|------|-----------|
| INT              | 0    | 20   | 7.77     | 5.47      | 0.34     | -0.94    | 0.14 | <.001     |
| CONF             | 0    | 12   | 4.61     | 4.01      | 0.40     | -1.08    | 0.14 | <.001     |
| INT_aut          | 0    | 12   | 3.81     | 3.42      | 0.66     | -0.66    | 0.21 | <.001     |
| INT_int          | 0    | 12   | 3.97     | 3.55      | 0.57     | -1.01    | 0.18 | <.001     |
| CONF_aut         | 0    | 12   | 5.54     | 3.98      | 0.10     | -1.18    | 0.10 | .004      |
| CONF_int         | 0    | 12   | 3.31     | 3.26      | 0.82     | -0.33    | 0.18 | <.001     |
| Support          | 7    | 35   | 17.51    | 6.79      | 0.25     | -0.77    | 0.09 | .016      |
| Substitution     | 10   | 35   | 23.15    | 5.24      | -0.31    | -0.11    | 0.07 | .189      |
| Exploration      | 7    | 32   | 19.69    | 5.41      | 0.03     | -0.32    | 0.07 | .200      |
| Bond             | 7    | 34   | 16.04    | 6.72      | 0.51     | -0.43    | 0.09 | .021      |
| Self-Improvement | 10   | 35   | 23.69    | 5.21      | -0.37    | 0.13     | 0.10 | .010      |
| Insight          | 8    | 34   | 23.20    | 5.94      | -0.43    | -0.26    | 0.09 | .016      |
| Self-Guiding     | 10   | 35   | 24.37    | 5.15      | -0.63    | 0.26     | 0.10 | .005      |

Note. K-S = Kolmogorov–Smirnov test.

and Self-Guiding of the FUND were slightly negatively skewed, with more high values. The mean score in other subscales of the FUND and ICON were slightly positively skewed, with more low values. However, all the coefficients of skewness were in the range from -1 to 1, so the skewness is not strong enough and can be ignored. The values of kurtosis were also within the acceptable range.

To establish whether there were correlations among the key constructs— integrative and confrontational characteristics of IDs and functions of IDs—zero-order correlations among the ICON and FUND subscales were performed. The results are presented in Table 2.

In order to answer the research question, canonical correlation analysis was used. According to Sherry and Henson (2005), it is the most appropriate analysis when a researcher desires to examine the relationship not between single variables, but between two variable sets—in this case between an ID's characteristics set and an ID's functions set. Canonical correlation analysis is a multivariate statistical model allowing for simultaneous prediction of multiple dependent variables from multiple independent variables. However, the nature of this analysis as a correlational method makes the declaration concerning the direction of influence ultimately arbitrary, based on the researcher's expectations about predictive causality (cf. Sherry & Henson, 2005). So, if any

causal inferences appear in the discussion of my findings, they will be based on the adopted differentiation between the predictor set (ID's integrative and confrontational characteristics: INT\_aut, INT\_int, CONF\_aut, and CONF\_int) and the criterion set (ID's key functions) and they should be treated as hypotheses demanding further verification in experimental design.

The analysis yielded two significant canonical functions with canonical correlations of .54 ( $p < .001$ ) and .49 ( $p < .001$ ) and two non-significant ones (Table 3). The first canonical function explained 29% of total variance and the second explained 24% of the remaining variance (unexplained by the first function) shared between the variable sets.

Looking at the coefficients of Canonical Function 1 (Table 4), one can see that the first canonical variable, representing the ID's characteristics, explains 26.8% of the variance shared by CONF\_aut (canonical loading = .61), INT\_aut (-.68), and INT\_int (-.43). It also explains 6.2% of the variance shared by variables from the "ID's function set." The second canonical variable including the ID's functions is represented mostly by Substitution (.47), Bond (-.74), Support (-.66), and Insight (-.47); it explains 21.3% of their shared variance and 7.8% of the variance shared by variables from the "ID's characteristics set."

Canonical loadings having the same signs indicate a positive correlation of the variables,

**Table 2** Correlations among subscales of ICON and FUND

|                      | 1      | 2      | 3      | 4      | 5      | 6    | 7      | 8      | 9      | 10     | 11     | 12     |
|----------------------|--------|--------|--------|--------|--------|------|--------|--------|--------|--------|--------|--------|
| 1. INT               | —      |        |        |        |        |      |        |        |        |        |        |        |
| 2. CONF              | -.02   | —      |        |        |        |      |        |        |        |        |        |        |
| 3. INT_aut           | .78*** | -.16   | —      |        |        |      |        |        |        |        |        |        |
| 4. INT_int           | .80*** | .12    | .24**  | —      |        |      |        |        |        |        |        |        |
| 5. CONF_aut          | .10    | .59*** | -.24** | .38*** | —      |      |        |        |        |        |        |        |
| 6. CONF_int          | .33*** | -.06   | .53*** | .01    | -.23*  | —    |        |        |        |        |        |        |
| 7. Support           | .37*** | -.07   | .30*** | .29*** | -.04   | -.02 | —      |        |        |        |        |        |
| 8. Substitution      | .09    | .29*** | .00    | .14    | .44*** | -.01 | .08    | —      |        |        |        |        |
| 9. Exploration       | .17    | .07    | .12    | .15    | .10    | .10  | .34*** | .56*** | —      |        |        |        |
| 10. Bond             | .43*** | -.10   | .34*** | .34*** | -.05   | .00  | .74*** | -.03   | .15    | —      |        |        |
| 11. Self-Improvement | .17    | .05    | .18*   | .08    | .05    | .14  | .34*** | .33*** | .32*** | .22*   | —      |        |
| 12. Insight          | .38*** | .05    | .32*** | .27**  | .05    | .11  | .61*** | .29*** | .42*** | .50*** | .58*** | —      |
| 13. Self-Guiding     | .07    | .20*   | .01    | .11    | .26**  | -.09 | .30*** | .53*** | .48*** | .18    | .50*** | .56*** |

\*  $p \leq .05$ ; \*\*  $p \leq .01$ ; \*\*\*  $p < .001$ .

whereas loadings with different signs indicate a negative correlation. In Canonical Function 1, the confrontational attitude of the author (participant conducting the dialogue; CONF\_aut) is negatively correlated with the integrative attitudes of both ID parties (INT\_aut; INT\_int). Thus, the stronger the tendency of the author to make the interlocutor the loser and themselves the winner in ID (CONF\_aut), the weaker the tendency to modify both viewpoints under their mutual influence (INT\_aut; INT\_int). The aim of the author is not to convince the interlocutor but to show an advantage over him/her. The ending of such ID based on rivalry is that the author perceives himself/herself to be the winner, even though the stances taken in the discussion do not change. In this context, Canonical Function 1 can be labeled *competitive dialogue*.

The more the ID is competitive, the lower the indices of the ID's key functions, such as Bond, Support and Insight, and the higher the level of Substitution. It means that competitive ID is mainly a form of argumentation practice or catharsis for negative emotions (Substitution). At the same time, it is hardly probable that such ID gives the experience of deep relation with the interlocutor (Bond), that it is a source of hope (Support), and a way of gaining a new perspective or distance from a problem (Insight). In accordance with Canonical Function 1, high intensity of bond,

support, and insight would be possible, if the strong integrative attitudes of both parties were combined with the weak confrontational attitude of the author. Then the substitution function would be weak as well.

For Canonical Function 2 (Table 4), one can see that the first canonical variable, representing ID's characteristics, explains 28.7% of the variance shared mainly by CONF\_aut (canonical loading =  $-.76$ ), INT\_int ( $-.65$ ), and INT\_aut ( $-.39$ ). It also explains 6.3% of the variance shared by variables from the ID's function set. The second canonical variable is represented mostly by Substitution ( $-.77$ ), Insight ( $-.58$ ), Bond ( $-.52$ ), Self-Guiding ( $-.52$ ), and Support ( $-.47$ ); it explains 27.0% of their shared variance and 6.8% of the variance shared by variables from the ID's characteristics set.

Canonical Function 2 reflects the situation when the confrontational attitude of the author (CONF\_aut) is positively correlated with the integrative attitudes of the author (INT\_aut) and imaginary interlocutor (INT\_int). Similarly to Canonical Function 1, in this configuration of integrative and confrontational characteristics, the author may try to be the winner in the ID (CONF\_aut). However, contrary to Canonical Function 1, he/she arranges the dialogue in such a way that both his/her own viewpoint and (to a much greater degree) the interlocutor's viewpoint become modified under their mutual influence (INT\_aut, INT\_int). In this context we can

**Table 3** Canonical correlation analysis: Four canonical functions

| Canonical function | Canonical correlation | Canonical $R^2$ | Wilks' $\lambda$ | $p$  |
|--------------------|-----------------------|-----------------|------------------|------|
| 1                  | .54                   | .29             | .489             | .001 |
| 2                  | .49                   | .24             | .690             | .001 |
| 3                  | .30                   | .09             | .902             | .314 |
| 4                  | .09                   | .01             | .992             | .930 |

**Table 4** Canonical Functions 1 and 2: Competitive dialogue and persuasive dialogue

|   | Loadings | Cross-loadings | Variance in the set variables explained by: |                                |
|---|----------|----------------|---|--------------------------------|
|   |          |                | Their own canonical variate                 | The opposite canonical variate |
| <b>Function 1: Competitive dialogue</b> |          |                |   |                                |
| Predictor set:                          |          |                | 26.8%                                       | 7.8%                           |
| INT_aut                                 | -.68     | -.37           |   |                                |
| INT_int                                 | -.43     | -.23           |   |                                |
| CONF_aut                                | .61      | .33            |   |                                |
| CONF_int                                | -.23     | -.13           |   |                                |
| Criterion set:                          |          |                | 21.3%                                       | 6.2%                           |
| Support                                 | -.66     | -.35           |   |                                |
| Substitution                            | .47      | .26            |   |                                |
| Exploration                             | -.09     | -.05           |   |                                |
| Bond                                    | -.74     | -.40           |   |                                |
| Self-Improvement                        | -.13     | -.07           |   |                                |
| Insight                                 | -.47     | -.25           |   |                                |
| Self-Guiding                            | .22      | .12            |   |                                |
| <b>Function 2: Persuasive dialogue</b>  |          |                |   |                                |
| Predictor set:                          |          |                | 28.7%                                       | 6.8%                           |
| INT_aut                                 | -.39     | -.19           |   |                                |
| INT_int                                 | -.65     | -.31           |   |                                |
| CONF_aut                                | -.76     | -.37           |   |                                |
| CONF_int                                | .09      | .04            |   |                                |
| Criterion set:                          |          |                | 27.0%                                       | 6.3%                           |
| Support                                 | -.47     | -.23           |   |                                |
| Substitution                            | -.77     | -.37           |   |                                |
| Exploration                             | -.34     | -.16           |   |                                |
| Bond                                    | -.52     | -.25           |   |                                |
| Self-Improvement                        | -.29     | -.14           |   |                                |
| Insight                                 | -.58     | -.28           |   |                                |
| Self-Guiding                            | -.52     | -.25           |   |                                |

Note. INT\_aut = author's integrative attitude; INT\_int = interlocutor's integrative attitude; CONF\_aut = author's confrontational attitude; CONF\_int = interlocutor's confrontational attitude.

hypothesize that the author's victory in the ID is based on persuading the interlocutor and, consequently, Canonical Function 2 can be labeled *persuasive dialogue*.

The more the ID is persuasive, the higher the indices of the ID's key functions, such as Substitution, Insight, Bond, Support, and Self-Guiding. Thus, persuasive ID is not only

a form of preparing the argumentation for a real discussion (Substitution), but also through such an ID a person may gain a new perspective on the problem (Insight), strengthen the bond with the interlocutor (Bond), get support and hope (Support), and find motivation for further real-world action (Self-Guiding).



## Discussion

This study aimed to answer the question: What are the functions of IDs simulating social relationships, which are described by different patterns of integrative and confrontational characteristics? Canonical correlation analysis revealed two main patterns that are reflected in two different types of IDs—competitive and persuasive. In competitive ID, the strong confrontational attitude of the author (participant creating the dialogue) is accompanied by his/her own and the imaginary interlocutor's low integrative attitudes. The more evident this pattern is, the lower the levels of bond, support, and insight functions and the higher the level of substitution. Thus, the more the ID is competitive, the more probable that it is either a form of argumentation practice or catharsis for negative emotions. In the first situation, a person is preparing for a real discussion about the problem, which is still an open question. Then the ID is a place where a person creates alternative scenarios of the future discussion and practices his/her argumentation to defeat his/her interlocutor and to achieve victory. The second situation means that an ID allows the author to relieve his/her stress, tension, and negative emotions. Contrary to the first situation, the ID's content is usually censured by the author who does not want to reveal it in actual discussion. But the fact that the content has been expressed in ID causes the author to feel better and sometimes even like a (moral) winner in the discussion.

In this context, the IDs performing substitution can be seen as a way of realizing the self-enhancement motive, which is one of the central motives organizing the self (Duval & Silvia, 2002; Steele, 1988; Tesser, 1988). The functions of competitive IDs can be better understood in the light of Roesse and Olson's (2007) ideas. The researchers emphasize the adaptive role of appraisals in which the self is viewed more favorably than other people, calling it *self-serving judgments*. In their optimal vigilance hypothesis, they assume that threat (information of actual or imagined harm) evokes negative affect, which in turn mobilizes cognitive

activity. If a threat is judged to be high in mutability (i.e., the circumstances are open to further modification), a behavioral response follows, which aims at addressing the threat directly. If a threat is judged to be low in mutability (i.e., the circumstances are closed to modification), then self-serving judgments become more likely. Self-serving judgments elicit positive affect, which serves to rapidly restore affect to set point, thereby enabling optimal vigilance toward the subsequently encountered threat.

By analogy, difficult situations discussed in IDs can be understood as a kind of threat that evokes negative affect. If a person perceives the possibility to modify the situation, they can create ID scenarios that help in visualizing subsequent steps towards the desirable change. And then the ID as a form of argumentation practice prepares for real actions (a behavioral response). But if the person does not perceive any possibility of modifying the situation, an ID is aimed only at reducing negative affect (self-serving judgments) and is thus a form of catharsis.

When the pattern describing competitive ID is reversed, the integrative attitudes of author and interlocutor are quite strong whereas the author's confrontational attitude is rather weak. This reversed pattern is conducive to decreasing substitution, and increasing insight, support, and bond. The last three functions are not surprising in light of negotiation research showing that interpersonal integrative agreement strengthens the parties' relationship and promotes future cooperation (Deutsch, 2000; Kremenyuk, 1991; Pruitt & Carnevale, 1993). These findings are also consistent with studies according to which IDs based on the cooperation between the parties were characterized by higher indices of Support and Bond than those without cooperation (Puchalska-Wasył, 2007). In order to reach integrative agreements, negotiation scholars recommend building trust, asking questions, acknowledging each other's perspectives, clarifying misunderstandings, freely exchanging information, and so forth (Deutsch, 1973; Pinkley, Griffith, & Northcraft, 1995; Weingart, Thompson, Bazerman, & Carroll, 1990). Presumably, these "integrative

behaviors” are rooted in personality characteristics. When we extrapolate the above-mentioned recommendations into IDs, we can better understand results showing that the higher the intensity of openness and the tendency to adopt an interlocutor’s viewpoint, the more strongly a person’s ID performs insight and support, and the weaker its substitution function is (Puchalska-Wasył, 2016c).

The other pattern of integrative and confrontational characteristics, which was obtained in our analysis, describes a persuasive ID. In this ID, one can observe that the stronger the confrontational attitude of the dialogue’s author, the stronger integrative attitudes of the author and his/her imaginary interlocutor. The dialogue’s author in his/her pursuit of victory is able to take the partner’s needs into account and to modify his/her own stance to some degree, which is accompanied by the greater interlocutor’s concession. In that context, an interpretative hypothesis can be advanced that the author’s victory in the ID is based on persuading the interlocutor.

The pattern of persuasive ID is associated with an increase in the intensity of substitution, insight, support, bond, and self-guiding. Taking the first four functions into account, they were also related to the first pattern of integrative and confrontational characteristics, but then these functions did not appear together in one ID. When the confrontational attitude of the author was strong, the competitive ID fulfilled substitution, whereas when the integrative attitudes of both parties were intense, the IDs performed insight, support, and bond. Is it possible that, when high intensity of integrative and confrontational attitudes co-occur in one ID, their typical functions are combined? The persuasive ID seems to epitomize this idea. Consequently, the persuasive ID is not only a form of preparing the argumentation for a real discussion or catharsis (Substitution). Such ID can also provide a person with a new perspective on the problem (Insight) and feelings of hope and support (Support); it can also strengthen the bond with the interlocutor (Bond). Moreover, IDs with high intensity of integrative and confrontational characteristics

fulfill the self-guiding function that was not performed by IDs discussed previously. Generally, self-guiding IDs are created by the dialogue’s author as a factor motivating real-world actions, often providing him/her a sense of control over the situation. Sometimes they result in setting new goals and even in a decision about personal development. The fact that all these positive functions are fulfilled by persuasive ID can be seen as an effect of co-occurring strong integrative and confrontational characteristics in one ID. Their combination not only seems to result in fulfilling all the functions typical of integrative and confrontational attitudes when they are working separately, but also to provide self-guiding as an extra value that can be tentatively interpreted as a synergistic effect. In this context, our findings invite further exploration.

This is the first study to explore the connection between different patterns of integration and confrontation in IDs and their functions. Regarding limitations, first, the sample consisted only of students from one country. Therefore, the patterns of competitive and persuasive IDs should be replicated in different samples coming from different countries and including people of different ages and status. Second, the study was limited to IDs reflecting social interactions. Such IDs are a very important category, but not the only one. Thus, it is also worth investigating whether the patterns of competitive and persuasive IDs apply to IDs that do not simulate social relations, for example dialogues between parts of the self (e.g., I-idealist vs. I-pragmatist).

Additionally, further research ought to seek other ID types with other patterns of integrative and confrontational characteristics. Apart from functions of these IDs, their personality and situational determinants and correlates should be explored. Moreover, studies testing potential mediators and moderators of the relationship between integrative and confrontational attitudes of dialogue parties would be desirable.

Summing up, canonical correlation analysis used in order to determine the relationships between integrative and confrontational characteristics of IDs and their functions allowed us to identify two types of ID: competitive and persuasive. It was also found that the persuasive

ID in which the author combined integrative and confrontational attitudes fulfilled more positive functions than the competitive ID and the ID characterized by the competitive-reversed pattern.

## Conflict of Interest

The author has no conflict of interest to disclose.

## References

- Alderson-Day, B., & Fernyhough, C. (2015). Inner speech: Development, cognitive functions, phenomenology, and neurobiology. *Psychological Bulletin*, *141*, 931–965. <https://doi.org/10.1037/bul0000021>
- Borawski, D. (2011). The influence of dialogical thinking on situational self-esteem and emotions. In P. Oleś, M. Puchalska-Wasył, & E. Brygoła (Eds.), *Dialogue with oneself* (pp. 201–223). Warsaw: Wydawnictwo Naukowe PWN. (In Polish.)
- Brinthaupt, T. M., & Dove, C. T. (2012). Differences in self-talk frequency as a function of age, only-child, and imaginary childhood companion status. *Journal of Research in Personality*, *46*, 326–333. <https://doi.org/10.1016/j.jrp.2012.03.003>
- Deutsch, M. (1973). *Resolution of conflict: Constructive and destructive processes*. New Haven, CT: Yale University Press.
- Deutsch, M. (2000). Justice and conflict. In M. Deutsch & P. Coleman (Eds.), *The handbook of conflict resolution: Theory and practice* (pp. 41–64). San Francisco, CA: Jossey-Bass.
- Duval, T. S., & Silvia, P. J. (2002). Self-awareness, probability of improvement, and the self-serving bias. *Journal of Personality and Social Psychology*, *82*, 49–61. <https://doi.org/10.1037/0022-3514.82.1.49>
- Eysenck, H. J. (1990). Biological dimensions of personality. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 244–276). New York, NY: Guilford Press.
- Eysenck, S., Eysenck, H. J., & Barrett, P. (1985). A revised version of the Psychoticism Scale. *Personality and Individual Differences*, *6*, 21–29.
- Hermans, H. J. M. (2003). The construction and reconstruction of a dialogical self. *Journal of Constructivist Psychology*, *16*, 89–130.
- Hermans, H. J. M., & Dimaggio, G. (Eds.). (2004). *The dialogical self in psychotherapy*. New York, NY: Brunner-Routledge.
- Hermans, H. J. M., & Hermans-Jansen, E. (1995). *Self-narratives: The construction of meaning in psychotherapy*. New York, NY: Guilford Press.
- Kremenyuk, V. A. (1991). *International negotiation: Analysis, approaches, issues*. San Francisco, CA: Jossey-Bass.
- Młynarczyk, M. (2011). Dialogues of discrepant selves. In P. Oleś, M. Puchalska-Wasył, & E. Brygoła (Eds.), *Dialogue with oneself* (pp. 224–251). Warsaw: Wydawnictwo Naukowe PWN. (In Polish.)
- Nir, D. (2012). Voicing inner conflict: From a dialogical to a negotiational self. In H. J. M. Hermans & T. Gieser (Eds.), *Handbook of dialogical self theory* (pp. 284–300). Cambridge, England: Cambridge University Press.
- Pinkley, R. L., Griffith, T. L., & Northcraft, G. B. (1995). “Fixed pie” a la mode: Information availability, information processing, and the negotiation of suboptimal agreements. *Organizational Behavior and Human Decision Processes*, *62*, 101–112. <https://doi.org/10.1006/obhd.1995.1035>
- Pruitt, D. G., & Carnevale, P. J. (1993). *Negotiation in social conflict*. Belmont, CA: Thomson Brooks/Cole.
- Puchalska-Wasył, M. (2006). *Our internal dialogues: On dialogicality as a way of human functioning*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego. (In Polish.)
- Puchalska-Wasył, M. (2007). Types and functions of inner dialogues. *Psychology of Language and Communication*, *11*, 43–62.
- Puchalska-Wasył, M. (2014). When interrogative self-talk improves task performance: The role of answers to self-posed questions. *Applied Cognitive Psychology*, *28*, 374–381. <https://doi.org/10.1002/acp.3007>
- Puchalska-Wasył, M. (2016a). Coalition and opposition in myself? On integrative and confrontational internal dialogs, their functions, and the types of inner interlocutors. *Journal of Constructivist Psychology*, *29*, 197–218. <https://doi.org/10.1080/10720537.2015.1084601>
- Puchalska-Wasył, M. (2016b). Determinants of integration and confrontation in internal dialogues. *Japanese Psychological Research*, *58*, 248–260. <https://doi.org/10.1111/jpr.12115>
- Puchalska-Wasył, M. (2016c). The functions of internal dialogs and their connection with personality. *Scandinavian Journal of Psychology*, *57*, 162–168. <https://doi.org/10.1111/sjop.12275>
- Puchalska-Wasył, M. (2017). Relationship of personality with integration and confrontation in internal dialogues. *Scandinavian Journal of Psychology*, *58*, 451–457. <https://doi.org/10.1111/sjop.12387>

- Puchalska-Wasył, M., Chmielnicka-Kuter, E., & Oles, P. (2008). From internal interlocutors to psychological functions of dialogical activity. *Journal of Constructivist Psychology, 21*, 239–269. <https://doi.org/10.1080/10720530802071476>
- Roese, N. J., & Olson, J. M. (2007). Better, stronger, faster: Self-serving judgment, affect regulation, and the optimal vigilance hypothesis. *Perspectives on Psychological Science, 2*, 124–141. <https://doi.org/10.1111/j.1745-6916.2007.00033.x>
- Sherry, A., & Henson, R. K. (2005). Conducting and interpreting canonical correlation analysis in personality research: A user-friendly primer. *Journal of Personality Assessment, 84*, 37–48. [https://doi.org/10.1207/s15327752jpa8401\\_09](https://doi.org/10.1207/s15327752jpa8401_09)
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Social psychological studies of the self: Perspectives and programs*. *Advances in Experimental Social Psychology* (Vol. 21, pp. 261–302). San Diego, CA: Academic Press.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Social psychological studies of the self: Perspectives and programs*. *Advances in Experimental Social Psychology* (Vol. 21, pp. 181–227). San Diego, CA: Academic Press.
- Watkins, M. (2000). *Invisible guest: The development of imaginal dialogues*. Woodstock, CT: Spring.
- Weingart, L. R., Thompson, L. L., Bazerman, M. H., & Carroll, J. S. (1990). Tactical behavior and negotiation outcomes. *International Journal of Conflict Management, 1*, 7–31. <https://doi.org/10.1108/eb022670>

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