

SUPPLEMENTAL MATERIAL 1

THE THEORY OF POSITIVE DISINTEGRATION: DESCRIPTION AND THE CONTRIBUTION OF THE THEORY TO UNDERSTANDING PERSONALITY DEVELOPMENT IN COMPARISON WITH OTHER EXISTING APPROACHES

The Theory of Positive Disintegration: Description of Developmental Levels

The first level constitutes an integration that occurs through interaction with the environment and may be seen as the outcome of social conditions (Dąbrowski, 1979; Piechowski, 2008). It is defined by an absence of any developmental dynamisms (i.e., a developmental state). If people are operating at Level I, it is because this is the condition of their world, not because they are constituted that way (Piechowski, 2003). As it is neither primary nor a personality structure on this level, Piechowski (2008, 2014) said the concept of primary integration needed to be reconsidered. This level is characterised by dominant concern with self-protection and survival, self-serving egocentrism and instrumental view of others (Piechowski, 2008).

People on this level show prominence of (a) “heredity and endowment” (First Factor) and/or (b) “social environment” (Second Factor). Hence, there are (a) those who are unsocialized, well-integrated in their drive to follow their own impulses and for that reason never experiencing any inner conflicts, and (b) “average” normally socialized people who derive their values from an external source (social norms or peer pressure). Dąbrowski (1996) described this level as having “little differentiation, primitive drive structure, and predominant externality” (p. 18) and believed that most of society’s members (70%) live on it (Dąbrowski, 1979), however Level I, as a broad category, is subject to many distinctions (Piechowski, 2017a).

Unilevel Disintegration (Level II, see “the patchwork self”, Elkind, 1984) may be a transitional period for those with developmental potential and constitute the first stage of disintegration (i.e., process of loosening of rigid mental structures, Dąbrowski, 1979). In general, it has no structure comparable to higher levels (Piechowski, 2017b). Nonetheless, it is not always characterized by disintegration, because it enables partial or adaptive integration, that follows the conventions and social norms (Piechowski, 2008). Moreover, there

is some evidence that the majority of people who live on this level are rather stable (Piechowski, 2017b).

However, the prominent features of this level are brief and intense inner struggles, many selves, the lack of inner direction, obedience, relativism (Piechowski, 2003) and rapid mood shifts (Piechowski, 2008) with prevalence of negative elements (Dąbrowski, 1996). Automatic dynamisms with only slight self-consciousness and self-control prevail. The resulting internal conflicts produce noticeable ambivalencies (i.e., changeable and conflicting courses of action), ambivalences (i.e., fluctuations between opposite feelings) and syntony (i.e., positive emotions toward others can easily turn to resentment or jealousy (Dąbrowski, 1970, 1977). The individual is likely to experience indecision because they strive for two irreconcilable things at once (see Dąbrowski, 1996). However, this level has some capacity for development. In this situation the Second Factor (i.e., fulfilling the expectations of others and the sense of inferiority toward others) can serve as a dynamism because the individual might seek some guidance to resolve the internal conflict. If the social influence is strong, the person might follow the order and reintegrate at Level I (i.e., derive a sense of self from a social role). But if there is a conflict between authorities as well and the person's inner tension compels them to change the situation or the person does not want to succumb the social pressure, she or he might need to determine which way is superior for themselves personally. Responding positively to the challenge, people are making a meaningful step forward. They look for self-knowledge and self-definition in others like themselves, and eventually in themselves. Emergent individual values of the "new" personality increasingly encounter as a result of it and conflict with the person's previous socialization (Dąbrowski, 1996). The possible kinds of emotional development are: a personal growth from black-and-white to relativistic thinking, from no sense of self to an individual self, and fulfillment of one's talents as a productive member of society (Piechowski, 2017b). In a dark scenario, however, the individual is literally thrust into a void; their social rationales fail to account for their experiences, and no alternative explanations are satisfactory anymore. The predominant emotion of this misfortune resolution is an existential despair.

Spontaneous Multilevel Disintegration (Level III) is the aforementioned step forward but requires a huge amount of energy to take and developmental potential. At the same time Dąbrowski believed that multilevel disintegration was indispensable for growth (Piechowski, 2008). The individual begins to perceive superior and inferior potential courses of action. They have a sense

of the ideal but not reaching it (Piechowski, 2008). This new perception constitutes a basis on which to build and prioritize their autonomous values. The individual's hierarchy of values begins to emerge and starts to influence their behaviour. The First and Second Factors are both targets of the inner conflict. The individual might ask: "Should I follow my instincts (First Factor), my teachings (Second Factor), or my heart (i.e., own inner voice, Third Factor)?" The right approach (the quest for self) is to choose the last path, transform instincts into virtues, and resist internalised social answers (which is not necessarily "gut feeling", see Piechowski, 2008).

Reaching the Dąbrowski's higher levels is achieved through the shift to multilevelness. Then the unilevel stimulus-response model of life is replaced by a hierarchical one. All events come to be interpreted in relation to the personal ideal, which is an inner vision of how the person wants to live their life and the kind of person one wants to become. As all life events are perceived in relation to this multilevel view and higher life goals are identified, it becomes implausible to take positions that favour the lower course. However, if a person does not have sufficient resources to take the multilevel perspective, then they might fall back from the crises of Level II to reintegrate at Level I.

At Level IV (Organized Multilevel Disintegration), the individual accepts authorship of their development and takes full responsibility of it. The Third Factor, described as "an autonomous factor of conscious choice (valuation) by which one affirms or rejects certain qualities in oneself and in one's environment" (Dąbrowski, 1972, p. 306), flourishes. Also, behaviour is under the influence of the chosen person's ideal (see self-actualising people, Maslow, 1970; Piechowski, 2008).

In consequence, the behaviour becomes less reactive, and more deliberate and volitional. The social orientation taken by an individual reflects their deep responsibility based on both intellectual and emotional factors. This perspective results from seeing life in relation to the consistent hierarchy of values: the individual perceives how their life could be and ought to be lived. People have a high level of energy, drive for autonomy and development of their own powers, respond to opportunities, offer help, have high self-esteem, live a deeply satisfying way of life, and are able to let go of experiences without devaluing (Wetzel, 1991). Some inevitable disagreements with a lower society, called *positive maladjustment*, are expressed on this level compassionately and with understanding and empathy.

Secondary Integration (Level V) has again an integrated (but different compared to the Primary) character. Huge developmental potential (i.e., talents,

abilities, intelligence, overexcitabilities, and capacity for inner transformation (Dąbrowski, 1977) is needed to reach the summit. Here, personality understood as “a self-aware, self-chosen, and self-affirmed structure whose dominant dynamism is personality ideal” (Dąbrowski, 1977, p. 53), is fully developed. This inner state occurs after having attained inner peace for good (Piechowski, 2008) and a high level of energy to serve (Piechowski, 2014).

For steps toward this state and timeline please see, e.g., Peace Pilgrim (1982) or Piechowski (2009). Personality ideal is the only one dynamism operating on this level. One’s behaviour is subordinate to thoughtful decisions derived from an individually established hierarchy of values. For this reason, inner conflicts arise rarely in one’s life.

The Contribution of the Theory of Positive Disintegration to Understanding Personality Development in Comparison With Other Existing Approaches

Among some psychological instruments that measure Dąbrowskian constructs, the most widely known is the Overexcitability Questionnaire–Two (Falk et al., 1999; see also the first version of it, i.e., OEQ; Lysy & Piechowski, 1983). It measures the developmental potential, specifically the degree and nature of emotional, intellectual, and imaginal overexcitability rather than personality development *per se* and is used primarily in research on giftedness. Emotional and intellectual overexcitabilities occurred to moderately correlate with potential for multilevel growth (Miller et al., 1995; Piechowski, 2008). Moreover, it has inconclusive psychometric properties (Botella et al., 2015; Falk et al., 1999; Van den Broeck et al., 2014; Warne, 2011).

In turn, the Definition Response Instrument (DRI, Gage et al., 1981) contains six thought-provoking questions related to such themes as: (a) susceptibility to the influence of others, (b) internal conflict, (c) inferiority, (d) dissatisfaction, (e) self-observation, and (f) personality idea. It was designed to elicit responses (through content analysis) indicating level of emotional development as conceptualized in Dąbrowski’s TPD (Dąbrowski & Piechowski, 1977). The internal consistency of DRI items was .71 (Miller, 1985). Both OEQ and DRI were developed as alternatives to neurological exams, clinical interviews, and autobiographical essays.

Miller (1985) expanded on the initial DRI instrument and coding procedure in her development of an updated content analysis coding system, the Miller Assessment Coding System (MACS, see also Miller & Silverman, 1987). MACS

is a coding system in which dynamisms are categorised as feeling towards values, self and others at the five theoretical levels of development (Miller, 1985). The categories represent motivations which are assumed to direct the behavior of individuals. The categories and sub-categories were derived from the dynamisms and descriptions of developmental levels in Dabrowski's theory. Interrater reliability ranges between .77 and .80 (Miller, 1985). The most recently revised edition of MACS (Miller, 1991) was used in Bailey's (2011) research.

Finally, the Multilevelness of Emotional and Instinctive Functions Project may be very useful (see Piechowski, 2008; see also Dąbrowski & Piechowski, 1977, 1996), showing in a detailed way Piechowski's approach to content analysis of the material (autobiographies and verbal stimuli responses) sent by Dąbrowski. It ranged from defining interpretative units through converting Dąbrowski's conceptions of levels into a numerical expression to assessing reliability and validity of his approach by three post facto empirical test of the Theory.

Referring to the concept of positive disintegration, also the Post-Traumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 2004) cannot be ignored. This is the most commonly used tool (see Jayawickreme & Blackie, 2014) in the trauma-related (in a broad sense) research area with satisfying reliability and validity coefficients. However, the specificity of the research sample on which the psychometric properties of the original psychometric tool were tested raises some methodological doubts. It consisted of 199 men and 405 women recruited from general psychology classes at one U.S. university. In majority they aged from 17 to 25 (92% of them), were single (95%) and Protestant (85%) (Tedeschi & Calhoun, 1996). In consequence, both the nature and the range of the stressors reported by participants (such as bereavement (36%), injury-producing accidents (16%), separation or divorce of parents (8%), relationship break-up (7%), criminal victimization (5%), academic problems (4%), and unwanted pregnancy (2%) [Tedeschi & Calhoun, 1996]) were hardly comparable to the general population. What is more, PTGI language adaptations showed that the factor structure identified from two to five PTG dimensions (Weiss & Berger, 2010) and explained no more than 57.7% of the total variance of PTG (e.g., Ogińska-Bulik & Juczyński, 2010).

Also recent adaptations suggest that the former translations of PTGI should be reconsidered and improved (e.g., Henson et al., 2022) or show not always satisfactory reliability, if not of the total PTGI scale, then of some of its five subscales (e.g., Heidarzadeh et al., 2017). In this context it is worth noticing

that Cann, Calhoun, Tedeshi, and Solomon (2010), and Cann, Calhoun, Tedeshi, et al., (2010) developed a shortened version of the PTGI: the PTGI-Short Form (PTGI-SF). It displayed adequate internal consistency ($\alpha = 0.86$ to 0.89) and confirmatory factor analyses supported the five-factor structure.

At the same time, the biographical method, incorporated in the study, allows one to grasp the meaning of many given events (including the most recent CLE) and their consequences for a person due to indirect questions measuring personality changes that are not always observed by respondents themselves. In consequence, the tools (CLEI and CSPD) fit into the current work on narrative identity development. Within this paradigm there are two major contemporary approaches: identity status model (Schwartz, 2015, 2001) and the narrative identity model (e.g., McAdams, 2001; McAdams & Cox, 2010; McAdams & McLean, 2013; Singer, 2004). Within the former model surveys either directly ask about the identity processes of exploration and commitment (Marcia, 1966) in different content domains (e.g., Balistreri et al., 1995) or ask more generalized questions about them that are decontextualized from content (e.g., Luyckx et al., 2008). The main limitation of these questionnaire assessments is that responses in different content domains are aggregated to form identity statuses and their closed-ended format does not allow to capture any personal meaning of various identity contents (e.g., McLean et al., 2016). Moreover, the convergence of these assessments with the identity status paradigm is problematic (e.g., Waterman, 2015).

According to the narrative identity model growth is manifested in changes in individuals' personal life stories. In McAdams's (1988, 1993, 1995; McAdams & Pals, 2006) theory of personality, life stories constitute one level (next to traits [neuroticism] and characteristic adaptations [i.e., goals, ego development]) of personality. Life Story Interview (LSI; McAdams, 2001) and the Guided Autobiography (GA; Foley Center for the Study of Lives, 1997), or some modified versions of them are usually used to collect the narrative accounts (Bruner, 1991). At the heart of this model lies the construct of autobiographical reasoning (Habermas & Bluck, 2000; Habermas & Kober, 2015) and there are many ways of examining it, such as meaning-making (e.g., McLean & Pratt, 2006; Park 2010; Park & Folkman, 1997; Wortmann & Park, 2009), exploratory processing (Pals, 2006), and making self-event connections (Pasupathi & Mansour, 2006; Pasupathi et al., 2007).

Moreover, studies on personality development within the narrative identity model often focus on growth themes, such as: "disequilibrating" emotional impact of the event on self and a positive ending to the story (McAdams et al.,

1997; Pals, 2000; Pals & McAdams, 2004) and their interactions within stories (e.g., King et al., 2000), agency and/or communion and/or their combination (e.g., Guisinger & Blatt, 1994; Gutmann, 1994; Kaźmierczak et al., 2023; McAdams et al., 1996), coherence (e.g., Adler et al., 2012, 2013; Adler & McAdams, 2007; Adler et al., 2007; Adler et al., 2008; Baerger & McAdams, 1999), contamination and/or redemption (e.g., Adler et al., 2006; Adler et al., 2015; Blackie et al. 2020; McAdams et al., 2006), and narrative and emotion problem markers (Angus, 2012), to name a few. However, studies conducted in this approach typically examine only one content, without comparing across content types. Therefore, the narrative approach allows rather identifying marker(s) of personality development than the diagnosis of its complex structure and change in time (McLean et al., 2016).

Apart from the two classic models, there has been a recent movement toward their integration, both theoretically (McLean & Pasupathi, 2012; McLean & Syed, 2015; Syed & McLean, 2015) and empirically (McLean & Pratt, 2006; McLean et al., 2014, 2016; Syed, 2012; Syed & Azmitia, 2008). For instance the process model of narrative self-development (McLean et al., 2007) assigns storytelling the role of a major process for the ego development and maintenance of self-concept (which elements are brought to experience of events and to the construction of situated stories). Blackie et al. (2016) focus on the process of identity integration (defining to what extent people integrate conflicting identities [e.g., beliefs, values, needs] into a coherent self-concept). Blackie and McLean (2021) integrate the engagement in repeated narration and meaning-making processes with character trait changes over time (see also development of character strengths over time; Jayawickreme et al., 2020; and virtue of wisdom that is developed by coping with and overcoming adversity; Jayawickreme & Blackie, 2016). The integrative approach seems to be well complemented by the concept and the operationalisation of Positive Disintegration as they both allow for identifying the dynamics that underlie personality change and provide methods of measuring the structure of the changing personality.

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