Commentary

Three papers published in NeuroQuantology have presented data that support the idea that the emotional and behavioral function of persons displaying personality disorders have a neural mechanism basis (Gawda 2012; Gawda, Bernacka and Gawda, 2016; Gawda, 2017). Every personality disorder is associated with emotional and behavioral impairments manifested in different ways which are determined by complex neural organization. For instance, borderline personality disorder’s main characteristics such as emotional instability, suicidality, identity disturbances, outbursts of intense anger, stormy relationships are entrenched in neurobiological mechanisms (Koenigsberg et al., 2009). Psychopaths experience love as unclear and strong emotion, with an inappropriate valence, and high self-concentration. Their insight in emotional states is dysfunctional which has serious and negative consequences in their interpersonal relationships. These findings are in line with other data indicating their inability to take a victim’s perspective (Hiatt and Newmann, 2007).

The findings presented on mental rigidity defined as personality disposition showed that this trait can be also associated with neural mechanisms. A stable line in the formation and development of this mental disposition has been found, i.e. research showed that fear attachment is a predictor for differentiating, and analyzing emotional information, disturbances in emotional processing and experiencing have been shown as significantly related to neural mechanisms (Gawda, 2012). Psychopaths experience love as unclear and strong emotion, with an inappropriate valence, and high self-concentration. Their insight in emotional states is dysfunctional which has serious and negative consequences in their interpersonal relationships. These findings are in line with other data indicating their inability to take a victim’s perspective (Hiatt and Newmann, 2007).

The findings presented on mental rigidity defined as personality disposition showed that this trait can be also associated with neural mechanisms. A stable line in the formation and development of this mental disposition has been found, i.e. research showed that fear attachment is a predictor for
dogmatism/mental rigidity. This demonstrates the links between trait anxiety and mental rigidity. As fear/anxiety as a disposition has been described as being based on neural foundations, such is the case for other personality traits, among them mental rigidity, which can be associated with a neurobiological bases (Gawda and Szepietowska, 2016). The relationships shown correspond with other data on personality dimensions which have documented that personality is rooted in the relevant brain systems (De Young et al., 2010). Dogmatism as well as other personality traits such as Openness, and Mindfulness can be associated with both the activation of brain areas and the structural variations of brain regions (De Young, 2010). For example, Openness has been presented to be associated with structure variation and activation in the lateral prefrontal cortex (De Young, 2010; De Young et al., 2010). Mindfulness which is opposing to dogmatism, in turn, has been found as involving more efficient PFC inhibition of the amygdala responses during affect labeling. This trait is associated with activation in the medial prefrontal, ventrolateral prefrontal, and ventromedial prefrontal cortices (Creswell et al., 2007). Thus, dogmatism/mental inflexibility being an opposite of Openness and Mindfulness and being formed on the bases of fear attachment can be entrenched in the stable neural mechanism encompassing the lateral prefrontal cortex, the medial ventrolateral, and ventromedial prefrontal cortices, and amygdala. It is worth noting that mental rigidity means some inflexible behavior which is also present in personality disorders.

All findings presented in the articles clearly point out that stability of emotional functioning and behavioral patterns in individuals with personality disorders is determined by neurobiological bases (Gawda 2012; Gawda, Bernacka and Gawda, 2016; Gawda, 2017). This means that all personality disorder traits are deeply rooted in neural mechanisms. This has consequences. First, it is a cause of their relatively stable nature. Second, it results in a resistance to change during treatment. It explains that behaviors and emotions can be modified only in the process of long-term treatment. Finally, these results emphasizing that the most effective understanding, description, and treatment should encompass both biological and psychological approaches.

References


