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Implicit motives and hemispheric processing differences are critical for understanding
personality disorders: A Commentary on Hopwood

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Abstract

In this commentary, I highlight the role of implicit motivational needs for power and affiliation and their interaction with hemispheric laterality in shaping adaptive and maladaptive interpersonal behavior as it occurs in normal personality processes and personality disorders.

**Implicit motives and hemispheric processing differences are critical for
understanding personality disorders: A Commentary on Hopwood**

Hopwood (this issue) calls attention to the interpersonal dynamics characterizing personality and personality disorders. In my response to Hopwood's stimulating target article, I will focus on two issues: the role of motives in interpersonal dynamics and their interaction with hemispheric processing differences in adaptive and maladaptive personality processes.

1. Implicit motives and interpersonal dynamics

Implicit motives are dispositions to experience specific classes of incentives as rewarding and corresponding classes of disincentives as aversive (Schultheiss & Köllner, in press). For instance, those high in the need for power (nPower) – but not those low -- enjoy having impact on other people and respond with negative affect to others trying to have an impact on them. Similarly, individuals with a high need for affiliation (nAffiliation) – but not those low in this motive – cherish the experience of close, harmonious relationships and suffer when rejected. Motive measures were derived by studying the effects of motivational arousal on the content of picture stories (McClelland, 1958; Winter, 1999). They therefore fulfill a central criterion of modern validity theory: that a measure reflect causal effects of changes in the attribute it targets (Borsboom, Mellenbergh, & van Heerden, 2004). This sets the motive measures apart from most other measures in personality psychology, for which causal effects of the targeted attribute on the measure have not been documented (this also applies to the trait measures that Hopwood suggests as a starting point for research on personality disorders; see Boag, 2015).

nPower and nAffiliation are based on *social* incentives and disincentives, color peoples' interpretation of corresponding incentive cues, and influence their own social signals and behavior directed towards others. In other words, *motives play a key role in the interpersonal dynamics of behavior*. While Hopwood acknowledges this in his model, measures of nPower and nAffiliation should not be equated with consciously represented goals (also represented in Hopwood's model) or self-attributed motivational needs. Meta-analyses and studies with large samples consistently show that motive measures based on content coding have almost no variance overlap ($\leq 2\%$) with goal and motive measures based on declarative measures (Köllner & Schultheiss, 2014; Rawolle, Schultheiss, & Schultheiss, 2013). Hence the term *implicit* motives.

Stanton, Hall and Schultheiss (2010) presented a systematic framework for understanding the role of motives in interpersonal behavior, called *motivational field theory* (MFT). Like Hopwood's model, MFT is based on earlier work by Wiggins (e.g., Wiggins & Trobst, 1999). MFT holds that interpersonal signaling of motivational states and interpersonal behavior occur along the dimensions of dominance and affiliation. nPower determines to what extent signals sent by an interaction partner are interpreted as submissive (rewarding) or dominant (aversive). nAffiliation determines to what extent signals sent by another are interpreted as friendly (rewarding) or hostile (aversive). Individuals high in nPower are responsive to signals captured by the dominance axis and individuals high in nAffiliation are responsive to signals varying along the affiliation axis.

MFT is supported by studies showing, for instance, that nPower predicts sensitivity for dominance-related interpersonal cues (e.g. Donhauser, Rösch, & Schultheiss, 2015; Wang, Liu, & Yang, 2014) and the acquisition and execution of

behavior aimed at maximizing one's own influence on others and minimizing others' influence on oneself (e.g., Stoeckard, Strick, Bijleveld, & Aarts, 2016, 2018; Schultheiss & Schiepe-Tiska, 2013). Similarly, nAffiliation predicts sensitivity for others' signals of friendliness or distance (Kordik, Eska, & Schultheiss, 2012), nonverbal behavior in social interaction situations (Hagemayer, Dufner, & Dennissen, 2016), and negative emotional responses to social isolation (Hofer & Busch, 2011).

2. The role of hemispheric differences

Although motives influence interpersonal behavior and thus may contribute to the onset and maintenance of personality disorders, they do not represent maladaptive dispositions per se. So what determines whether motives translate into normal or abnormal interpersonal functioning? To answer this question, I draw on evidence for brain laterality as a moderator of motive-driven interpersonal dynamics, as viewed through the lens of McGilchrist's (2009) theory of interhemispheric dynamics.

Motive research consistently shows that individuals with a propensity to engage attentional functions of the right hemisphere (RH), indexed by a high level of activity inhibition (AI) assessed in picture stories (Schultheiss, Riebel, & Jones, 2009), show more socially adaptive behavior than individuals with a propensity to engage attentional functions of the left hemisphere (LH), as reflected in low AI. For instance, in the former nPower predicts management success as reflected in high organizational clarity and team morale, whereas in the latter nPower is associated with a self-aggrandizing leadership style (McClelland & Burnham, 2003). Similarly, whereas in the former nAffiliation predicts non-violent conflict tactics in intimate relationships, in the latter nAffiliation predicts high levels of physical and psychological partner abuse (Mason & Blankenship,

1987; see Schultheiss et al, 2009, for more examples). Such findings suggest that motives are particularly likely to contribute to behavior associated with personality disorders in individuals prone to engage LH functions.

This is consistent with McGilchrist's (2009) hypothesis, based on a large neuropsychological literature, that individuals who get stuck in an LH information processing mode (as opposed to those with an RH-favoring mode and/or fluid interhemispheric information exchange) have a peculiar maladaptive mindset. It is characterized, for instance, by reality distortion through denial of expectation-violating information, an inability to deal with ambiguity, a tendency to view and treat others as mere tools for the advancement of one's interests and goals, and a profound lack of empathy. I contend that the literature reviewed by McGilchrist points toward specific, socially adaptive functions of the RH, which, if weakened or underdeveloped, may contribute to an LH-processing propensity and the maladaptive interpersonal consequences associated with it. McGilchrist's hypothesis is thus compatible with, and helps to make sense of, the moderating effects of AI on the expression of implicit motives in interpersonal behavior. It also points toward a treasure trove of neuropsychological information on hemispheric processing asymmetries that may be of particular importance to research on personality disorders.

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