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# Dispositional Self-Evaluation Motives and Accuracy of Self-Knowledge

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#### **ABSTRACT**

#### Aim

This laboratory study was the first to investigate the links between four cardinal dispositional self-evaluation motives (self-motives) and accuracy of self-knowledge. *Method*. Participants were 178 people (i.e., 89 dyads of acquaintances) at a mean age of 24 years. The used measures were the Self-Motive Items (Gregg, Hepper & Sedikides) and the personality Q-sort QOS (Miciuk).

#### Results

Accuracy of self-knowledge correlated most strongly and positively with the self-assessment motive. In turn, self-enhancement was a negative correlate of accuracy. Response surface analyses (RSAs) supported hypotheses about discrepancies inside pairs of self-motives being predictors of accurate self-knowledge. Most importantly, compared with the other three motives, the accuracy of self-knowledge was higher in participants who scored lower in self-enhancement. Self-motives and their interconnections explained 22% of accuracy of self-knowledge.

#### Conclusion

The dispositional motive of self-enhancement is negatively related to the accuracy of self-knowledge. Nonetheless, self-enhancing people can still achieve relatively high levels of accuracy as long as their self-enhancement is not stronger than the other three motives. In general, self-motives are important predictors of accuracy of self-knowledge.

**Keywords:** accuracy of self-knowledge, self-other agreement, self-enhancement, self-verification, self-assessment, self-improvement, Q-sort, response surface analysis

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#### INTRODUCTION

Self-knowledge denotes "an awareness of who we are, what we can do, and the limitations that we possess" (Strube, 2012, p. 397), usually expressed in broadly defined self-attributes. Back and Vazire (2012) define self-knowledge as "accurate explicit self-perceptions of how one regularly thinks, feels, and behaves, and awareness of how these patterns are interpreted by others" (p. 133). The typical way to probe the level of accuracy of self-knowledge is to measure self-other agreement, in other words, the correspondence between one's explicit self-views and one's reputation in the eyes of other people (Vazire & Carlson, 2010). In turn, self-evaluation motives (or simply self-motives) are self-regulatory motivational processes "relevant to the development, maintenance, and modifications of selfviews" (Gregg, Hepper, & Sedikides, 2011, p. 840). The four cardinal self-motives are self-enhancement (i.e., the strive to see oneself positively; Alicke & Sedikides, 2009), self-verification (i.e., the urge to confirm one's pre-existing self-views; Swann, Rentfrow, & Guinn, 2003), self-assessment (i.e., the motivation to know what one is honestly and genuinely like; Trope, 1986), and self-improvement (i.e., the desire to possess information which may be useful in the attempts to make oneself a person better than one currently is; Taylor, Neter, & Wayment, 1995).

Both accuracy of self-knowledge and self-motives may be considered in two ways, namely from a situational and a dispositional perspective. In the first case, we inquire: "Does this person, at this time, for this self-attribute, have a good reason to be accurate?" (Strube, 2012, p. 398). In the second case, the one of interest in this article, we are concerned with individual differences in self-motives (Gregg, Hepper, & Sedikides, 2011) and how they predict the overall accuracy of self-knowledge.

From the theoretical point of view (Sedikides & Strube, 1997), self-motives play an important regulatory role in the processing, selection and evaluation of information about oneself (see also: Gregg, Hepper, & Sedikides, 2011; Jankowski, 2006). In particular, self-assessment should provide timeliness of self-knowledge due to continuous self-monitoring and seeking for diagnostic information about the self. Self-verification should strengthen cognitive meta-scheme of the self, including both positive and negative self-attributes. Self-improvement should motivate proper diagnosis of oneself in the service of efforts to become a better person. Self-enhancement, however, should be related to bias in self-knowledge since it typically manifests as self-promotion (playing up positive attributes) or self-protection (playing down negative attributes) (Alicke & Sedikides, 2009). Thus, while all self-motives are associated with a preference for specific information, self-enhancement is particularly associated with selectivity in the service of the self and bias in self-knowledge (compare: Robins & John, 1997). According to Strube (2012, p. 400), "self-enhancement and its influence of self-knowledge might be thought of as the default or resting state of the self-system (when it is not being called upon to do something more important or demanding in the way of self-evaluation)". This may be because there are substantial benefits and low costs of positively biased self-perceptions in most everyday situations, such as those related to self-serving bias, the illusion of control, unrealistic optimism, and inflated self-esteem (Kruger, Chan, & Roese, 2009; Taylor & Brown, 1988). Therefore, it is understandable that most people generally score relatively high in dispositional self-enhancement (Gregg, Hepper, & Sedikides, 2011). Surprisingly enough, despite such a common tendency to self-enhance, meta-analyses report rather satisfactory levels of self-knowledge accuracy in various samples (Vazire & Carlson, 2010). If so, the simple idea that people accurate in their self-views must necessarily be low in self-enhancement is not convincing. It seems more reasonable to think that for some people, self-enhancement is probably an obstacle in achieving the accuracy of self-knowledge, whereas, for others, it is not. Whether (and how) individual differences in self-evaluation motives relate to the accuracy of self-knowledge has not yet been explored.

This study aimed to investigate how the overall accuracy of self-knowledge may be predicted by (mis)matches in theoretically meaningful pairs of dispositional self-motives. The first hypothesis regarded three pairs, each consisting of self-enhancement and one of the remaining self-motives. The author hypothesized that for a higher level of accuracy of self-knowledge, people should be higher in self-verification, self-assessment, and self-improvement when each of these motives is paired and compared with self-enhancement. In particular, self-verification should be higher than self-enhancement in order to provide self-schema including both positive and negative self-attributes. Self-assessment should be higher than self-enhancement in order to ensure that a person is seeking diagnostic information more than preferred positive information. Self-improvement should be higher than self-enhancement, because preferring information about what can be improved in one's self is more conducive to critical thinking about the self than preferring information about what one is already great at.

Due to the above-mentioned functions of self-verification, self-assessment and self-improvement, these three self-motives should, each in their own way, contribute positively to the accuracy of self-knowledge. Hence, the second hypothesis regarded the remaining three possible pairs of self-motives, each pair consisting of two self-motives other than self-enhancement, and the author hypothesized that higher levels of self-motives in each such pair should predict higher levels of accuracy of self-knowledge. In addition to addressing the two hypotheses, this study aimed to determine the total variance of accuracy of self-knowledge explained by self-motives and their interconnections.

#### **METHOD**

# **Participants**

One hundred seventy-eight people (65% women) took part in this study, i.e., eighty-nine dyads of acquaintances aged 18 to 55 years (M = 23.99, SD = 5.32). They were friends or colleagues who declared they knew each other well, but

were not family members nor romantic partners. They did not receive any renumeration for participating in this study. According to the power analysis (Faul, Erdfelder, Buchner, & Lang, 2009), this sample provided 0.99 power to detect a medium-sized ( $f^2 = 0.15$ ) effect on  $R^2$  (i.e., as a result of expanding a two main effects model to a polynomial model by the addition of the interaction and two quadratic terms in the regression analysis), or 0.50 power to detect a small-sized ( $f^2 = 45520.04$ ) effect.

## Measures

### **Predictors: Self-motives**

Self-enhancement, self-verification, self-assessment, and self-improvement were measured with the Self-Motive Items by Gregg, Hepper and Sedikides (2011) in Polish translation by Miciuk and Oleś, i.e., a valid, short, and elegant self-report measure of individual differences in self-motives. Each self-motive was measured on a 7-point response scale (1 = totally disagree, 7 = totally agree) by two items concerning what one likes to hear and wants to discover about oneself (e.g. "In general, I LIKE to hear that I am a GREAT person" and "In general, I WANT to discover what I HONESTLY am like").

## Outcome: accuracy of self-knowledge

Accuracy of self-knowledge was probed as self-other agreement in the QOS (the Q-sort to measure Objectivity of Self-knowledge; Miciuk, 2020), based on the ACL (the Adjective Check List by Gough and Heilbrun, 1983). The QOS was constructed with the participation of six competent judges, who selected, out of 300 ACL items, personal characteristics that are particularly important to consider when assessing the accuracy of self-perceptions (selection criteria included manifestation of personal characteristic in social interactions and its availability for external observers). If an item was chosen by at least four of the six judges, it was included in the Q-sort deck, which finally consisted of 83 adjectives denoting various personal characteristics (e.g. "ambitious", "egoistic", "sexy", "mature", "reflective", and "sociable"). In the QOS, as in a typical Q-sort measure, a respondent is asked to sort (according to a given criterion) all items into piles of different sizes so that their arrangement resembles normal distribution (Block, 2008). Therefore, the QOS enforces a more balanced and well-thought-out psychological description than personality questionnaires, as every item must be weighed (juxtaposed with the rest of the items) before deciding where to place it (Miciuk, 2020). Following the rules formulated by Funder and colleagues (Riverside Accuracy Project, 2016), first, respondents had to sort all 83 items into three categories (piles): uncharacteristic, neutral, and characteristic. Next, respondents had to sort all items into nine categories (piles), from 1 (extremely uncharacteristic) to 9 (extremely characteristic). Respondents were free to move the items between all nine categories (i.e., the preliminary sorting was not binding) and to change their decisions until they decided that the sorting was done.

#### **Procedure**

Participants were recruited by means of advertisements inviting them to participate in the study and via snowball sampling (Goodman, 1961) and they entered the laboratory in dyads of acquaintances. Each participant worked in a separate room, and the time for finishing tasks was indefinite. In round 1, participants were asked to sort the QOS items in order to describe themselves (self-report of one's own personal characteristics). In round 2, participants filled in the Self-Motive Items unobtrusively embedded in a battery of unrelated measures. In round 3, participants sorted the QOS items in order to describe their dyad acquaintances (one's estimation of his/her acquaintance's personal characteristics). All respondents were assured that they would never know how their dyad acquaintances described them. Q-sortings were performed on computers using the Q-sorter Program software developed by Funder and colleagues (Riverside Accuracy Project, 2016).

## **Data analysis**

Guided by Cronbach's critique of the differential scores (1955) and Block's recommendations for Q-methodology (2008), Pearson's R correlation between self-and other-sorting in the QOS quantified self-other agreement (compare: Brauer & Proyer, 2020; Funder & West, 1993), i.e., the indicator of the accuracy of self-knowledge.

Quadratic polynomial regression and response surface analyses (RSAs) were conducted with the use of RSA package in R software (Schönbrodt, 2016) in order to check how agreement and discrepancy (i.e., degree and direction) inside six pairs of predictors (self-motives) related to the outcome variable (accuracy of self-knowledge). RSA is "an approach designed to answer questions about how (mis)matching predictors relate to outcomes while avoiding many of the statistical limitations of alternative, often-used approaches" (Barranti, Carlson, & Côté, 2017, p. 465; compare: Edwards, 2002; Humberg, Nestler, & Back, 2019). In line with recommendations by Barranti, Carslon, and Côté (2017), predictor variables were from one common conceptual domain (self-motives) and were all assessed on an identical response scale (1-7). First, the scores in predictors were evaluated for the presence of discrepancies inside pairs of self-motives. Second, the outcome variable Z (accuracy of self-knowledge) was (for three pairs of X and Y self-motives separately) regressed on to: centered predictors X and Y, centered predictors X and Y squared, and cross-products of centered predictors X and Y. Finally, model significance was assessed, response surface was generated, and its coefficients  $a_1$ - $a_4$  were analyzed to enable psychological interpretation. The response surface is defined by the line of congruence and the line of incongruence (see figure 1, p. 161; compare: Barranti, Carslon & Côté, 2017). The line of congruence is described by coefficients  $a_1$  (slope) and  $a_2$  (curvature). The outcome may be higher (positive  $a_1$ ) or lower (negative  $a_2$ ) when both predictors match at higher levels, as compared with lower levels. What is more, the outcome may be

higher  $(+a_2)$  or lower  $(-a_2)$  when both predictors match at more extreme levels, as compared with midrange levels. In turn, the line of incongruence is described by coefficients  $a_3$  (slope) and  $a_4$  (curvature). The outcome may be higher  $(+a_3)$  or lower  $(-a_3)$  when first predictor is higher than second predictor than when second predictor is higher than first predictor. The outcome may be also higher  $(+a_4)$  or lower  $(-a_4)$ , the more both predictors deviate from one another (Barranti, Carlson, & Côté, 2017; Miciuk & Dubas-Miciuk, 2020).

#### **RESULTS**

## **Descriptive Statistics and Correlations between Variables**

Table 1 presents descriptive statistics and correlations between variables. Self-assessment was the self-motive most strongly and positively related to the accuracy of self-knowledge (probed as self-other agreement in the QOS; Miciuk, 2020). This finding is consistent with the theoretical meaning of self-assessment, i.e., the motive to seek the truth about oneself (Strube, 2012). Not surprisingly, self-enhancement was a negative correlate of accuracy. As shown by the semi-partial correlations, self-verification did correlate with accuracy and self-improvement did not, when controlling their common variances with the other three self-motives (check table 1 for details).

 ${\bf Table\ 1}$  Descriptive statistics and correlations between variables

Variables	Mean	SD	1	2	3	4
1. Self-Enhancement	5.38	1.21	[.69]			
2. Self-Verification	4.74	1.30	.24**	[.67]		
3. Self-Assessment	5.99	.93	.07	.02	[.62]	
4. Self-Improvement	5.46	1.10	.12	.24**	0.29***	[.60]
5. Accuracy of Self-Knowledge	.47	.17	18* (23**)	.13 <sup>†</sup> (.17**)	0.34*** (.33***)	.15* (.04)

*Note.* Spearman-Brown split-half reliability coefficients are presented on the diagonal in square brackets. Semi-partial correlations between accuracy of self-knowledge and each self-motive (when controlling the other three self-motives) are presented in round brackets. Measures 1–5 did not correlate with sex and age.

$$N = 178$$
, \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , †  $p < .10$ 

# Variances of Accuracy of Self-Knowledge Explained by Each Pair of Self-Motives Separately

Response surface analyses (RSAs) revealed more complex, nuanced effects of self-motives on the accuracy of self-knowledge. As shown in table 2, five out of six polynomial regression models (i.e. models A-E), in which predictors were different pairs of self-motives, yielded significant effects ( $Rs^2$  from .10 to .17) on the outcome variable (accuracy of self-knowledge). Regression coefficients were then used to estimate response surface coefficients  $a_1$ – $a_4$  for each model's line of congruence and line of incongruence separately (table 2, p. 160). Figure 1 presents the response surfaces for models A-E.

As regards the first hypothesis, the results were consistent across models A-C, where the pairs of predictors consisted of self-enhancement plus another self-motive (see figure 1). For the lines of incongruence, the significant negative values of  $a_3$  indicated that accuracy of self-knowledge was higher when the discrepancy was such that self-enhancement was lower than another self-motive rather than vice versa.

As regards the second hypothesis, the results were consistent across models D-E. For the lines of congruence, the significant positive values of  $a_1$  indicated that accuracy of self-knowledge was higher when both self-motives matched at higher levels, as compared with lower levels. In other words, high accuracy corresponded with high self-assessment and self-verification, as well as with high self-assessment and self-improvement (see figure 1, p. 161). Model F (self-improvement and self-verification) would probably demonstrate a very similar pattern if this model reached statistical significance (check table 2 for details).

# Total Variance of Accuracy of Self-Knowledge Explained by Self-Motives

In order to determine the total variance of accuracy of self-knowledge explained by self-motives, additional regression analyses were performed. The saturated (full) model predicting accuracy of self-knowledge included all ( $T_1$ - $T_{14}$ ) terms ( $T_1$ : self-enhancement,  $T_2$ : self-verification,  $T_3$ : self-assessment,  $T_4$ :self-improvement,  $T_5$ : self-enhancement<sup>2</sup>,  $T_6$ : self-verification<sup>2</sup>,  $T_7$ : self-assessment<sup>2</sup>,  $T_8$ : self-improvement<sup>2</sup>,  $T_9$ : self-enhancement\*self-verification,  $T_{10}$ : self-enhancement\*self-improvement,  $T_{12}$ : self-assessment\*self-verification,  $T_{13}$ : self-assessment\*self-improvement,  $T_{14}$ : self-improvement\*self-verification) taken from models A-F. As guided by Johnston, Jones, and Manley (2018), in order to omit the problem of collinearity of regression terms,

 $\rm T_2\text{-}T_{_{14}}$  (i from 2 to 14) were in replaced with their residuals. More precisely, for i = 2, res\_T\_2 = residual(T\_2 ~ T\_1); for i = 3, res\_T\_3 = residual(T\_3 ~ T\_1 + res\_T\_2); and, for each i > 3, res\_T\_i = residual(T\_i ~ T\_1 + res\_T\_2 + ... + res\_T\_{\_{i-1}}). Such saturated (full) model (SOA ~ T\_1 + res\_T\_2 + ... + res\_T\_{\_{14}}) was significant [ $R^2$  = .27 (adjusted  $R^2$  = .20); F(14, 163) = 4.23; p < .001].

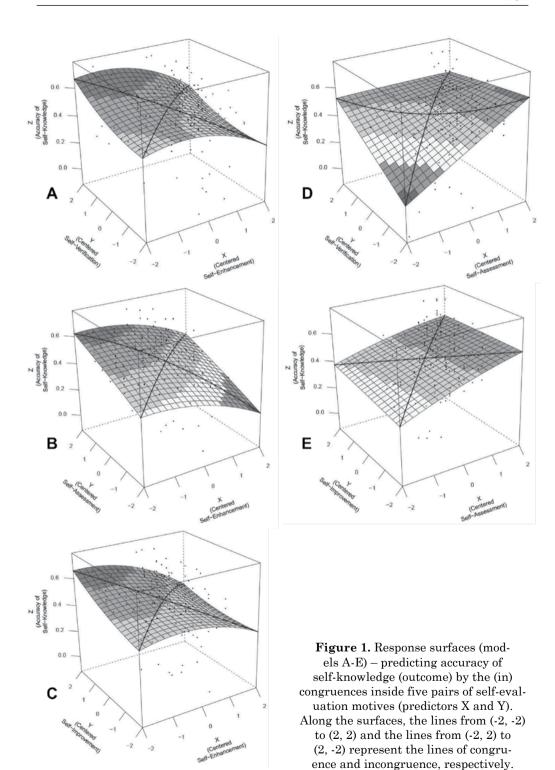
Table 2

Regression analyses and response surface analyses - predicting accuracy of self-knowledge (outcome) by the (in)congruences inside six pairs of self-evaluation motives (predictors X and Y).

Outcome Z. Accuracy o	Jo		Polynon	nial Regres	Polynomial Regression Analysis coefficients	sis coeffic	ients		Respon	se Surfac	Response Surface Analysis coeffi- cients	coeffi-
Predictor X Predictor Y	or Y	$b_{0}$	$b_{_1}$	$b_{_2}$	$b_3$	$b_4$	$b_5$	$R^2$	$a_{_1}$	$a_{_{2}}$	$a_{_3}$	$a_{_4}$
Model A				F(5.172) =	F(5.172) = 3.76 [.003]			.10				
Self-Enhancement Self-Verification	ication	.51 [<.001]	05 [<.001]	.05 [.004]	03 [.015]	01 [.642]	.01 [.086]		003 [.821]	02 [.147]	09 [<.001]	-0.1 [.695]
Model B			F	7(5.172) = 7	F(5.172) = 7.15 [<.001]			.17				
Self-Enhancement Self-assessment	ssment	.46 [<.001]	05 [< .001]	.07 [< .001]	02 [.010]	< .01 [.852]	<01 [.894]		.02 [.441]	02 [.376]	12 [<.001]	02 [.248]
Model C			'	F(5.172) = 3.79 [.003]	3.79 [.003]			.10				
Self-Enhancement Self-Improve- ment	orove-	.49 [<.001]	05 [<.001]	.04 [.006]	02 [.005]	01 [.245]	.01 [.433]		01 [.431]	03 [.067]	09 [<.001]	<01 [.915]
Model D			F	$^{7}(5.172) = 8$	F(5.172) = 5.96 [<.001]			.15				
Self-Assessment Self-Verification	ication	.46 [<.001]	.06 [< .001]	.04 [.055]	<01 [.963]	03 [.050]	<01 [.923]		.10 [<.001]	03 [.204]	.02 [.407]	.03 [.198]
Model E			F	$^{7}(5.172) = 4$	F(5.172) = 4.77 [<.001]			.12				
Self-Assessment Self-Improvement	orove-	.47 [< .001]	.06 [.004]	.01 [.572]	01 [.670]	01 [.740]	<01 [.944]		.07 [<.001]	01 [.524]	.05 [.169]	<pre>&lt;01 [.980]</pre>
Model F				F(5. 172) = 1.53 [.183]	1.53 [.183]			.04				
Self-Improvement Self-Verification	ication	.47 [< .001]	.03 [.053]	.01 [.396]	<01 [.850]	.02 [.244]	<01 [.772]		.04 [.017]	.02 [.280]	.02 [.549]	02 [.525]

Note. N = 178. All coefficients unstandardized.  $b_0 = \text{constant}$ ;  $b_1 = X$ ;  $b_2 = Y$ ;  $b_3 = X^2$ ;  $b_4 = X^*Y$ ;  $b_5 = Y^2$ ; slope of the line of congruence  $a_1 = b_1 + b_2$ ; curvature of the line of congruence  $a_2 = b_3 + b_4 + b_5$ ; slope of the line of incongruence  $a_3 = b_1 - b_2$ ; curvature of the line of incongruence  $a_4 = b_3 - b_4 + b_5$ .

Levels of significance (p-values) in square brackets. Significant statistics in bold.



Backward stepwise regression gradually eliminated terms from the full model one by one to find a model that best explained the data, i.e., the reduced model  $[R^2=.25,$  adjusted  $R^2=.22;$  F(7,170)=8.29, p<.001] including five significant terms and 2 terms at the level of the statistical trend (constant: .61, p<.001; res\_self-enhancement: B=.03, p=.008; res\_self-verification: B=.02, p=.008; res\_self-assessment: B=.06, p<.001; res\_self-enhancement<sup>2</sup>: B=-.02, p=.013; res\_self-improvement\*self-verification: B=.02, p=.036; res\_self-enhancement\*self-improvement: B=-.02, p=.060; res\_self-verification\*self-assessment: B=-.02, p=.081). The differences between variances of accuracy of self-knowledge explained by the reduced model and the saturated (full) were not significant (F of change = 1.78, p=.180).

The remaining possible interactions of self-motives were trios ( $T_{15}$ : self-enhancement\*self-assessment\*self-verification,  $T_{16}$ : self-enhancement\*self-improvement\*self-verification,  $T_{17}$ : self-enhancement\*self-improvement\*self-assessment,  $T_{18}$ : self-verification\*self-improvement\*self-assessment) and a quartet ( $T_{19}$ : self-enhancement\*self-verification\*self-assessment\*self-improvement). To explore whether taking them into account would increase the amount of explained variance of the outcome variable, their residuals were included as the additional terms in the second step of regression analysis as an attempt to supplement the reduced model. The change in the explained variance of accuracy of self-knowledge was nonsignificant [ $F_{\rm change}$ (5, 165) = .36, p = .872] and the regression coefficients of the additional terms were nonsignificant too [Bs: -.013 to .000, ps: .232 to .989]. As a result, the reduced model including seven terms (self-motives and their interconnections) turned out to be the final one, explaining 22% of the accuracy of self-knowledge variance.

### DISCUSSION

Self-motives are usually theorized as working in concert rather than operating separately (Bosson & Swann, 2001; Oleś \* Drat-Ruszczak, 2008; Strube, 2012). The findings of this study are in line with this claim and also fall into the discussion on the implications of overly positive self-perceptions (Colvin, Block, & Funder, 1995; Strube, 2012; Taylor & Brown, 1988) and on accuracy and bias in self-knowledge (Djikic, Peterson & Zelazo, 2005; Hardaker & Tsakanikos, 2021; Kruger, Chan & Roese, 2009; Vazire & Carlson, 2010). In line with the first hypothesis, (mis)matches in the three theoretically justified pairs of self-motives (with self-enhancement present in each of these pairs) predicted accuracy of self-knowledge, measured as self-other agreement in a personality Q-sort (Miciuk, 2020). Specifically, the accuracy of self-knowledge was higher when self-enhancement was lower than the other self-motive paired with it. Considering self-motives at the dispositional level, these findings suggest that to be closer to accurate self-knowledge, one should probably seek less to see oneself positively than to confirm pre-existing self-views (not only positive but also negative ones), find honest information about oneself, and collects information which may help

in one's attempts to become a better person. In line with the second hypothesis, accuracy of self-knowledge was higher when self-assessment paired with self-verification, and self-assessment paired with self-improvement, matched at higher levels, as compared with lower levels. The amount of the accuracy of self-knowledge variance explained by self-verification paired with self-improvement was too small to reach the level of statistical significance. However, the product of self-improvement and self-verification turned out to be a significant term in the final regression model, which explained 22% of the accuracy of self-knowledge variance by self-motives and their interconnections. Hence, the relationships between self-motives and the accuracy of self-knowledge appear to be nuanced beyond simple linear correlations.

This study was the first to investigate the relationship between dispositional self-motives and the general level of accuracy of self-knowledge. Notably, the latter was measured using Q-methodology, which is effortful but valuable in self-and other- perceptions studies. Since the results of RSAs were conclusive and consistent, they challenge the popular claim that because most self-knowledge is context-dependent, "simple questions about accuracy and bias are largely off the mark" (Strube, 2012, p. 400). Nevertheless, future studies should investigate potential moderators of the relationships presented in this paper, such as self-attribute centrality or modifiability (compare Strube, 2012). For example, measurement of the less/more central self-attributes may presumably translate into lower/higher regression coefficients.

This study had some limitations. First, although statistical power was acceptable (compare: Faul, Erdfelder, Buchner, & Lang, 2009), it could have been better, i.e., allowing smaller effects detection. Second, self-motives were measured in self-report. Third, measured self-knowledge surely did not sample broadly from its all domains. Fourth, participants were Polish adults only. Future research with other domains of self-knowledge, other (than self-other agreement) measures of its accuracy, other populations, and non-self-report measures of self-motives will be indispensable for the generalizability of these findings.

In the title of one of their works, Sedikides and Strube (1997) proposed a pictorial metaphor of self-evaluation processes: "To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better". To paraphrase their words in summarizing the findings of this study, for accurate self-perceptions it may be better if a person strives for a "good" self to a lesser extent than for a "sure", "real" and "better" self (compare: James, 1990).

## REFERENCES

Alicke, M. D., & Sedikides, C. (2009). Self-enhancement and self-protection: What they are and what they do. *European Review of Social Psychology*, 20, 1–48. DOI: 10.1080/10463280802613866.

Back, M.D., & Vazire, S. (2012). Knowing our personality. In S. Vazire & T. D. Wilson (Eds.), *Handbook of self-knowledge* (pp. 131–157). New York: Guilford Press.

- Barranti, M., Carlson, E. N., & Côté, S. (2017). How to test questions about similarity in personality and social psychology research: Description and empirical demonstration of response surface analysis. *Social Psychological and Personality Science*, 8(4), 465–475. DOI: 10.1177/1948550617698204.
- Block, J. (2008). The Q-sort in character appraisal: Encoding subjective impressions of persons quantitatively. Washington, DC: American Psychological Association. DOI: 10.1037/11748-000.
- Bosson, J. K., & Swann, W. B., Jr. (2001). The paradox of the sincere chameleon: Strategic self-verification in close relationships. In J. Harvey & A. Wenzel (Eds.), *Close romantic relationships: Maintenance and enhancement* (pp. 67–86). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Brauer, K., & Proyer, R. T. (2020). Dyadic effects. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 1222–1226). New York: Springer. DOI: 10.1007/978-3-319-28099-8\_656-1.
- Colvin, C. R., Block, J., & Funder, D. C. (1995). Overly positive self-evaluations and personality: Negative implications for mental health. *Journal of Personality and Social Psychology*, 68, 1–11. DOI: 10.1037/0022-3514.68.6.1152.
- Cronbach, L. J. (1955). Processes affecting scores on "understanding of others" and "assumed similarity". *Psychological Bulletin*, *52*, 177–193. DOI: 10.1037/h0044919.
- Djikic, M., Peterson, J. B., & Zelazo, P. D. (2005). Attentional biases and memory distortions in self-enhancers. *Personality and Individual Differences*, 38, 559–568. DOI: 10.1016/j.paid.2004.05.010.
- Edwards, J. R. (2002). Alternatives to difference scores: Polynomial regression analysis and response surface methodology. In F. Drasgow & N. Schmitt (Eds.), *Measuring and analyzing behavior in organizations: Advances in measurement and data analysis* (pp. 350–400). San Francisco: Jossey-Bass.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149–1160. DOI: 10.3758/BRM.41.4.1149.
- Funder, D. C., & West, S. G. (1993). Consensus, self-other agreement, and accuracy in personality judgment: An introduction. *Journal of Personality*, 61(4), 457–476. DOI: 10.1111/j.1467-6494.1993.tb00778.x.
- Goodman, L. A. (1961). Snowball Sampling. *Annals of Mathematical Statistics*, 32, 148–170. DOI: 10.1214/aoms/1177705148.
- Gough, H. G., & Heilbrun, A. B. (1983). *Adjective Checklist Manual*. Palo Alto, CA: Consulting Psychologists Press.
- Gregg, A. P., Hepper, E. G., & Sedikides, S. (2011). Quantifying self-motives: Functional links between dispositional desires. European Journal of Social Psychology, 41, 840–852. DOI: 10.1002/ejsp.827.
- Hardaker, M., & Tsakanikos, E. (2021). Early information processing in narcissism: Heightened sensitivity to negative but not positive evaluative attributes. *Personality and Individual Differences*, 168, 110386. DOI: 10.1016/j.paid.2020.110386.

- Humberg, S., Nestler, S., & Back, M. D. (2019). Response Surface Analysis in Personality and Social Psychology: Checklist and Clarifications for the Case of Congruence Hypotheses. Social Psychological and Personality Science, 10(3), 409–419. DOI: 10.1177/1948550618757600.
- James, W. (1999). The self. In R. F. Baumeister (Ed.), *The self in social psychology* (pp. 69–77). Psychology Press.
- Jankowski, T. (2006). Motywy związane z koncepcją siebie [Self-motives]. Studia z Psychologii w KUL [Research in Psychology at Catholic University in Lublin, Poland], 13, 149–174.
- Johnston, R., Jones, K., & Manley, D. (2018). Confounding and collinearity in regression analysis: a cautionary tale and an alternative procedure, illustrated by studies of British voting behaviour. *Quality and Quantity*, *52*, 1957–1976. DOI: 10.1007/s11135-017-0584-6.
- Kruger, J., Chan, S., & Roese, N. (2009). (Not so) positive illusions. *Behavioral and Brain Sciences*, 32(6), 526–527. DOI: 0.1017/S0140525X09991270.
- Miciuk, L. R. (2020). QOS: Q-sort do pomiaru zgodności między samoopisem i szacowaniem (self-other agreement) orazinnych wskaźników obiektywności samowiedzy [QOS: Q-sort to measure self-other agreement and other indexes of objectivity of self-knowledge]. In M. Trojan & M. Gut (Eds.), Nowe technologie i metody w psychologii [New technologies and methods in psychology] (pp. 431–448). Warsaw: Liberi Libri. DOI: 10.47943/lib.9788363487430.rozdzial20.
- Miciuk, Ł. R., & Dubas-Miciuk, M. M. (2020). Analiza powierzchni odpowiedzi (response surface analysis) w badaniach psychologicznych [Response surface analysis in psychological research]. In M. Trojan & M. Gut (Eds.), Nowe technologie i metody w psychologii [New technologies and methods in psychology] (pp. 411–429). Warsaw: Liberi Libri. DOI: 10.47943/lib.9788363487430.rozdzial19.
- Oleś, P.K., Drat-Ruszczak, K. (2008). Osobowość [Personality]. In J. Strelau, D. Doliński (Eds.), *Psychologia. Tom 1 [Psychology. Vol. 1]* (pp. 651–764). Gdańsk: GWP.
- Pyszczynski, T., Greenberg, J., & Goldenberg, J. (2003). Freedom vs. fear: On the defense, growth, and expansion of the self. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 314–343). New York: Guilford Press.
- Riverside Accuracy Project. (2016). *Q-sort resources. Q-sorter program.* https://rap.ucr.edu/qsorter.
- Robins, R. W., & John, O. P. (1997). The quest for self-insight: Theory and research on accuracy and bias in self-perception. In R. Hogan, J. A. Johnson, S. R. Briggs (eds.), *Handbook of Personality Psychology* (pp. 649–679). San Diego: Academic Press. DOI: 10.1016/B978-012134645-4/50026-3.
- Schönbrodt, F. D. (2016). RSA: Response surface analysis (R package Version 0.9.10) [Oprogramowanie]. Pobrane z http://cran.r-project.org/web/packages/RSA.
- Sedikides, C. (1993). Assessment, enhancement, and verification determinants of the self-evaluation process. *Journal of Personality and Social Psychology*, 65, 317–338. DOI: 10.1037/0022-3514.65.2.317.

- Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. In M. P. Zanna (Ed.), Advances in experimental social psychology (Vol. 29, pp. 209–270). Academic Press. DOI: 10.1016/S0065-2601(08)60018-0.
- Strube, J. S. (2012). From "out there" to "in here": Implications of self-evaluation motives for self-knowledge. In S. Vazire & T. D. Wilson (Eds.), *Handbook of self-knowledge* (pp. 397–412). New York: Guilford Press.
- Swann, W. B., Rentfrow, P., & Guinn, J. (2003). Self-verification: The search for coherence. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity* (pp. 367–383). New York: Guilford.
- Taylor, S.E., & Brown, J. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103(2), 193–210. DOI: 10.1037/0033-2909.103.2.193.
- Taylor, S. E., Neter, E., & Wayment, H. A. (1995). Self-evaluation processes. Personality and Social Psychology Bulletin, 21, 1278–1287. DOI: 10.1177/01461672952112005.
- Trope, Y. (1986). Self-enhancement and self-assessment in achievement behavior. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition:* Foundation of social behavior (pp. 350–378). New York: Guilford Press.
- Vazire, S., & Carlson, E. N. (2010). Self-knowledge of personality: Do people know themselves? *Social and Personality Psychology Compass*, 4, 605–620. DOI: 10.1111/j.1751-9004.2010.00280.x.

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#### Statement

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