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### Self-concept and self-esteem: How the content of the self-concept reveals sources and functions of self-esteem

*The relations of content of self-concept to self-esteem may reflect the role of different factors in developing self-esteem. On the basis of theories describing sources of self-esteem, we distinguished four domains of self-beliefs: agency, morality, strength and energy to act, and acceptance by others, which we hypothesized to be related to self-esteem. In two studies, involving 411 university students, the relationship between self-esteem and self-concept was examined. The results confirmed relative independence of these four domains. Self-evaluation of agency was the strongest predictor of self-esteem, followed by self-evaluation of strength and energy to act, and self-evaluation of acceptance by others. Self-evaluation regarding morality turned out to have either no or negative relationship with self-esteem. The results supported the theories assuming that either perception of one's own agency or acceptance by others are sources of self-esteem.*

**Keywords:** *self-esteem, self-concept, sources and functions of self-esteem*

#### Introduction

For many years, self-esteem, understood as an attitude towards oneself, has been considered one of the most important phenomena in psychology (Leary & MacDonald, 2003; Watson, Suls, & Haig, 2002). Despite plenty of research there still exist controversies concerning its nature (Mar, De Young, Higgins, & Peterson, 2006), sources (Crocker & Park, 2004; Leary & Baumeister, 2000; Pyszczynski, Greenberg, Solomon, & Schimel, 2004), and functions (Baumeister, Campbell, Krueger, & Vohs, 2003; DuBois & Tevendale, 1999; Trzesniewski, Donnellan, Moffitt, Robins, Poulton, & Caspi, 2006). Existing self-esteem theories refer either to intrapersonal (James, 1890/1952; Pyszczynski et al., 2004) or to social sources (Bowlby, 1982; Cooley, 1902; Leary & Baumeister, 2000; Mead, 1934), with these theories usually being tested in experimental or correlational studies (Leary, Tambor, Terdal, & Downs, 1995; Sowards, Mioniz, & Harris, 1991).

Studies presented in this paper sought to identify factors that affect self-esteem related to self-image. Research studying relations between self-image and self-

esteem has focused mostly on the formal aspects of self-concept (Campbell, Assanand, & Di Paula, 2003; Hardy & Moriarty, 2006; Marsh, 1993, 2008; Pelham, 1995). For example, self-esteem was found to be influenced by clarity (Campbell, 1990), confidence (Baumgardner, 1990), richness and complexity of the self-concept (Linville, 1987; Rafaeli-Mor & Steinberg, 2002), and the extent of its compartmentalization (Showers, Zeigler-Hill, & Limke, 2006).

We assumed that in order to understand the processes of developing self-esteem better, one should inquire into the content of the self-image. We predicted that regardless of whether the sources of self-esteem are located in external or in internal factors, this should be reflected in the content of self-image. For example, people who frequently encounter positive feedback from others may conclude that they are liked and socially desired, and this will contribute to their high self-esteem. If they perform worse than others on various intellectual tasks, they may attribute it to their low level of intelligence and thus experience low self-esteem. Therefore inquiry into one's self-concept may be a way of specifying the level of self-esteem.

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The direct relation of the self-concept and self-esteem was postulated over one hundred years ago by William James' (1980/1952) who stated that self-esteem is a product of an individual's own sense of their achievements and aspirations. The higher the self-evaluation is when compared to the person's aspirations, the higher the self-esteem. Therefore people who perceive themselves as successful in areas of their aspirations should have higher self-esteem than people with lower self-assessments. James did not specify which area of self-evaluation should exert most impact on self-esteem - the one related to perception of one's own competence, morality or acceptance by others. He rather pointed out that self-image is a significant factor in self-esteem development especially when the area of self-perception is considered as important by individual.

Jennifer Crocker and her collaborators (Crocker & Knight, 2005; Crocker & Park, 2003; 2004; Crocker & Wolfe, 2001) extended James's view in the model of contingencies of self-worth. They identified areas on which people may base their self-esteem, asking them what affects their self-esteem. The subjects of their research most frequently indicated appearance, others approval, outdoing others in competition, academic competency, love and support from family, virtue and God's love. Given the way of collecting data used by Crocker and her colleagues (Crocker, Sommers & Luhtanen, 2001; Crocker & Wolfe, 2001) one may assume that those areas reflect people's beliefs about what affects their self-esteem. It seems reasonable to identify those domains of self-concept, which not only people think affect their self-esteem, but influence it actually.

It is interesting to know whether there are more specific relations between the content of the self-concept and self-esteem such that certain area of self-image would be more strongly related with self-esteem than the others, irrespective of personal aspirations of the individual.

### Theories of self-esteem development and self-concept

The existing theories describing roots and function of self-esteem could be a base for prediction which specific area of self-image may be related with self-esteem.

Terror Management Theory (TMT; Pyszczynski et al., 2004; Solomon, Greenberg, & Pyszczynski, 2004) - one of the most well-known and inspiring theories of the origins of self-esteem, predicts that self-esteem protects an individual against death anxiety. Self-esteem reflects the degree to which one meets culturally accepted standards, which in turn provides the person with a feeling of immortality. Cultural standards may describe not only personal achievements but also moral principles, basic to order and harmony within the in-group. An individual achieves high self-esteem and a feeling of immortality when he or she fulfill cultural demands. This, in turn, creates the feeling of

belonging to something greater than oneself. Two possible aspects of self-image that influence self-esteem are implied by this theory. Cultural standards may require achievements as well as morality - hence, knowledge about one's agency and morality should influence self-esteem.

The significant role of one's own agency in developing of self-esteem is also postulated by Bandura's self-efficacy theory (Bandura, 1989).

Theories referring to interpersonal sources of self-esteem suggest the significance of beliefs about one's own social functioning. In classic theories by Cooley (1902) and Mead (1934), social functioning and self-concept are directly connected. Interactions between individuals and the environment, and with significant others in particular, constitute a source of self-concept and self-esteem. Thus an individual's self-concept and self-esteem reflect how they are perceived and evaluated by others.

The key role played by other people in self-esteem has been further supported by Mark Leary's studies (Leary, et al., 1995; cf. Leary, 2005), although the focus there is less on the important others and more on the role of group belonging. According to the sociometer theory, proposed by Leary and his colleagues, self-esteem reflects the degree of acceptance by a group. When the individual regularly experiences inclusion in a group, this leads to high self-esteem, whereas regular experiences of rejection lead to low self-esteem. Although Leary does not refer to self-concept, it can be assumed that the most important thing for self-esteem would be knowledge of how much one is accepted as a member of various groups.

One can ask if the factors presented so far exhaust the range of possible variables influencing self-esteem. The main argument against such a claim is the finding indicating that self-esteem is inherited in a way similar to other personality traits (Neiss, Sedikides, & Stevenson, 2002; Neiss, Stevenson, Sedikides, Kumashiro, Finkel, & Rusbult, 2005). Some light on the way in which self-esteem is inherited is shed by studies of temperament and its relation to emotions. Watson and colleagues (Watson et al., 2002) observed high correlations between self-esteem and positive and negative affectivity as well as between self-esteem and depression and anxiety. Judge, Erez, Bono and Thoresen (2002) noted that self-esteem creates one factor along with anxiety and locus of control. Although this research was not focused on identifying self-esteem's origins, it points to a possible emotional basis of its development. This prediction has been confirmed by research in behavioral genetics (Neiss, Stevenson, Legrand, Iacono, & Sedikides, 2009), indicating that self-esteem has a common genetic factor with negative affectivity and depression. It suggests that temperamental variables are the basis on which both self-esteem and emotionality are formed.

Lachowicz-Tabaczek (2006; Lachowicz-Tabaczek & Śniecińska, 2008, 2010) proposed a functional model of

self-esteem, according to which self-esteem is a direct reflection of the subjective feeling of strength and energy to act, which in turn is underpinned by the temperamental dimension of reactivity and associated emotions. It is assumed that low reactive, compared to high reactive, individuals are sensitized to positive rather than to negative stimuli, and thus are less prone to anxiety and depression, which in turn gives them the feeling of personal strength and energy to undertake action, manifested in high self-esteem. Self-esteem thus serves to monitor one's emotional and energetic resources, and by signaling whether the individual is able to cope emotionally with a challenge, it is an important component of the ability to take up action.

The feeling of strength and energy to act mediates between temperament, temperamentally-based emotions, and self-esteem. This feeling may be conceived both as a state, reflecting an individual's current energetic and emotional level, and as a trait – the manifestation of the individual's temperamentally-determined dispositional resilience and energy to act. Based on this idea, we can predict that the important area of self-concept basic to self-esteem will be self-evaluation regarding one's strength and energy to act.

This idea of self-esteem is consistent with the conclusions drawn by Baumeister and associates (2003) that self-esteem determines, among others things - initiation of activity, readiness to take up challenges, and perseverance in task executions.

#### **Sources of self-esteem and content of self-image**

According to the theories presented above, we may predict that self-esteem will be influenced mainly by self-evaluations of four domains of self-image: competence, morality, social acceptance, and energetic dispositions. However, existing research does not offer a clear picture of the relationships between these four content domains and self-esteem.

Relationships between the contents of self-concept and level of self-esteem, as revealed in consecutive stages of human development, were investigated by Susan Harter (1986, 1999, 2003). Harter was interested in identifying those areas of self-concept that are the most relevant for self-esteem. Her findings (1999; cf. Harter, 2003) show that children tend to attribute the highest importance to scholastic competence, athletic competence, physical appearance, peer acceptance, and behavior. For university students, this list was expanded to include intellectual abilities, creativity, job competence, close friendships, romantic relationships, relationships with parents, and sense of humor (Harter, 1999). As can be seen, the majority of these content areas fall into two broad categories: competencies and interpersonal relationships. Although it is possible that the areas chosen by participants might not cover all contents relevant to self-esteem (Harter, 1999), competencies and

social relations are the elements of self-concept considered most often by researchers of self-esteem.

The direct effects of self-evaluations regarding competencies and morality on self-esteem have been postulated by Tafarodi and Swann (1995, 2001). They assumed that global self-esteem is not a uniform construct, but is rather a product of beliefs regarding one's own agency and morality. This follows from the two-dimensional character of human activity: people are simultaneously agents and social objects. Thus, on the one hand they draw feelings of satisfaction, power and competence from their own successes; on the other hand they evaluate their agency from a moral perspective. Feelings associated with success contribute to a sense of self-competence and self-respect, while moral reflection is expressed in self-liking. According to Tafarodi and Milne (2002), these two elements in combination contribute to global self-esteem. The model has been supported with the two-dimensional structure of the most popularly used self-esteem measurement tool, Rosenberg's Self-Esteem Scale, SES (Tafarodi & Milne, 2002). Half of the items on this scale describe evaluations of self-competence and the resulting self-respect, while the other half describes self-liking. However, there is little agreement as to the theoretical nature of this questionnaire, because other studies yielded a one-factor solution (Dzwonkowska, Lachowicz-Tabaczek, & Łaguna, 2008; Gray-Little, Williams, & Hancock, 1997; Marsh, 1986, 1996; O'Brien, 1985). Nevertheless, Tafarodi's and Milne's theory assumes that regardless of whether self-esteem is a uniform or a more complex construct, its level is most likely influenced by beliefs about both morality and agency.

Wojciszke (2005a, 2005b; cf. also Abele & Wojciszke, 2007) has proposed a theory that accounts for the asymmetrical perspectives of agents and recipients of actions. According to this theory, self-esteem is predicted solely by self-evaluations along the agency dimension, while morality is the key dimension used in evaluating others. This asymmetry is produced by the self-profitability of traits associated with competencies and other-profitability of traits related to morality (Peeters, 1983). In short, actors are more interested in their own efficiency (competencies) while recipients in whether they feel safe and comfortable in the company of the acting agent (the agent's morality).

Wojciszke and Baryła (2005) tested these predictions by examining relationships between self-evaluations of morality and agency on the one hand, and self-esteem on the other. They asked participants to evaluate how much they possess characteristics that in previous research were found to be the most strongly associated with morality and agency (Wojciszke, Dowhyluk, & Jaworski, 1998). They predicted that self-esteem would first of all be correlated with evaluations of one's agency; their results generally supported these predictions. In trials conducted with six

different samples, significantly stronger correlations were found between self-esteem and evaluations of one's own agency than between self-esteem and evaluations of one's own morality. Agency traits also predicted global self-esteem in all samples while evaluations of one's own morality did not. These results might indicate that global self-esteem does not include those aspects of self-functioning that are connected with presenting oneself as the moral person who cares about other people's well-being, in other words as having other-profitable traits (Peeters, 1992).

The research cited above has revealed the role of agentic traits in shaping self-esteem, as well as the significance of social traits suggested by sociometer theory, but it has not confirmed the positive effects of moral traits for self-esteem, as implied for example by TMT or Tafarodi's and Milne's theory.

The two studies described below were conducted to clarify the relations between different domains of self-concept and self-esteem, that is, to establish, if these domains form separate or common factors and what is the relative impact of the specific areas of self-concept on self-esteem.

## STUDY 1

The main aim of the first study was to test the role of different sources of self-esteem proposed in existing theories by examining its relation with relevant areas of self-belief.

Drawing on the TMT assumption that self-esteem develops when cultural standards are fulfilled, two areas of self-knowledge possibly related to self-esteem were distinguished: self-beliefs about competence and about morality.

Based on the sociometer theory, one can predict that self-esteem should be strongly related to self-knowledge about acceptance received from others.

The theory of self-esteem as a monitor of energy to act implies that self-concept will be self-described in terms of energetic dispositions.

Research to date makes it possible to predict positive relations to self-esteem of self-beliefs regarding competence (agency) and acceptance received from others. Self-knowledge about one's own energetic dispositions has not been tested yet, and the role of morality in self-evaluations is unclear. In this study we intended to test all these areas together to assess their unique and relative impact on self-esteem. In addition, we wanted to establish if four, instead of two, content areas are really needed. In other words, might not the two categories, agency and social functioning, be enough to explain the relations of self-image and self-esteem? It can be argued that assessment of one's own energetic dispositions may be a part of the broader area of

agency. For example, Tafarodi and Swann (1995, 2001) demonstrated that after success, along with a feeling of competence, a feeling of strength appeared as well. This claim, however, is contradicted by what is known about different sources of the two types of content. Evaluation of one's agency is the result of having or not having specific competencies and thus should be contingent on actual experiences of success and failure, while energy to act has as its basis temperament and emotion (Lachowicz-Tabaczek & Śniecińska, 2008) and can be unrelated to the individual's actual competencies and achievements.

By the same token, morality is not the same as being approved of and liked by others. People may be admired and approved of or envied and disliked because of their achievements, and not only moral virtues, and moral people can arouse indulgence and compassion rather than admiration and approval. Thus we can predict that beliefs about morality and acceptance by others will be two distinct categories of self-concept.

In the first study we tested the relative independence of the four contents of self-concept (agency, morality, social acceptance, and feeling of strength and energy to act) and their relationship to global self-esteem. In this way we examined, to some extent, the accuracy of theories that proposed different sources and functions of self-esteem.

## Method

### Participants

Participants were one hundred ninety-five full- and part-time students (108 women and 87 men) from two universities in Wrocław. They were psychology and elementary-secondary education students, as well as engineering majors (construction industry, electronics), and were aged 19 to 51 ( $M = 23.43$ ,  $SD = 4.48$ ).

### Procedure

Participants were tested in 20- to 30-person groups. They were told that the study concerned the relationship between various beliefs about oneself. Participants were informed about the anonymous nature of the study, and were asked for their consent. All participants agreed to participate. They were handed two questionnaires, the Content of Self-Concept List (COSCL) followed by Rosenberg SES.

*Self-concept.* Self-concept was measured with the COSCL made up of 28 items describing four groups of traits: agency (effective, intelligent, energetic, knowledgeable, bright, talented, logical), morality (honest, just, truthful, disinterested, good, frank, loyal), a feeling of strength and energy to act (active, full of strength, full of life, full of energy, impetuous, strengthened, strong), and social relations (attractive, friendly, liked by others, respected, accepted, loved, and appreciated). Items corresponding

**Table 1**  
**Loadings of factors extracted by Principal Factors Analysis using Promax rotation for Content of Self-Concept List (Study 1).**

| Item             | Factor 1<br>energy | Factor 2<br>agency | Factor 3<br>morality | Factor 4<br>Social acceptance |
|------------------|--------------------|--------------------|----------------------|-------------------------------|
| Energetic        | .95                | .00                | -.01                 | -.08                          |
| Full of energy   | .90                | -.03               | .06                  | .01                           |
| Impetuous        | .88                | -.21               | .03                  | -.04                          |
| Full of strength | .86                | .09                | .07                  | -.10                          |
| Active           | .82                | -.01               | .00                  | -.07                          |
| Full of life     | .72                | -.02               | .02                  | .22                           |
| Strengthened     | .61                | .06                | -.17                 | .19                           |
| Strong           | .49                | .37                | .03                  | -.04                          |
| Intelligent      | -.13               | .96                | .05                  | -.07                          |
| Bright           | -.03               | .75                | -.15                 | .13                           |
| Logical          | .01                | .74                | .21                  | -.22                          |
| Talented         | .01                | .68                | .03                  | .05                           |
| Knowledgeable    | .00                | .42                | .00                  | .17                           |
| Effective        | .22                | .38                | -.03                 | .25                           |
| Truthful         | .04                | -.09               | .83                  | -.03                          |
| Frank            | .12                | .01                | .76                  | -.08                          |
| Honest           | -.11               | .17                | .76                  | -.04                          |
| Just             | -.01               | .09                | .66                  | -.08                          |
| Loyal            | -.03               | .13                | .58                  | .23                           |
| Disinterested    | .04                | -.03               | .48                  | .03                           |
| Liked            | -.14               | .09                | -.02                 | .81                           |
| Loved            | .03                | -.19               | .07                  | .77                           |
| Appreciated      | .06                | .13                | -.18                 | .73                           |
| Accepted         | .01                | .10                | -.03                 | .72                           |
| Friendly         | .00                | -.21               | .40                  | .58                           |
| Good             | -.04               | -.07               | .41                  | .55                           |
| Respected        | .09                | .27                | .05                  | .49                           |
| Eigenvalue       | 10.54              | 3.28               | 2.41                 | 1.55                          |
| % of variance    | 37.64              | 11.71              | 8.61                 | 5.54                          |

to agency and morality were derived from respective scales used previously by Wojciszke and Baryła (2005). Participants rated the degree to which they possessed each trait on a 9-point scale anchored at 1 means “I definitely am not like this”, and 9 “I definitely am like this”.

*Global self-esteem.* To measure self-esteem, the Polish adaptation (Dzwonkowska et al., 2008) of Rosenberg’s Self Esteem Scale (SES; Rosenberg, 1965) was used ( $\alpha = .86$ ). The scale consists of 10 statements rated on a 4-point scale of the Likert type anchored at 1 (*definitely agree*) and 4 (*definitely disagree*). Example statements are “*I feel that I have a number of good qualities*”, and “*I take a positive attitude toward myself*”.

## Results

### Exploratory factor analysis

The COSCL was subjected to exploratory factor analysis (Principal Factor Analysis with Promax rotation). The “scree test” indicated four-factor solution because last substantial drop was after fourth factor. The four distinguished factors accounted for 63.51% of variance (Table 1).

Factor loadings mostly coincided with theoretical

predictions. The only differences were the item “energetic”, assumed previously to belong to the agency dimension (Wojciszke & Baryła, 2005), which loaded on the “energy to act” factor, the item “good”, previously assigned to the “moral” dimension, which fell under the “social relations” factor, and the factor loadings of the item “attractive” where under .40 for all factors so it was removed from analyses (Table 1). The social relations factor thus consists mostly of items describing a person’s position in a group (e.g., being liked, accepted, appreciated), and hence will be called “social acceptance” in further parts of the paper.

On the basis of the factor analysis results the four sub-scales were formed and their measures were the mean scores of the items included in each of four content areas of self-image - agency, morality, social acceptance, and feeling of strength and energy to act. All four sub-scales had high Cronbach  $\alpha$  coefficients, indicating their high consistency. Detailed statistics of each sub-scale are included in Table 2.

A one-way analysis of variance with type of content as a repeated measure revealed significant differences between the four contents,  $F(3, 582) = 13.26, p < .001, \eta^2 = .06$  and the post-hoc tests with Bonferroni correction revealed that self-evaluations of morality were significantly higher

Table 2

Means and standard deviations of the four content areas of self-concept – agency, energy to act, morality and social acceptance (Study 1).

|                       | M(N=195)           | SD   | Cronbach's Alpha |
|-----------------------|--------------------|------|------------------|
| Agency (6)            | 7.06 <sup>bc</sup> | 1.01 | .85              |
| Energy to act (8)     | 6.72 <sup>a</sup>  | 1.39 | .93              |
| Morality (6)          | 7.24 <sup>c</sup>  | 1.13 | .84              |
| Social acceptance (7) | 6.86 <sup>ab</sup> | 1.17 | .88              |

Note. The number of items making up the scale is given in parentheses. Means marked with different subscripts differ at  $p < .05$  level.

Table 3

Correlations between global self-esteem and four sub-scales of self-concept – agency, energy to act, morality and social acceptance (Study 1).

|                       | Self-esteem | Social acceptance | Morality | Energy to act |
|-----------------------|-------------|-------------------|----------|---------------|
| Agency (6)            | .63***      | .57***            | .35***   | .48***        |
| Energy to act (8)     | .53***      | .55***            | .28***   |               |
| Morality (6)          | .26***      | .52***            |          |               |
| Social acceptance (8) | .60***      |                   |          |               |

Note.  $N = 195$ . \*\*\* $p < .001$

than both self-evaluations of social acceptance, ( $p < .001$ ), and beliefs about one's own energetic dispositions, ( $p < .001$ ). Self-evaluation of agency was significantly higher than beliefs about energetic dispositions, ( $p < .001$ ), but did not significantly differ from self-evaluation of morality, ( $p < .24$ ) and social acceptance ( $p < .16$ ) (Table 2).

### Predictors of self-esteem

Table 3 presents intercorrelations between the four subscales and their correlations with the measure of self-esteem. Self-evaluations of agency, social acceptance, and energy to act were strongly correlated with global self-esteem, while self-evaluation of morality showed the lowest correlation (Table 3).

A linear regression analysis of self-esteem on the contents of self-concept revealed that the four factors accounted for a considerable part (51%) of the total variance of self-esteem. The strongest predictor were beliefs about one's own agency, followed by beliefs about being socially accepted. A weaker, yet significant, predictor of self-esteem were beliefs regarding one's energetic dispositions. Traits involving the area of morality did not significantly predict self-esteem (Table 4).

### Discussion

Results demonstrated that, in line with theoretical claims made in various theories of self-concept and self-esteem, it is possible to empirically isolate four relatively independent areas of self-concept – that is, beliefs about own agency, morality, energy to act, and social acceptance. The distinguished factors coincided to a great extent with the theoretically assumed trait arrangements. The subscales based on the four factors were intercorrelated but not strongly enough to consider them being one construct.

Table 4

Regression of global self-esteem on four sub-scales of the Content of Self-Concept List (Study 1).

|                   | $R^2 = .51$ ; $F(4,190)=50.868$ , $f^2$ Cohena = 1.04 | $\beta$ |
|-------------------|---|---------|
| Agency            |   | .39***  |
| Energy to act     |   | .20**   |
| Morality          |   | -.10    |
| Social acceptance |   | .32***  |

Note.  $N = 195$ . \*\* $p < .01$ , \*\*\* $p < .001$

Two distinct areas of contents associated with action efficiency were distinguished: intellectual and task-oriented competencies, and energetic resources drawn from temperamental and emotional dispositions. Contrary to Tafarodi and collaborators (Tafarodi & Milne, 2002; Tafarodi & Swann, 2001), evaluations of personal morality were made independently from the individual's own attractiveness and acceptance by others.

Beliefs about own agency were the strongest predictor of global self-esteem, followed by beliefs about being socially accepted, and evaluations of one's own energy to act. Beliefs about one's own morality, although correlated with self-esteem, did not significantly predict self-esteem, which corroborates findings by Wojciszke and Baryła (2005). This failure to predict was observed despite the fact that, of the four content areas, the highest scores for self-attribution were received for self-attribution of moral traits and the variance of self-evaluations of these traits was as high as for other areas of self-evaluation.

**Table 5**  
**Confirmatory factor analysis of the Content of Self-Concept List – compare of four different models (Study 2)**

|  | $\chi^2$   | df  | RMSEA | GFI   | AGFI  |
|--|------------|-----|-------|-------|-------|
| Model 1 – 4 factors (agency, energy to act, morality, social acceptance) | 813.66***  | 318 | 0.083 | 0.787 | 0.747 |
| Model 2 – 3 factors (agency+energy to act, morality, social acceptance)  | 1186.89*** | 321 | 0.130 | 0.661 | 0.600 |
| Model 3 – 3 factors (agency, energy to act, morality+social acceptance)  | 964.73***  | 321 | 0.104 | 0.730 | 0.682 |
| Model 4 – 2 factors (agency+energy to act, morality+social acceptance)   | 1319.34*** | 323 | 0.145 | 0.620 | 0.555 |

Note. N=216; \*\*\*p<.001

## STUDY 2

The first aim of this study was to test if the four-factor structure of self-image revealed by the exploratory factor analysis in the first study could be confirmed in a different sample by using confirmatory factor analysis. As was mentioned earlier, different theoretical proposals would suggest other than four factor structure of the self-image. According to Tafarodi and colleagues (Tafarodi & Milne, 2002; Tafarodi & Swann, 2001) approach, the agentic and energetic areas of self-image should make one factor and morality and acceptance should form the second one. The theory of agent and recipient (Wojciszke 2005a, 2005b; cf. also Abele & Wojciszke, 2007) also suggests that while people describing self and others they use two main types of traits referring to moral and agentic aspects of evaluation. Thus the four factor model yielded in the first study build of the agency, energy to act, morality and social acceptance factors in the second study was pitted against three other models. The first of these competitive models posits three factors with energy to act and agency as an one factor and morality and social acceptance as two another factors. The second model posits three factors with morality and acceptance as one factor and agency and energy to act as two separate factors. The third model assumed that the agency and the energy to act areas of self-image would create common factor and morality and acceptance would unit in another one.

The additional objective of this study was to examine whether the impact of distinguished areas of self-image on self-esteem will be reflected in the order of importance attached by participants to those areas of self-perception. This would be suggested by James's (1980/1952) interactional hypothesis who asserted that these traits or areas of self-perception should have the strongest impact on self-esteem which are rated as the most important by the individual. If this hypothesis would be confirmed it could mean that the subject is at least partly aware of the influence of some contents of self-image on his or her self-esteem.

## Method

### Participants

Participants were two hundred and sixteen students of humanities departments of Wroclaw University (154 women and 62 men), aged 19 to 23.

### Procedure

The procedure was the same as in Study 1. Along with the Rosenberg SES ( $\alpha = .86$ ) and the COSCL measuring four contents of self-concept a new questionnaire was used to collect ratings of the contents' subjective importance of distinguished areas of self-image. The self-evaluation of own attractiveness where removed from the COSCL because factor loadings of this item observed in the Study 1 were to low. A description of measurement instruments employed in this study will be restricted to new tool only.

*Measurement of trait importance.* The Questionnaire of Trait Importance included the same 27 items as the Content of Self-Concept List (without attractiveness), arranged in different order. Participants were asked to rate on a 5-point scale anchored at 1 (*not important at all*) to 5 (*very important*) the degree to which they considered important to possess given trait or quality.

## Results

### Confirmatory factor analysis

To compare the ability of four different possible factor solutions to fit the data confirmatory factor analysis was conducted (GLS-ML). The results are presented in Table 5. None of the accounted model shows good fit to data but the best fit indexes were obtained for the four-factors model ( $\chi^2 = 813.66$ ;  $p < .001$ ;  $df = 318$ ; RMSEA = .083; GFI = .787; AGFI = .747). In this case CFA was used in order to compare the fit to the data the four accounted models of self-image structure. Thus it is of lesser importance that some of the parameters of the best fitted model are below typical acceptance level. Besides such poor CFA fit was demonstrated for several widely used personality measures with confirmed criterion-related validity (Hopwood & Donnellan, 2010).

**Table 6**  
Means and standard deviations of the four content areas of self-concept – agency, energy to act, morality and social acceptance (Study 2).

|                   | M (N=216)         | SD   | Cronbach's Alpha |
|-------------------|-------------------|------|------------------|
| Agency            | 6.45 <sup>a</sup> | 1.14 | .85              |
| Energy to act     | 6.46 <sup>a</sup> | 1.47 | .93              |
| Morality          | 7.10 <sup>c</sup> | 1.19 | .84              |
| Social acceptance | 6.85 <sup>b</sup> | 1.08 | .83              |

Note. Means marked with unique subscripts differ at least the  $p < .05$  level.

**Table 8**  
Regression analysis of global self-esteem on four contents of self-concept: agency, energy to act, morality, and social acceptance (Study 2).

|   | $\beta$ |
|---|---------|
| $R^2 = .45, F(4,211) = 42.83, f^2 \text{ Cohena} = .82$ |         |
| Agency  | .34***  |
| Energy to act   | .30***  |
| Morality  | -.24*** |
| Social acceptance                                       | .27***  |

Note.  $N = 216$ . \*\*\* $p < .001$

Identically to Study 1, measures of the four content areas were mean ratings of items in each subscale. The four scales had high Cronbach  $\alpha$  coefficients, which provides evidence of their high consistency. Detailed statistics of each subscale are included in Table 6. A one-way analysis of variance with the type of content as a repeated measure revealed significant differences between the four contents,  $F(3, 645) = 25.16, p < .001, \eta^2 = .10$  and post-hoc tests with Bonferroni correction revealed that self-evaluations of morality were rated highest and significantly differed from beliefs about own energy to act ( $p < .001$ ), self-evaluations of agency ( $p < .001$ ), and self-evaluations of social acceptance ( $p < .05$ ). Social acceptance was rated significantly higher than energy to act ( $p < .001$ ) and agency ( $p < .001$ ). The self-evaluations of energy to act and agency did not differ significantly from each other (Table 6).

**Predictors of self-esteem**

Table 7 presents intercorrelations between the four scales and their correlations with global self-esteem. The highest correlations were found between social acceptance and morality, as well as between social acceptance and agency and social acceptance and energy to act. Self-esteem, again, correlated the most strongly with evaluation of one's own agency, followed by evaluations of strength and energy to act, and of social acceptance. Self-evaluations with respect to morality did not correlate with self-esteem (Table 7).

A linear regression analysis of self-esteem on the four content areas replicated the pattern obtained in Study 1. The four factors accounted for almost 45% of the variance in

**Table 7**  
Correlations between global self-esteem and four sub-scales of self-concept – agency, energy to act, morality and social acceptance (Study 2).

|                       | Self-esteem | Social acceptance | Morality | Energy to act |
|-----------------------|-------------|-------------------|----------|---------------|
| Agency (6)            | .57***      | .49***            | .21**    | .46***        |
| Energy to act (8)     | .51***      | .49***            | .35***   |               |
| Morality(6)           | .10         | .60***            |          |               |
| Social acceptance (7) | .44***      |                   |          |               |

Note. The number of items making up the sub-scale is given in parentheses.  $N = 216$ . \*\*\* $p < .001$ ; \*\* $p < .01$

**Table 9**  
Means and standard deviations of importance ratings of the four contents of self-concept: agency, energy to act, morality, and social acceptance (Study 2).

|                             | M (N=216)         | SD   |
|-----------------------------|-------------------|------|
| Agency (6 items)            | 4.06 <sup>b</sup> | 0.51 |
| Energy to act (8 items)     | 3.72 <sup>a</sup> | 0.64 |
| Morality (6 items)          | 4.33 <sup>c</sup> | 0.67 |
| Social acceptance (7 items) | 4.16 <sup>b</sup> | 0.62 |

Note. The number of items included in the scale is given in parentheses. Means marked with unique indexes differ at the  $p < .05$  level.

self-esteem. Again, the strongest predictor was evaluation of one's own agency, followed by evaluation of strength and energy to act, and of social acceptance. Evaluation of oneself as a moral person turned out to be a negative predictor of self-esteem (Table 8).

**Importance ratings and self-esteem**

Table 9 lists means and standard deviations of importance ratings of the four contents of self-concept. A one-way analysis of variance with the type of content as a repeated measure revealed significant differences between ratings of the importance of the four content areas,  $F(3, 645) = 49.99, p < .001$ , and post-hoc tests with Bonferroni correction revealed that the ratings of importance of morality were the highest and significantly differed from beliefs about one's own energy to act ( $p < .001$ ), from self-evaluation of agency ( $p < .001$ ) and from ratings of importance of social acceptance ( $p < .01$ ). The ratings of importance of agency and social acceptance did not differ significantly of each other. The lowest were the ratings of importance of strength and energy to act and they differed significantly from the ratings of importance of agency ( $p < .001$ ) and social acceptance ( $p < .001$ ) (Table 9).



## Discussion

The results of Study 2 replicated the findings from Study 1. The four-factors model extracted by the exploratory factor analysis from the self-description ratings made by participants in the first study were confirmed in the second study as the best approximation of the structure of self-image. Although the indices of this model were not fully satisfactory, they were noticeably better than parameters of competitive models each assuming the existence of the broader factors embracing the energy to act and agency as one factor or morality and social acceptance as the another. It means that it is reasonable to distinguish in the self-image four separate content and examine its relations with self-esteem.

The pattern of intercorrelations between distinguished factors was similar to the one observed in Study 1. As in Study 1, the highest scores were observed in self-evaluations of morality.

The relationships between self-evaluations and self-esteem also replicated the findings of Study 1. The areas of agency, strength and energy to act, and social acceptance were strongly correlated with self-esteem. However, whereas in Study 1 the evaluation of one's own morality was unrelated to self-esteem, in Study 2 it predicted self-esteem negatively. A similar phenomenon was observed in Lachowicz-Tabaczek's study (1998), in which higher ratings of one's own friendliness correlated negatively with self-esteem. It is therefore possible that people consider other-profitable traits (such as morality or friendliness) as a handicap in fulfilling personal goals and thus at odds with such self-profitable traits as agency or energy to act. This hypothesis is in line with findings that warmth and competence (Fiske, Cuddy, & Glick, 2007; Yzerbyt, Provost, & Corneille, 2005) are complementary rather than orthogonal dimensions of a person's perception.

Moral traits were rated as the most important overall, which suggests that declarations regarding the importance of evaluated traits do not coincide with their influence on self-esteem. This was also shown in the low importance ascribed to strength and energy to act, which were traits that strongly influenced self-esteem. It is highly plausible that the importance attributed to a specific area of self-concept reflects prevalent societal norms rather than true insights into a person's own psychological processes. Thus in everyday life people rarely describe themselves in terms of traits such as "energy to act" and therefore may not appreciate the significance of having such a trait. On the other hand, moral categories are often used to describe the behavior of other people and hence are highly salient. Their value is also culturally sanctioned as the majority of religious and legislative systems consider it an individual's duty to display moral conduct. Therefore it is likely that high evaluation and high weight ascribed to one's own

morality is less a result of a veridical assessment of one's moral functioning than it is of social norms that exert pressure on such evaluation.

The observed inconsistency between the importance attached to the trait and its influence on self-esteem contradicts James' interactional hypothesis according to which the weight attached by the subject to a particular domain of self-concept should be reflected in the impact of this self-concept on self-esteem.

Overall, the results obtained in this study replicated the findings of Study 1 and showed that self-esteem is influenced both by self-evaluations of one's own agency (i.e., competence and energetic traits) and by beliefs concerning the way in which one is evaluated by other people. These results offer support to those theories that predict that self-esteem is influenced by self-evaluation of the ability to achieve agentic standards (TMT, self-efficacy theory), of undertaking actions (self-esteem as a monitor of energetic resources theory), and of gaining acceptance from others (sociometer theory).

## General Discussion

Existing theories of the origin of self-esteem refer to either interpersonal or intrapsychic sources. The former assume that individuals gain self-esteem when they experience acceptance from others and are included in groups that they highly value (Cooley, 1902; Leary, 2005; Leary et al., 1995; Mead, 1934). The latter assume that self-esteem is a consequence of reflecting on one's aims and intentions, which might derive from cultural expectations (Pyszczynski et al., 2004; Solomon et al., 2004) as well as from the individual's personal aspirations (Crocker & Wolfe, 2001; James, 1890/1952).

Regardless of which set of factors is found to be the most important predictor of self-esteem, its influence would also be reflected in self-concept. Therefore, investigating the relationships between self-esteem and self-evaluations or beliefs included in self-image could to some extent enable testing the predictive values of various theories of self-esteem development. In the studies presented in this paper, and on the basis of theories describing different sources and functions of self-esteem, four areas of self-image were distinguished: beliefs about one's agency, morality, relations with others, and energy to act. It was assumed that each of these areas should be distinguishable as an independent aspect of the self-concept. Exploratory and confirmatory factor analyses conducted on questionnaire items measuring self-evaluations in these four areas revealed that the best solution was a four-factor solution. The low to moderately high correlations between sub-scales measuring the four factors of self-concept confirmed their relative independence. In the case of three sub-scales

– evaluations of one's intellectual competencies, energetic capabilities, and acceptance by others – moderately high correlations with the remaining sub-scales were observed. Beliefs regarding one's own morality correlated the most weakly with the other sub-scales.

The relations between distinct areas of self-concept with self-esteem were also consistent. In both samples, self-esteem was predicted first of all by self-evaluations of agency concerning intellectual traits, and strength and energy to act. Both groups of traits are conducive to fulfilling agentic standards and personal aims. In both studies self-evaluations concerning others' acceptance were also a clear predictor of self-esteem. As far as evaluation of one's own morality was concerned, either it did not predict self-esteem significantly or it influenced self-esteem negatively.

Based on these two studies, it can be stated that two significant factors influencing self-esteem are 1) personal beliefs about possessing traits conducive to realizing agentic standards, and 2) opinions about evaluation of oneself by other people. Thus the findings support both those models that assume that individuals formulate a global attitude towards themselves based on their ability to realize agency standards (Bandura, 1989; Pyszczynski et al., 2004), as well as those that postulate that global self-esteem reflects liking, love and acceptance by other people (Cooley, 1902; Leary, 2005; Mead, 1934). At the same time, results suggest that it is reasonable to make a distinction between agency traits relating to intellectual competences and traits of energetic character. The first type of trait ensures agency of action in knowing how to manage a task, while the second type of traits ensures readiness to act and cope with difficult situations (cf. Lachowicz-Tabaczek & Śniecińska, 2008, 2010).

The finding that moral traits attributed to oneself do not influence self-esteem is in accordance with the two-factor model of agent and recipient, assuming that agency traits are the agent's interests, while moral traits involve the interests of recipients of the action (Wojciszke, 2005a; cf. Abele & Wojciszke, 2007). At the same time these findings are in contradiction with contingencies of self-worth proposition (Crocker et al., 2001, Crocker & Wolfe, 2001) which assumes, that agentic as well as social or moral area may have positive impact on self-esteem if it is highly valued by the person. It maintains that in some circumstances it is more beneficial to stake self-esteem on moral than on agentic domain especially when one is not able to live up to agentic standards. Obtained results additionally show that people's beliefs about the importance of possessing some traits may not reflect the real impact of these traits on self-esteem. The possible reason of differences observed in the results obtained in this article and Crocker's et al. (2001) findings may lay in the people's poor insight in the events or behavior which have the most influence on their self-esteem.

However, at the same time it is intriguing that out of all the traits people attribute moral traits to themselves in the highest degree, and consider possessing them as distinctly more important than having agentic and social traits. This would imply that people care about being perceived as moral; yet possessing morality-related traits does not lead to a positive attitude toward oneself – and what is more, it can sometimes even lower it.

This discrepancy might reveal the duality of private meaning and social evaluation of moral traits. On the one hand, they can be valued and expected from members of an in-group; on the other, their possession can weaken the feeling of an individual's agency. Friendliness, for example, despite being positively valued in members of the in-group, can be perceived as naivety, lack of assertiveness, or susceptibility to being taken advantage of by others. As a result, at the level of the participants' declarations, moral traits were deemed very important while having little influence on self-evaluations.

These results might reflect existing convictions that fulfilling one's interests may remain in opposition to caring for the interest of others. Such compensation effect was observed in group perception, where positive evaluation of the target along the competence dimension led to less positive impression on the warmth dimension (Kervyn, Yzerbyt, Judd, & Nunes, 2009).

The assumed opposition in how moral and agentic traits are conceived might explain why women, who are expected to be ready to act for the benefit of others, have lower self-esteem than men in the majority of cultures (e.g. Heaven & Ciarrochi, 2008; Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002). Being nice, good and devoted to others fulfills expectations of the culture; however, it can weaken feelings of agency and, as a result, their self-worth.

Research performed by Heine, Lehman, Markus, and Kitayama (1999) has demonstrated that self-esteem is a construct that clearly reflects agentic rather than relational aspects of an individual's self-view, regardless of culture. These researchers indicated that self-esteem in each culture is strongly positively correlated with a tendency to construe oneself as independent of others, while a tendency to construe oneself in categories of interdependence with others is negatively connected with self-esteem. This indicates that the construct of self-esteem, understood as an attitude towards oneself, includes mainly a personal evaluation of oneself as an acting subject and agent. To a lesser degree, self-esteem shows how much an individual goes along with moral norms accepted in the culture. However, one result obtained in Study 2 may indicate that self-evaluation in the moral domain may influence self-esteem in indirect way. The self-evaluation in the social acceptance area was linked to both agency and morality traits, what may mean that knowledge of how others evaluate the individual is built both on the basis of their

evaluation of personal effectiveness and their functioning in reference to existing moral norms, which are beneficial for others.

This discrepancy between the strength and declared importance of attributed moral traits and their lack of influence on self-esteem is at odds with James' theory, which assumes that self-esteem is influenced by traits considered important by the individual.

Thus, referring to concepts postulating various mechanisms for developing self-esteem, one may state that the relationships between self-esteem and different content areas of self-image lend support to theories that assume that its source lies in agency and social acceptance. This way, the results confirm that the main functions of self-esteem are related on the one hand to monitoring others' acceptance, and on the other to monitoring an individual's ability to fulfill standards and take action.

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