

Sense of Identity and Self-Control: The Mediating Role of Goal Characteristics

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Abstract

This study addressed the role of a sense of personal identity as a self-regulatory mechanism that facilitates congruence and coherence of goals that people set for themselves and thereby enhances their capacity to exert self-control. A total of 489 young adults completed a packet of questionnaires that assessed basic dimensions of sense of identity, congruence and coherence of goals, and self-control capacity. Direct and indirect paths of a sense of identity on self-control were examined using structural equation modelling. The proposed model was, for the most part, supported by data. It should be noted, however, that the mediation effects were fairly small, and the sense of identity had a direct predictive effect on self-control over and above congruence and coherence of goals.

Keywords: sense of identity, self-control, goal congruence, goal coherence

Introduction

The notion that personal identity plays an important role in the self-regulation process seems well established in the psychological literature (e.g., Bandura, 2001; Berzonsky, 1989; Markus & Nurius, 1986). Several authors have argued that the subjective identity experience should include a sense of purposefulness and energy (e.g., Adams & Marshall, 1996; Blasi, 1993). Erikson himself (1963) noted that a “sense of identity provides the ability to experience one’s self as something that has

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continuity and sameness, and to act accordingly” (p. 42). However, there has been relatively little empirical research directly examining the relationship between personal identity and various self-regulatory resources. Even fewer studies have explicitly focused on self-control strength (Berzonsky, Branje, & Meeus, 2007; Berzonsky & Papini, 2014; Hofer, Chasiotis, Kiessling, & Busch, 2006; Morsunbul, 2015), and each has employed Marcia’s (1966) identity-status paradigm and its extensions, within which the subjective experiential aspect of identity has tended to be neglected (Blasi & Glodis, 1995). The present study aims to empirically establish the association between these two self-related phenomena – the subjective awareness and experience of one’s self (i.e., sense of identity) and the regulation of processes by the self (i.e., self-control). In addition, it attempts to contribute to the literature by capturing some of the mediating processes of the sense of identity–self-control pathway.

Sense of Identity

Erikson’s (1963, 1980) psychosocial development theory is widely regarded as the foundation of research in the field of identity. The current literature offers several models (e.g., Berzonsky, 1989; Luyckx et al., 2008; McAdams, 2013; Vignoles, Regalia, Manzi, Gollodge, & Scabini, 2006), which do not necessarily oppose each other, but emphasize different aspects of identity. Although they have gone beyond Eriksonian thinking, they all seem to agree a primary function of identity is to provide one with a sense of inner coherence and continuity.

The concept of a sense of identity, rooted in Erikson’s theory, addresses the issue of identity from phenomenological (subjective, experiential) perspective. The present conceptualization defines a sense of personal identity as a person-specific, intuitive-reflective relation to oneself that corresponds to the recurring modes of experiencing and understanding oneself (Blasi, 1993; Pilarska, 2016). This view is grounded in the assumption that self-identification stems from experiencing one’s self in a certain way, and from interpreting and making meaning of one’s experiences (e.g., Epstein, 2003). It also allows assumption that manifestations of a sense of identity can be recognized in experience and so articulated. This phenomenological perspective of identity leaves out the concrete contents (e.g., specific preoccupations, competencies, ideals, values) with which each person identifies. Different individuals can construct their sense of identity around different issues. Such understood sense of identity is a multifaceted phenomenon encompassing several dimensions, all of which have been mentioned in the literature, although not always exhaustively by every author (e.g., Blasi, 1993; Erikson, 1980; Sokolik, 1996; Vignoles et al., 2006). These are senses of having inner contents (thoughts, feelings, etc.), uniqueness, one’s own boundaries, coherence, continuity over time, and self-worth. The healthy and mature sense of identity requires the development and maintenance of all of them (Pilarska, 2016; Sokolik, 1996).

A fundamental notion of many personality theories is that construction of a stable and coherent identity is a crucial part of healthy development (e.g., Lecky, 1945; Rogers, 1959). As Erikson (1980) notes, the subjective experience of identity actually gives rise to a preconscious sense of personal well-being. Many researchers (e.g., Schwartz et al., 2010; Waterman, 2007) have indeed found a positive relationship between mature identity and psychological adjustment. Moreover, disturbances of personal identity have been documented as a core therapeutic issue in the treatment of many psychopathological conditions. In fact, the absence of a strong sense of identity forms the most severe clinical syndromes (Kernberg, 1975). In attempting to clarify the central role of identity for sustaining well-being, Adams and Marshall (1996) proposed that identity is best understood “as a self-regulatory system” (p. 433) which functions to provide individuals with “a sense of personal control and free will” (p. 433). This proposition was further supported by studies showing that identity-achieved individuals, in contrast to identity-diffused individuals, have higher levels of internal locus of control and conscientiousness, and lower levels of conformity (Adams & Ethier, 1999; Serafini & Adams, 2002). Drawing on these findings, the present study attempts to further the understanding of the self-regulatory functions of identity by examining the relationship between subjective sense of identity and self-control.

Self-Control

Self-control refers to the executive aspect of the self, colloquially known as willpower. Defined as the capacity to consciously alter one’s responses (thoughts, feelings, impulses, and behaviours) to bring them into line with standards, self-control is posited as “a vital mechanism for producing adaptive and socially desirable behaviour” (Baumeister, DeWall, Ciarocco, & Twenge, 2005, p. 590). Consistent with this view, high self-control has been associated with various positive outcomes, such as better mental and physical health, positive social relationships, and better academic performance (de Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2012). Furthermore, many of the problems facing both individuals and society, including depression, obesity, violent crime, and drug abuse, can be – at least partly – attributed to self-control failure (Tangney, Baumeister, & Boone, 2004). Overall, both theoretical and empirical evidence substantiates the claim that having better self-control is an unmitigated good (Hofmann, Luhmann, Fisher, Vohs, & Baumeister, 2014).

There is a small body of research relating personal identity to various measures of self-control. Berzonsky et al. (2007) found that self-control was associated positively with the normative identity style and negatively with diffuse-avoidance. However, contrary to expectations, the informational identity style was associated negatively with self-control. Similar results were more recently obtained by Berzonsky and Papini (2014), except that the effect of the informational style on self-control was insignificant. In Hofer et al.’s (2006) study, action control, as

measured by the Action Control Scale (ACS; Kuhl, 1994), has been shown to correlate positively with identity achievement, while negatively with moratorium and diffusion. Furthermore, Morsunbul (2015) demonstrated that low self-control, operationalized by the Low Self-Control Scale (LSCS; Grasmick, Tittle, Bursik, & Arneklev, 1993), was negatively related to making commitment and identification with commitment. These findings support the conclusion that individuals with a more mature identity tend to have higher self-control.

According to Baumeister (2002), the effectiveness of self-control depends on various factors, with the standards, a monitoring process, and the operational capacity to alter one's behaviour being the chief determinants. Standards are defined as "goals, ideals, norms, and other guidelines that specify the desired response" (Baumeister, 2002, p. 671). Since at any one time people are likely to pursue multiple goals, of particular importance is the way in which people choose their goals and the way in which their different goals are interrelated, or, more specifically, congruence and coherence of goals people set for themselves. Both properties of goal systems can be considered as aspects of personality integration (Sheldon & Kasser, 1995).

Goal Congruence and Goal Coherence

The concept of goal congruence (Sheldon & Elliot, 1999; Sheldon & Kasser, 1995) addresses the question of why people pursue their goals. It is grounded in self-determination theory (Deci & Ryan, 2008), which distinguishes four types of reasons. Two of these are externally regulating (i.e., controlled motivation) and two internally regulating (i.e., autonomous motivation). Controlled motivation represents goals pursued due to others' wishes, to attain rewards, or avoid punishment (i.e., external reasons) and goals pursued to avoid feelings of shame, guilt, or anxiety (i.e., introjected reasons). Autonomous motivation involves goals pursued out of a belief that they are intrinsically important goals to have (i.e., identified reasons) and goals pursued because of the fun and enjoyment they provide (i.e., integrated reasons). Goals are self-congruent (i.e., self-concordant) when they are pursued because of either integrated or identified motivation, i.e., they are strived for because of strong interest or self-identified personal convictions (Sheldon & Elliot, 1999; Sheldon & Kasser, 1995). Phenomenologically, goal congruence manifests itself in a sense of authenticity and a sense of autonomy (i.e., internal perceived locus of causality).

Self-congruent goals are likely to be protected and maintained in the face of task-irrelevant temptations because they are continually energized and free of conflict about the source of the goal (Koestner et al., 2006; Sheldon & Elliot, 1999). Accordingly, prior research has shown that higher goal congruence is related to greater motivation, more effort allocation, and greater goal progress (Bono & Judge, 2003; Koestner et al., 2006; Molina, Unsworth, Hodkiewicz, & Adriasola,

2013; Sheldon & Elliot, 1999). Furthermore, engaging in self-control for intrinsic reasons has been found to counteract self-control depletion (e.g., Moller, Deci, & Ryan, 2006; Muraven, Gagne, & Rosman, 2008).

People may perceive their goals as related to each other in a number of ways. First, one's goals may be viewed as completely isolated to each other, in the sense that the pursuit of one has no impact, either positive or negative, on the pursuit of any other goal (i.e., goal independence). Second, achieving one goal may increase the likelihood of the accomplishment of other goals. This occurs when progress towards one goal also represents a step towards another goal or if strategies for pursuing one goal represent a subset of strategies for pursuing another goal. And third, goals can conflict (interfere) with each other – the pursuit of one goal may impair the likelihood of successfully reaching another goal. Goal coherence, as used herein, refers to the second case. It is related to other concepts, such as goal instrumentality (Emmons & King, 1988), intergoal facilitation (Riediger & Freund, 2004), and horizontal coherence (Sheldon & Kasser, 1995).

Previous research has shown positive associations of goal coherence with engagement in goal-directed behaviours, suggesting that goal coherence allows for more efficient planning and resource allocation (Sheldon & Emmons, 1995). Moreover, conflict among goals has been shown to undermine self-control (Milyavskaya & Inzlicht, 2017).

Of particular interest to the current study are research findings linking identity formation and goal setting. Past studies have found that, compared to individuals with a relatively less developed identity, those with the most mature identity style (i.e., informational) and status (i.e., achievement) reported greater feelings of personal expressiveness (Schwartz, Mullis, Waterman, & Dunham, 2000), a greater sense of autonomy (Soenens, Berzonsky, Vansteenkiste, Beyers, & Goossens, 2005), and a greater cohesion of goals (Colby, 1996). Further, a subjective sense of identity was Erikson's (1980) notion of what represented a successfully integrated personality.

Aim and Hypotheses

To enrich our understanding of how the way individuals experience their selves is reflected in their self-regulation abilities, this study aimed to examine the connection between a sense of identity and self-control. Given the above evidence, it was hypothesized that a stronger sense of identity would be associated with greater self-control strength (Hypothesis 1). Assuming that goals are a crucial ingredient of self-control, and that goal choice is, at least partially, driven by personal identity, there is reason to believe that congruence and coherence of goals constitute the mediational mechanism through which a sense of identity relates to self-control. Therefore, the second purpose was to investigate two properties of goal systems, namely goal congruence (Hypothesis 2) and goal coherence

(Hypothesis 3), as two possible mediating variables accounting for connections between a sense of identity and self-control. A serial mediating role of goal congruence via goal coherence was also expected to be found (Hypothesis 4). Since there are other factors that may mediate the relationship between a sense of identity and self-control, such as level of action identification (Vallacher & Wegner, 1989), partial rather than complete mediation was expected. Figure 1 presents the hypothesized model.

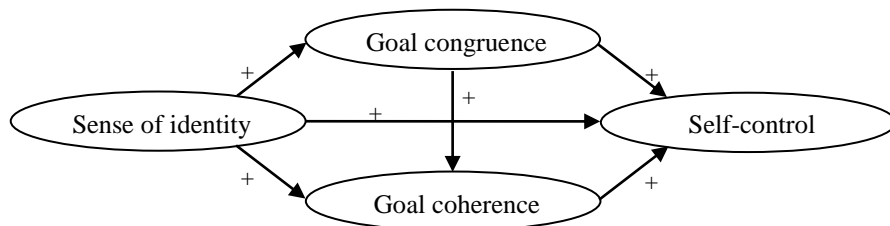


Figure 1. Theoretical path-analytic model. Influence of sense of identity and goal characteristics on self-control.

Method

Participants and Procedure

The sample was recruited as a part of a larger research project on personal identity and self-regulation. A total of 489 participants (56 % female) with complete data on the variables of interest were included. They were Polish university students, majoring in different academic disciplines. Participants' mean age was 20.89 years ($SD = 1.46$, range = 18-31). Based on the most complex analysis planned, the sample size was determined sufficient to detect a small effect size of $f^2 = .05$, with 80 % power and alpha set at .05.

Questionnaires were administered, in a counterbalanced order, in classrooms during academic class hours by trained research staff. Participation was voluntary and confidentiality was guaranteed. No financial incentives were offered for completion of the questionnaires. However, participants were informed that an optional follow-up phase was planned, and that those who consent and take part in the follow-up assessment will receive a cinema voucher (valued about 12 EUR).

Measures

A sense of identity was measured by the *Multidimensional Questionnaire of Identity-Extended* (MQI-E; Pilarska, 2015, 2016). The instrument consists of 45 items grouped into six subscales reflecting the degree of sense of having inner contents (5 items, e.g., "I know exactly what I feel and what I want"), sense of

uniqueness (9 items, e.g., “*I feel that I am not distinguished by anything in particular from other people*”), sense of one’s own boundaries (7 items, e.g., “*It happens that I perceive my close one as an important part of my self*”), sense of coherence (10 items, e.g., “*I have a sense of inner harmony and order*”), sense of continuity over time (8 items, e.g., “*I feel that I was once a very different person than I am now*”), and sense of self-worth (6 items, e.g., “*I like myself regardless of my shortcomings*”). All items are evaluated on a 4-point scale (0 = *strongly disagree/never*, 3 = *strongly agree/always*), with higher scores indicating stronger sense of identity¹.

To assess self-control, the *Self-Control Scale* (SCS) developed by Tangney et al. (2004; adapted by Pilarska & Baumeister, 2018) was employed. It consists of 36 5-point scale items ranging from 1 = *not at all* to 5 = *very much*, with higher scores reflecting more self-control. Tangney et al. (2004) factor-analyzed these items and identified five factors, labeled general capacity for self-discipline (e.g., “*I have trouble saying no*”), deliberate/nonimpulsive action (e.g., “*I often interrupt people*”), healthy habits (e.g., “*I eat healthy foods*”), work ethic (e.g., “*Pleasure and fun sometimes keep me from getting work done*”), and reliability (e.g., “*I am always on time*”). However, given the limited explanatory utility of the factor structure, they recommended treating the scale as unidimensional.

Congruence and coherence were operationalized using Emmons’ (1999) personal striving construct as a common unit of analysis. *The Personal Striving Questionnaire* (PSQ; Emmons, 1999; adapted by Kadzikowska-Wrzošek, 2010) was used to measure goal congruence. Participants were asked to list five current strivings, defined as “plans, objectives, and desires that we are typically trying to accomplish or attain”, and were given examples, such as “trying to make others feel comfortable in my company”. Participants were then asked to rate the extent to which they pursue each striving for each of four reasons, using a 10-point scale (0 = *not at all for this reason*, 9 = *completely because of this reason*). The four reasons were, respectively, external (i.e., “*because somebody else wants you to or thinks you should, or because you’ll receive a reward or praise for doing so*”), introjected (i.e., “*because you would feel ashamed, guilty, or anxious if you did not; nobody tells you to do so, but you feel that you ought to strive for this*”), identified (i.e., “*because you believe that it is an important goal to have; even if the goal has been instilled by others, you have come to believe in it*”), and intrinsic (i.e., “*because the goal is personally important to you and congruent with your values and beliefs; it is freely chosen and reflects your deeply held views and wishes, and it will provide you with fun and enjoyment – the primary reason is simply your interest in the experience itself*”). A summary index of striving congruence was formed by subtracting averaged introjected and external regulation ratings (i.e., controlled

¹ A person-mean substitution was used to replace missing values for participants missing up to 20 % of a (sub)scale’s items. Three participants (less than 1 %) had the maximum acceptable percentage of missing data.

motivation) from those for intrinsic and identified reasons (i.e., autonomous motivation). Higher scores indicated greater striving congruence.

To evaluate goal coherence, participants were given a 5 x 5 matrix adapted from the *Striving Instrumentality Matrix* (SIM; Emmons, 1999). They were asked to compare each of the previously listed strivings with every other striving and ask themselves, “*Does being successful in this striving have a helpful, a harmful, or no effect at all on the other striving?*”. The ratings were made on a scale of -2 to 2 (-2 = *very harmful effect*, 2 = *very helpful effect*). Responses were recoded on a 1-5 scale to aid statistical analysis of data. A total score was obtained by averaging the ratings of the whole matrix. Higher scores indicated greater coherence among strivings.

All measures were validated in previous studies and possess good psychometric properties. In the current study, as well, the reliabilities of these measures were within acceptable levels (Table 1).

Results

Descriptive and Preliminary Analyses

Table 1 presents the basic statistical description of study variables. Independent *t*-tests revealed that men reported higher sense of having inner contents, $t(487) = 1.97, p = .05$, sense of uniqueness, $t(487) = 4.43, p < .001$, sense of one's own boundaries, $t(487) = 4.19, p < .001$, and sense of self-worth, $t(487) = 4.91, p < .001$, than women. These results were consistent with the view that the identity formation process may take longer for females than males (e.g., Marcia, 1980), and with findings on gender differences in self-esteem and independent-interdependent self-construals (e.g., Cross & Madson, 1997; Kling, Hyde, Showers, & Buswell, 1999). No other gender differences emerged. With respect to age differences in the study variables, significant positive correlations were obtained between participants' age and sense of one's own boundaries ($r = .12, p = .008$) and sense of coherence ($r = .11, p = .017$), which were in line with the emerging adulthood conception (Arnett, 2000). No significant correlations were obtained between age and other study variables. Given that both gender and age differences were evident in study variables, the effects of these variables were controlled in the primary analysis.

Preliminary product-moment correlations were computed among the variables and are shown in Table 1. As posited in Hypothesis 1, all senses of identity were positively correlated with self-control, all but one being statistically significant at the $p < .001$. In addition, striving congruence was positively associated with senses of identity and self-control, suggesting a possible mediation effect. Striving coherence was positively related to striving congruence and self-control, but its correlations with senses of identity were low or insignificant.

Table 1
Means, Standard Deviations, Intercorrelations, and Internal Consistencies of the Study Variables

Variables	1	2	3	4	5	6	7	8	9
1. Sense of having inner contents	-								
2. Sense of uniqueness	.23***	-							
3. Sense of one's own boundaries	.23***	.13**	-						
4. Sense of coherence	.79***	.14**	.34***	-					
5. Sense of continuity	.66***	.17***	.15***	.65***	-				
6. Sense of self-worth	.58***	.48***	.34***	.57***	.47***	-			
7. Self-control	.42***	.09*	.27***	.49***	.44***	.41***	-		
8. Striving congruence	.24***	.12**	.09*	.26***	.19***	.29***	.28***	-	
9. Striving coherence	.00	.11*	.00	.00	.06	.08*	.12**	.20***	-
<i>M</i> (<i>SD</i>)	2.19 (0.52)	1.82 (0.52)	1.54 (0.47)	1.95 (0.50)	1.89 (0.45)	1.97 (0.54)	3.16 (0.47)	2.95 (2.14)	3.56 (0.52)
Cronbach's α	.76	.84	.64	.84	.72	.79	.87	.71	.80

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

Tests of Mediation

To examine the relative contribution of a sense of identity to the prediction of self-control and to investigate the possibility that striving congruence and striving coherence might mediate its effect, structural equation modelling with latent variables was performed. Following Hall, Snell, and Foust's (1999) recommendations for the choice of an indicator structure, items sharing a secondary factor were combined into the same parcel. Accordingly, Figure 2 shows how a latent variable was created to represent a sense of identity using the six subscales of the MQI-E as the observed manifest indicators. Self-control was modeled as a latent variable with five indicators representing the average scores on the five SCS factors (Tangney et al., 2004). Congruence scores calculated separately for each of the five strivings served as indicators of a striving congruence latent construct. Similarly, coherence scores for each of the five strivings served as indicators of a striving coherence latent construct.

To test whether the data met the normality assumption underlying the maximum likelihood procedure used to test the model, the multivariate normality of the indicator variables was examined. The result indicated that the data were not multivariate normal (Mardia's normalized estimate > 5). Therefore, the Satorra-Bentler scaled chi-square ($S-B\chi^2$) was used (Satorra & Bentler, 1988).

As suggested by Anderson and Gerbing's (1988) two-step procedure, a confirmatory factor analysis was first conducted to develop a measurement model with an acceptable fit to the data. Then, a structural model was conducted to test the hypothesized model. Because the chi-square statistic is affected by sample sizes, three additional indices were used to assess the model fit: the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root-mean-square residual (SRMR). Rules of thumb for determining acceptable model fit are as follows: a CFI value of .90 or above, and RMSEA and SRMR values close to .06 and .08 for a good fit (Hu & Bentler, 1999; Kline, 2005).

Although all indicators had significant ($p < .001$) loadings on their underlying constructs, an initial measurement model assuming uncorrelated errors indicated a marginal fit, $S-B\chi^2(183,489) = 515.21$, CFI = .89, RMSEA = .06 (90 % CI: lower bound = .06, upper bound .07), SRMR = .05. An inspection of the modification indices suggested, among others, the addition of an error covariance between sense of uniqueness and sense of self-worth. Given the content of the items and possible common omitted causes of the two subscales (e.g., defensive self-enhancement), it made sense to add the covariance. After this modification, the fit indices improved, $S-B\chi^2(182,489) = 416.67$, CFI = .92, RMSEA = .05 (90 % CI: lower bound = .05, upper bound = .06), SRMR = .05. The scaled difference chi-square test result, $\Delta\chi^2(1,489) = 68.97$, $p < .001$, indicated a significant difference in fit between the two models. All indicators continued to load significantly onto their latent variables ($p < .001$) and the factor loadings were very similar to those in the original

measurement model. Moreover, the pattern of relations between the latent variables remained unchanged, with all correlations significant ($p < .01$), except for the sense of identity with striving coherence.

Next, two structural models were fitted to the data. First, a mediation model, with no direct effect on self-control from sense of identity, was specified, followed by a direct-effect model, including mediational effects. To control for the effects of age and gender, paths were allowed from both control variables to each construct in the models. The fit indices of the mediational model were: $S-B\chi^2(217,489) = 613.94$, $CFI = .87$, $RMSEA = .06$ (90 % CI: lower bound = .06, upper bound = .07), $SRMR = .08$. The second structural model fit the data better than the first model, $S-B\chi^2(216,489) = 506.36$, $CFI = .91$, $RMSEA = .06$ (90 % CI: lower bound = .05, upper bound = .06), $SRMR = .05$. Addition of the direct-effect path from sense of identity to self-control significantly improved the fit of the model, $\Delta\chi^2(1,489) = 87.53$, $p < .001$. This indicated that the relationship of the sense of identity to self-control was partially, rather than fully, mediated by striving characteristics.

The direct-effect model contained several nonsignificant paths, which included the covariates and one of the hypothesized paths. These nonsignificant paths were removed, leading to the final structural model that fitted the data even better, $S-B\chi^2(231,489) = 474.50$, $CFI = .91$, $RMSEA = .06$ (90 % CI: lower bound = .05, upper bound = .06), $SRMR = .05$, $\Delta\chi^2(14,489) = 31.78$, $p < .001$. Indicator loadings and path coefficients for this model are presented in Figure 2. In this model, the sense of identity was a significant predictor of striving congruence ($\beta = .34$, $p < .001$), and striving congruence significantly predicted striving coherence ($\beta = .26$, $p < .001$). In addition, the sense of identity, striving congruence, and striving coherence were each significant predictors of self-control ($\beta = .58$, $p < .001$, $\beta = .11$, $p = .036$, and $\beta = .12$, $p = .015$, respectively). Regarding the covariates, significant relationships only appeared between gender and the sense of identity, with males having stronger sense of identity than females ($\beta = .11$, $p = .016$) and gender and striving congruence, with females reporting greater striving congruence than males ($\beta = -.13$, $p = .013$). This model accounted for 13 % of the variance in striving congruence, 7 % of the variance in striving coherence, and 42 % of the variance in self-control.

Through striving congruence, the sense of identity had a significant indirect link of .04 ($z = 2.04$, $p = .041$) to self-control. Striving congruence affected self-control directly and indirectly through its influence on goal coherence ($z = 2.04$, $p = .042$). Yet, the effect of a sense of identity on self-control through serial mediation of striving congruence and striving coherence was .01 and only marginally significant ($z = 1.92$, $p = .054$). Consistent with the finding that a sense of identity did not predict striving coherence, the indirect effect from a sense of identity through striving coherence to self-control was not significant.

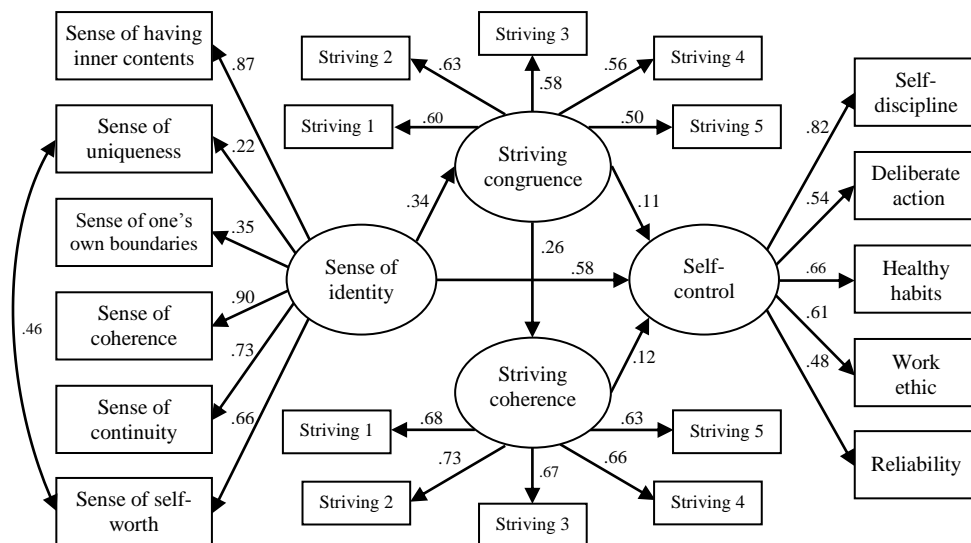


Figure 2. Significant ($p < .05$ or less) path estimates from final structural model. All the coefficients are from the completely standardized solution. Covariate (gender) not depicted for clarity.

The above results supported Hypothesis 1, that the sense of identity would positively predict self-control, and Hypothesis 2, that goal congruence would partially mediate this relationship. However, Hypothesis 3 was not supported, with a sense of identity failing to emerge as a significant predictor of goal coherence. Limited, if any, support was found for Hypothesis 4 as the indirect effect of the sense of identity on self-control via goal congruence and coherence operating in serial displayed only borderline significance.

Discussion

The present study aimed to determine whether stronger sense of identity (i.e., subjective awareness and experience of inner content, coherence, continuity, uniqueness, self-boundaries, and self-worth) is associated with higher self-control, and to determine whether this association is in part mediated by goal congruence and goal coherence.

Structural equation modelling supported the model in general, although not all proposed paths were significant. Striving congruence was found to mediate the relationship between a sense of identity and self-control, such that stronger sense of identity was associated with higher striving self-congruence, which consequently led to higher self-control. Striving congruence influenced self-control directly and

indirectly by means of striving coherence that, in turn, had a significant impact on self-control. The serial indirect effect of the sense of identity on self-control through striving congruence and then striving coherence was marginally significant. The sense of identity also showed a direct path to self-control. Moreover, the indirect effect was minor relative to the direct effect, suggesting that most of the benefit of a sense of identity for self-control appeared to proceed through a pathway other than the two features of the goal system.

The finding that the sense of identity positively contributed to self-control agrees with previous research using different identity and self-control measures (e.g., Hofer et al., 2006). It also aligns with the general theorizing that a consolidated sense of identity is a prerequisite for establishing important regulatory mechanisms that serve to maintain one's sense of identity and align one's feelings, thoughts, and actions with self-cognitions (e.g., Adams & Marshall, 1996). Consistent with that notion, behavioural dysregulation, as in borderline personality disorder, has been explained as an effect of a weak or disturbed sense of identity (e.g., Selby & Joiner, 2009). In a similar vein, Baumeister's (1990) escape theory has described disinhibition as a consequence of the deconstructed self and loss of self-awareness.

Of the two goal-based measures of personality integration only striving congruence was directly related to a sense of identity and functioned to mediate the relationship between a sense of identity and self-control. This meditational pathway, in line with results obtained by Schwartz et al. (2000) and Luyckx, Vansteenkiste, Goossens, and Duriez (2009), suggests that adaptive identity formation may create opportunities for need satisfaction and predispose individuals to adopt autonomous goals. It also indicates, in accordance with Muraven et al.'s (2008) conclusions, that people who pursue goals reflecting their enduring interests and values are better able to exert self-control. As Koestner (2008) points out, autonomous goals promote effective self-regulation because they are less likely to generate intrapersonal conflict. Consistent with this, striving coherence was found to partially mediate the link between striving congruence and self-control. Note, however, that the observed relationship between congruence and coherence of strivings was weaker than reported in previous work (e.g., Sheldon & Kasser, 1995). This finding could be interpreted to indicate that congruence and coherence, rather than reflecting a single underlying organizational process (Sheldon & Kasser, 1995), are regulated by relatively separate underlying motivational pathways.

Somewhat puzzling in the study was the failure of a sense of identity to directly predict striving coherence. Such an effect was expected based on theoretical reasoning and some, albeit relatively limited, empirical findings suggesting that the process of identity formation facilitates the resolution of conflicting goals (e.g., Colby, 1996). The lack of a direct relationship between the sense of identity and goal coherence does not necessarily prove independence of

the two but may suggest that more complex relationships need to be considered. For example, individuals with a well-developed identity may feel less threatened by inner conflicts and dichotomies and manage their conflicting motivations in a more adaptive way. As Blasi and Glodis (1995) maintained, the most mature form of subjective identity, namely Identity as Authenticity, is marked by „awareness of having irreconcilable but equally valid goals” (p. 420). Another explanation concerns the measurement of striving coherence. The SIM is a bipolar measure, which taps intergoal interference and facilitation as mutually exclusive opposites. As Riediger (2007) noted, studies using bipolar instruments, compared with those using unipolar scales, have produced more mixed results, with many studies failing to establish links between intergoal relations and psychological adjustment (e.g., King, Richards, & Stemmerich, 1998; Sheldon & Kasser, 1995). There is, indeed, evidence that intergoal facilitation and conflict are most adequately conceptualized as distinct characteristics and have different functions for psychological well-being and goal pursuit (e.g., Riediger & Freund, 2004).

Limitation and Conclusion

The present study addressed the call for personality-oriented accounts of self-regulation. Specifically, it examined how individuals’ sense of personal identity, representing a core feature of personality development, relates to their capacity to exert self-control. Although only a small and partial mediation effect was evidenced, the findings contribute to a burgeoning area worthy of future study. Nonetheless, certain limitations should be noted. First, the correlational nature of the study prevents causal interpretation of the results. Although it is plausible to argue that a sense of identity serves as an instrument of self-regulation, it is also possible that self-control contributes to the development and maintenance of a sense of identity. Second, the study involved university students and thus may not be representative of the general population, especially of populations with impulse control difficulties (e.g., substance abusers, pathological gamblers). It is also possible that the identity process operates differently for different age groups. The results may have been less robust given the immaturity of the sense of identity and the instability of commitments, both characteristic of many young people who are only just entering adulthood (e.g., Arnett, 2000). Future studies should seek to further substantiate the role of a sense of identity in relation to self-control with more diverse samples. Finally, there may be other factors mediating or qualifying the effects of a sense of identity, such as moral identity (Aquino & Reed, 2002) and social orientation (Seeley & Gardner, 2003). Certainly, further effort examining and understanding the link between personal identity and self-regulation process is warranted.

References

- Adams, G. R., & Ethier, J. L. (1999). *The objective measure of ego identity status: A manual on theory and test construction*. (Unpublished manual). University of Guelph, Canada.
- Adams, G. R., & Marshall, S. (1996). A developmental social psychology of identity: Understanding the person in context. *Journal of Adolescence*, 19(5), 1-14.
- Anderson, J., & Gerbing, D. W. (1988). Structural equation modelling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Aquino, K., & Reed, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6), 1423-1440.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26.
- Baumeister, R. F. (1990). Anxiety and deconstruction: On escaping the self. In J. M. Olson & M. P. Zanna (Eds.), *Self-inference processes: The Ontario symposium* (Vol. 6, pp. 259-291). Hillsdale, NJ: Erlbaum.
- Baumeister, R. J. (2002). Yielding to temptation: Self-control failure, impulsive purchasing, and consumer behavior. *Journal of Consumer Research*, 28(4), 670-676.
- Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88(4), 589-604.
- Berzonsky, M. D. (1989). Identity style: Conceptualization and measurement. *Journal of Adolescent Research*, 4(3), 268-282.
- Berzonsky, M. D., Branje, S. J. T., & Meeus, W. (2007). Identity processing style, psychosocial resources, and adolescents' perceptions of parent-adolescent relations. *Journal of Early Adolescence*, 27(3), 324-345.
- Berzonsky, M. D., & Papini, D. R. (2014). Identity processing styles and value orientations: The mediational role of self-regulation and identity commitment. *Identity*, 14(2), 96-112.
- Blasi, A. (1993). The development of identity: Some implications for moral functioning. In G. G. Noam, T. E. Wren, G. Nunner-Winkler, & W. Edelstein (Eds.), *Studies in contemporary German social thought. The moral self* (pp. 99-122). Cambridge, MA: MIT Press.
- Blasi, A., & Glodis, K. (1995). The development of identity. A critical analysis from the perspective of the self as subject. *Developmental Review*, 15(4), 404-433.
- Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46(5), 554-571.

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- Colby, P. M. (1996). *Individual differences in identity development status: Social and cognitive correlates of goal integration in early adulthood*. (Unpublished doctoral dissertation). University of California, Davis.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construal theory and gender. *Psychological Bulletin*, 122(1), 5-37.
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development and health. *Canadian Psychology*, 49(3), 182-185.
- De Ridder, D. T. D., Lensvelt-Mulders, G., Finkenauer, C., Stok, F. M., & Baumeister, R. F. (2012). Taking stock of self-control: A meta-analysis of how trait self-control relates to a wide range of behaviours. *Personality and Social Psychology Review*, 16(1), 76-99.
- Emmons, R. A. (1999). *The psychology of ultimate concerns*. New York, NY: Guilford Press.
- Emmons, R. A., & King, L. A. (1988). Conflict among personal strivings: Immediate and long-term implications for psychological and physical well-being. *Journal of Personality and Social Psychology*, 54(6), 1040-1048.
- Epstein, S. (2003). Cognitive-experiential self-theory of personality. In T. Millon & M. J. Lerner (Eds.), *Comprehensive handbook of psychology: Personality and social psychology* (Vol. 5, pp. 159-184). Hoboken, NJ: Wiley.
- Erikson, E. H. (1963). *Childhood and society* (2nd Ed.). New York: Norton.
- Erikson, E. H. (1980). *Identity and the life cycle*. New York: W. W. Norton.
- Grasmick, H. G., Tittle, C. R., Bursik, Jr., R. J., & Arneklev, B. J. (1993). Testing the core empirical implications of Gottfredson and Hirschi's general theory of crime. *Journal of Research in Crime and Delinquency*, 30(1), 5-29.
- Hall, R. J., Snell, A. F., & Foust, M. S. (1999). Item parceling strategies in SEM: Investigating the subtle effects of unmodeled secondary constructs. *Organizational Research Methods*, 2(3), 233-256.
- Hofer, J., Chasiotis, A., Kiessling, F., & Busch, H. (2006). Quality of familial relations in childhood and ego identity formation: The moderating influence of dispositions of action control. *Identity*, 6(2), 117-140.
- Hofmann, W., Luhmann, M., Fischer, R. R., Vohs, K. D., & Baumeister, R. F. (2014). Yes, but are they happy? Effects of trait self-control on affective well-being and life satisfaction. *Journal of Personality*, 82(4), 265-277.
- Hu, L. -t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling*, 6(1), 1-55.
- Kadzikowska-Wrzosek, R. (2010). Siła ego i sprawność mechanizmów kontroli działania a autonomia [Ego strength and action control mechanisms efficiency: The effect of autonomy support]. *Studia Psychologiczne*, 48(4), 17-36.

- Kernberg, O. (1975). *Borderline conditions and pathological narcissism*. New York: Jason Aronson.
- King, L. A., Richards, J. H., & Stemmerich, E. (1998). Daily goals, life goals, and worst fears: Means, ends, and subjective well-being. *Journal of Personality, 66*(5), 713-744.
- Kline, R. B. (2005). *Methodology in the social sciences. Principles and practice of structural equation modelling* (2nd ed.). New York, NY: Guilford Press.
- Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin, 125*(4), 470-500.
- Koestner, R. (2008). Reaching one's personal goals: A motivational perspective focused on autonomy. *Canadian Psychology, 49*(1), 60-67.
- Koestner, R., Horberg, E. J., Gaudreau, P., Powers, T., DiDio, P., Bryan, C., Jochum, R., & Salter, N. (2006). Bolstering implementation plans for the long haul: The benefits of simultaneously boosting self-concordance or self-efficacy. *Personality and Social Psychology Bulletin, 32*(11), 1547-1558.
- Kuhl, J. (1994). Action versus state orientation: Psychometric properties of the Action Control Scale (ACS-90). In J. Kuhl & J. Beckmann (Eds.), *Volition and personality: Action versus state orientation* (pp. 47-59). Göttingen, Germany: Hogrefe & Huber.
- Lecky, P. (1945). *Self-consistency: A theory of personality*. New York, NY: Island Press.
- Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., & Goossens, L. (2008). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality, 42*(1), 58-82.
- Luyckx, K., Vansteenkiste, M., Goossens, L., & Duriez, B. (2009). Basic need satisfaction and identity exploration and commitment: Bridging self-determination theory and process-oriented identity research. *Journal of Counseling Psychology, 56*(2), 276-288.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*(5), 551-558.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159-187). New York, NY: Wiley.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist, 41*(9), 954-969.
- McAdams, D. P. (2013). *The redemptive self: Stories Americans live by* (Rev. ed.). New York, NY: Oxford University Press.
- Milyavskaya, M., & Inzlicht, M. (2017). What's so great about self-control? Examining the importance of effortful self-control and temptation in predicting real-life depletion and goal attainment. *Social Psychological and Personality Science, 8*(6), 603-611.
- Molina, R., Unsworth, K. L., Hodkiewicz, M. R., & Adriasola, E. (2013). Are managerial pressure, technological control and intrinsic motivation effective in improving data quality? *Reliability Engineering and System Safety, 119*, 26-34.

- Moller, A. C., Deci, E. L., & Ryan, R. M. (2006). Choice and ego-depletion: The moderating role of autonomy. *Personality and Social Psychology Bulletin*, 32(8), 1024-1036.
- Morsunbul, U. (2015). The effect of identity development, self-esteem, low self-control and gender on aggression in adolescence and emerging adulthood. *Eurasian Journal of Educational Research*, 61, 99-116.
- Muraven, M., Gagne, M., & Rosman, H. (2008). Helpful self-control: Autonomy support, vitality, and depletion. *Journal of Experimental Social Psychology*, 44(3), 573-585.
- Pilarska, A. (2015). Contextualized self-views and sense of identity. *Personality and Individual Differences*, 86, 326-331.
- Pilarska, A. (2016). Wokół pojęcia poczucia tożsamości: przegląd problemów i propozycja konceptualizacji [On the concept of the sense of identity: Overview of problems and proposed conceptualization]. *Nauka*, 2, 123-141.
- Pilarska, A., & Baumeister, R. (2018). Psychometric properties and correlates of the Polish version of the Self-Control Scale (SCS). *Polish Psychological Bulletin*, 49(1), 95-106.
- Riediger, M. (2007). Interference and facilitation among personal goals: Age-group differences and associations with well-being and behavior. In B. R. Little, K. Salmela-Aro, J.-E. Nurmi, & S. D. Philipps (Eds.), *Personal project pursuit: Goals, action, and human flourishing* (pp. 119-143). Mahwah, NJ: Erlbaum.
- Riediger, M., & Freund, A. M. (2004). Interference and facilitation among personal goals: Differential associations with subjective well-being and persistent goal pursuit. *Personality and Social Psychology Bulletin*, 30(12), 1511-1523.
- Rogers, C. (1959). A theory of therapy, personality and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of a science. Formulations of the person and the social context* (Vol. 3, pp. 236-257). New York, NY: McGraw Hill.
- Satorra, A., & Bentler, P. M. (1988). Scaling corrections for chi-square test statistics in covariance structure analysis. *Proceedings of the Business and Economic Statistics Section of the American Statistical Association*, 308-312.
- Schwartz, S. J., Mullis, R. L., Waterman, A. S., & Dunham, R. M. (2000). Ego identity status, identity style, and personal expressiveness: An empirical investigation of three convergent constructs. *Journal of Adolescent Research*, 15(4), 504-521.
- Schwartz, S. J., Forthun, L. F., Ravert, R. D., Zamboanga, B. L., Umaña-Taylor, A. J., Filton, B. J., ... Hudson, M. (2010). Identity consolidation and health risk behaviours in college students. *American Journal of Health Behavior*, 34(2), 214-224.
- Seeley, E. A., & Gardner, W. L. (2003). The "selfless" and self-regulation: The role of chronic other-orientation in averting self-regulatory depletion. *Self and Identity*, 2(2), 103-117.

- Selby, E. A., & Joiner, T. E. (2009). Cascades of emotion: The emergence of borderline personality disorder from emotional and behavioral dysregulation. *Review of General Psychology, 13*(3), 219-229.
- Serafini, T. E., & Adams, G. R. (2002). Functions of identity: Scale construction and validation. *Identity, 2*(4), 361-389.
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need-satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology, 76*(3), 482-497.
- Sheldon, K. M., & Emmons, R. A. (1995). Comparing differentiation and integration within personal goal systems. *Personality and Individual Differences, 18*(1), 39-46.
- Sheldon, K. M., & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. *Journal of Personality and Social Psychology, 68*(3), 531-543.
- Soenens, B., Berzonsky, M. D., Vansteenkiste, M., Beyers, W., & Goossens, L. (2005). Identity styles and causality orientations: In search of the motivational underpinnings of the identity exploration process. *European Journal of Personality, 19*(5), 427-442.
- Sokolik, M. (1996). *Psychoanaliza i Ja [Psychoanalysis and self]*. Warszawa: J. Santorski & Co.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality, 72*(2), 271-322.
- Vallacher, R. R., & Wegner, D. M. (1989). Levels of personal agency: Individual variation in action identification. *Journal of Personality and Social Psychology, 57*(4), 660-671.
- Vignoles, V. L., Regalia, C., Manzi, C., Gollidge, J., & Scabini, E. (2006). Beyond self-esteem: Influence of multiple motives on identity construction. *Journal of Personality and Social Psychology, 90*(2), 308-333.
- Waterman, A. S. (2007). Doing well: The relationship of identity status to three conceptions of well-being. *Identity, 7*(4), 289-307.

Osjećaj identiteta i samokontrola: Medijatorska uloga karakteristika cilja

Sažetak

Ovo istraživanje ispituje osjećaj osobnog identiteta kao samoregulacijskog mehanizma, koji olakšava podudarnost i smislenost ciljeva koje si osoba postavlja, i tako povećava njihovu sposobnost samokontrole. U istraživanju je sudjelovalo 489 mladih odraslih osoba, koje su ispunile niz upitnika za procjenu osnovnih dimenzija osjećaja identiteta, kongruencije i koherentnosti ciljeva te kapaciteta za samokontrolu. Strukturalnim modeliranjem provjerene su izravne i neizravne veze osjećaja identiteta na samokontrolu. Dobiveni rezultati uglavnom potvrđuju predloženi model. Potrebno je naglasiti da su medijacijski efekti prilično niski, a osjećaj identiteta imao je izravan prediktivni učinak na samokontrolu, nakon kontrole kongruencije i koherentnosti ciljeva.

Ključne riječi: osjećaj identiteta, samokontrola, podudarnost cilja, smislenost cilja

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