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## Control strivings in the Socio-Economic Panel (SOEP)

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# Control Strivings in the Socio-Economic Panel (SOEP)

Ina Schöllgen, Denis Gerstorf, Jutta Heckhausen

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## **Control Strivings in the Socio-Economic Panel (SOEP)**

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## **Abstract**

The Motivational Theory of Life-Span Development (MTD) identifies motivational and self-regulatory strategies that people use to meet the challenges they face throughout life. The theory distinguishes control strivings related to goal engagement from those related to goal disengagement and goal re-engagement. In the Innovation Sample of the Socio-Economic Panel (SOEP-IS), these control strivings were surveyed using 12-item scales for key domains of life: work, family, and health. In this report, we first present key concepts and principles of MTD and a brief overview of research using the theory. This provides the backdrop for our discussion of the relevance of control strivings for major thematic areas covered in the SOEP and for the proposed domain-specific assessment of control strivings. Second, we examine the reliability and factor structure of the scales, using data from the SOEP Innovation Sample collected in 2012. In a third and final step, we sketch possible projects that make use of the rich SOEP data so as to examine pivotal questions revolving around the nature of control strivings (changes) across adulthood and old age as well as their antecedents, correlates, and consequences. In line with predictions based on MTD, results revealed mostly moderate to high inter-item correlations for selective primary control, selective secondary control, and compensatory primary control, with all items loading on a single goal engagement factor. Our results further show that disengagement, self-protection and re-engagement are interrelated, but distinguishable strategies for dealing with unattainable goals.

Keywords: primary and secondary control, goal engagement, goal disengagement, life-span development, motivation, SOEP, SOEP-IS

JEL Code: C81, Z13

## **Theoretical and Empirical Background**

Throughout life, individuals need to deal with various challenges, including major developmental transitions (e.g., starting first job, transition to retirement), chronic stressors (e.g., financial strain, chronic disease) and life events (e.g., job loss, divorce). The Motivational Theory of Life-Span Development (MTD; Heckhausen, Wrosch, & Schulz, 2010) identifies motivational and self-regulatory processes that play a central role in meeting these challenges and directing individual thoughts and behavior and hence contribute to successful development. According to this theory, developmental regulation works through cycles of applying strategies related to goal engagement and goal disengagement/reengagement.

In this article, we pursue three major objectives. First, we first present key concepts and principles of MTD and a brief overview of research using the theory. This provides the backdrop for our discussion of the relevance of control strivings for major thematic areas covered in the SOEP and for the proposed domain-specific assessment of control strivings. Second, we examine the reliability and factor structure of the scales, using data from the SOEP Innovation Sample (SOEP-IS) collected in 2012. In a third and final step, we sketch possible projects that make use of the rich SOEP data so as to examine pivotal questions revolving around the nature of control strivings (changes) across adulthood and old age as well as their antecedents, correlates, and consequences.

### **The Motivational Theory of Life-Span Development**

According to MTD, control strategies operate together in a goal-engagement mode on the one hand and a goal-disengagement mode on the other hand

(Heckhausen, Wrosch, & Schulz, 2010). Selective primary control (i.e., investing own effort and time), compensatory primary control (i.e., getting external help or using unusual means), and selective secondary control (i.e., enhancing volitional engagement) are each linked to goal engagement. For example, to successfully master the transition from university or vocational school to work, a person will invest time and effort (into obtaining a good degree and into applying to potential employers; selective primary control), imagine the positive consequences that would come with obtaining a job (selective secondary control), and seek advice from experts on effective application strategies (compensatory primary control).

When a goal cannot be reached anymore, it is considered adaptive to disengage from this goal (e.g., by downgrading its importance and withdrawing effort and commitment) and use cognitive strategies (e.g., positive reappraisal) to protect one's motivational resources. Disengagement and self-protection strategies often operate as interrelated, but separable compensatory secondary control strivings (Heckhausen & Schulz, 1993; Hall et al., 2010), suggesting that these are different ways of dealing with unattainable goals. Minimizing the adverse consequences of encountering unattainable goals not only requires individuals to disengage from goals that have become out of reach, but also to reengage in more feasible goals (Wrosch, Scheier, & Miller, 2013; Wrosch et al., 2003). Goal disengagement includes withdrawing behavioral efforts and psychological commitment from unattainable goals, its primary function being avoiding the waste of resources on futile goal pursuits, avoiding repeated goal failure and negative effects on subjective well-being. In contrast, goal reengagement involves identifying, committing to, and starting to pursue new goals with the primary function to keep individuals engaged in the pursuit of meaningful and attainable goals (Wrosch, Scheier & Miller, 2013). In line with

these predictions, empirical research has shown that goal disengagement and goal reengagement are indeed differentially related to major outcomes. For example, goal disengagement was found to be associated with lower psychological distress, whereas goal reengagement was related to positive indicators of well-being (e.g., Wrosch & Sabiston, 2013).

A central assumption of MTD is that goal engagement and goal disengagement are not per se adaptive, but need to be congruent with the control opportunities people have (congruence principle). Goal engagement is considered adaptive when control opportunities are good, whereas goal disengagement is considered adaptive when opportunities are poor. Because control opportunities differ across life, the endorsement and the predictive utility of control strivings is expected to be age-graded. Disengagement from unattainable goals and self-protection strategies are both assumed to be more strongly endorsed at higher ages so as to compensate for more frequent failure experiences and developmental losses. This hypothesis has received broad-based empirical evidence (e.g., Heckhausen, 1997). Moreover, it has been shown that persistence (i.e., a strategy linked to goal engagement) is more strongly associated with subjective well-being among younger adults compared to older adults. In older ages, in contrast, positive reappraisal (i.e., a strategy of self-protection when facing unattainable goals) is more adaptive (i.e., associated with higher well-being) than persistence (Wrosch, Heckhausen & Lachman, 2000). Control opportunities do not only vary between age groups, but also within age groups. Accordingly, the study by Wrosch and colleagues (2000) has found that age differences in the relation of control strategies to subjective well-being were stronger in subgroups facing stressors in the health or financial domain (i.e., having limited control opportunities).



Beyond assessing an individual's objective control opportunities (e.g., availability of jobs in the area a person is living in), additional and complementary information is often provided by assessing people's perception of their control potential because objective and subjective control opportunities are not necessarily congruent. Moreover, it can be assumed that the individual perception is more consequential for the selection of control strategies and hence for successful development than are objective circumstances. For example, although individuals with higher income tend to report higher mastery and less perceived constraints, there are large inter-individual differences in perceived control within income groups, particularly at lower levels of income (Lachman & Weaver, 1998). The study by Lachman and Weaver further demonstrated that individuals in the lowest income group with a high sense of control had levels of health and well-being comparable with higher-income groups, demonstrating the relevance of subjective assessments of control potential. As a consequence, when designing the control striving assessment to be included in the SOEP, we decided to complement the broad range of indicators already available in the SOEP that provide information on objective life circumstances with indicators that obtain information about people's perception of their control opportunities in different life domains (see below).

### **Control Strivings in Different Life Domains**

It is reasonable to assume that control opportunities and control strivings not only differ between individuals, but that there is also some variation across life domains. Research using a domain-specific assessment of control strivings has demonstrated the usefulness of this approach. Most previous studies focused on one

specific domain, however, such as academic achievement (Hamm et al., 2013), childbearing (Heckhausen, Wrosch, & Fleeson, 2001), intimate relationships (Wrosch & Heckhausen, 1999), and health-induced activity restrictions (Hall et al., 2010). As one notable exception, Tomasik and colleagues (2013) investigated control strivings across the domains of work, family, and leisure in young and middle-aged adults. Results indicated that for most control strivings, about one third of individual differences was attributable to the life domain. In this study, all control strivings were assessed with regard to demands of social change; hence, this common background might have even limited the amount of domain-specific variance. Following the general idea, when designing the control striving assessment to be included in the SOEP, we decided to select key domains of adult life and to assess the control strivings people pursue in these particular domains, family, work, and health.

The nature of social relationships often changes with age, but **family relationships** constitute central components of successful development and aging across the life span (Antonucci et al., 2012; Kreppner & Lerner, 1989). Family life undergoes critical transitions, for example with partner search and choice, becoming a parent, promoting one's children's development, and thus requires people's active goal engagement.

**Work** is another centrally important part of life in young and middle adulthood, with critical transitions that require goal engagement encompassing, among others, entry into the career or promotions to maximum career levels. Among adolescents and adults living in economically devastated regions, however, disengagement concerning demands in the work domain has been shown to be associated with higher life satisfaction (Tomasik, Silbereisen, & Heckhausen, 2010).

**Health** is another central domain of functioning, particularly in later adulthood and old age because health constraints and physical limitations are frequent and often severe (e.g., Wurm, Schöllgen, & Tesch-Römer, 2010). As outlined in more detail in the Lines-of-Defense Model (Heckhausen, Wrosch, & Schulz, 2013), a domain-specific application of MTD, the use of appropriate health-related control strategies can be assumed to play an important role in managing health threats. A study by Hall and colleagues (2010) suggests that older individuals with acute health conditions (which, by implication, offer opportunities for control) benefit from using goal engagement strategies, whereas goal disengagement was related to poorer physical health.

### **Questionnaire Development**

When designing the control strivings assessment to be included in the SOEP (IS), we decided to pursue several strategies. To begin with, we decided to tap into the control strivings people pursue in two central domains of life. For those who are part of the work force, we selected the work domain and the social domain, particularly the partner and family. For those already being retired, we selected the social and health domains. In a second step, we selected six control striving strategies assumed to be of major importance in adapting to the challenges of adult life: Selective primary control, selective secondary control, compensatory primary control, self-protection, goal disengagement, goal reengagement (Heckhausen, Schulz & Wrosch, 1998). In a third step, we operationally defined the strategies by selecting the two items per strategy that are assumed to be of central conceptual relevance and for which measurement properties had been established in previous studies such as the

Midlife in the United States Survey (Brim, Ryff, & Kessler, 2004), be it as reliability (e.g., correlation with full scale) and/or validity (e.g., correlation with major outcomes, including health, well-being, and depressive symptoms).

## **Method**

### **Participants and Procedure**

The German Socio-Economic Panel (SOEP) is a representative longitudinal study of private households in Germany that was started in 1984 (for details, see Headey, Muffels, & Wagner, 2010; Wagner, Frick, & Schupp, 2007). The present study uses data from the SOEP Innovation Sample (SOEP-IS) collected in 2012. The SOEP-IS was installed in 2011 and complements the core SOEP sample by providing an opportunity for testing innovative questionnaire modules (Richter & Schupp, 2012).

The SOEP-IS represents private households in Germany, with every adult in the household being surveyed each year. In 2012, the SOEP-IS consisted of three subsamples: (i) the existing longitudinal sample E that had first been surveyed in the SOEP in 1998 (referred to as  $I_E$ ), (ii) the existing longitudinal sample I that was launched in 2009 ( $I_1$ ), and (iii) a refreshment sample that was established in 2012 ( $I_2$ ; for details, see Richter & Schupp, 2012). Sample  $I_2$  was used to test several new modules, including the module “control strivings”; hence, only about 100 participants of  $I_2$  received this module. Subsequently, the control strivings module became part of the assessment in samples  $I_E$  and  $I_1$ , where 2,052 personal interviews in 1,267 households could partly or fully be realized in the 2012 assessment.

Beyond the control strivings module, core questionnaires at household and individual levels were also part of the assessment in SOEP-IS in 2012, obtaining information on a broad range of domains such as health, work, and social relationships. The domain-specific assessment of control strivings was stratified by age: before retirement age, control strivings were assessed in the domains work and family, whereas for retirees, control strivings were assessed in the domains health and family. Hence, sample sizes differ by domain ( $n_{family} = 2,024$ ,  $n_{work} = 1,412$ ,  $n_{health} = 516$ ).

## Measures

The domain-specific assessment of control strivings was assured by using the following introductory question: *“Please think of your health (work life / partner or family) over the course of the last year. Were there any events or changes or burdens – be those positive or negative – that you have experienced as being particularly challenging or that had far-reaching consequences?”* If participants indicated that there were events or changes in this domain of functioning, they were asked to provide a subjective assessment of their control potential: *“Have you had any influence on those changes or their consequences?”* (answers ranging from 0 – “not at all” to 10 – “a lot”). Next, control strivings were assessed for the specific domain. Items are provided in Table 1. Again, a scale from 0 (not at all) to 10 (a lot) was used. Six types of control strivings were assessed with two items each: selective primary control, selective secondary control, compensatory primary control, self-protection, goal disengagement, goal reengagement.

## Analyses

First, we calculated inter-item correlations for the six types of control strivings, separately for each domain of functioning. Correlations between the control strivings were calculated next. In a final step, the factor structure was examined by employing confirmatory factor analysis (CFA). In line with recommendations (e.g., Hu & Bentler, 1999; Kline, 2010), we examined several fit indices: the Chi-squared test, the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root mean square residual (SRMR). Correlations were computed in SPSS 22.0, using the pairwise deletion option for dealing with missing values. CFA was carried out in MPlus 5.2, using full information maximum likelihood (FIML; Wothke, 2000) to accommodate incomplete data.

## Results

**Inter-item correlations.** Table 2 provides the inter-item correlations for the six types of control strivings, separately for each domain of functioning. For selective primary control (SPC), inter-item correlations ranged from  $r=.48$  to  $r=.65$ . Inter-item correlations for selective secondary control (SSC) ranged from  $r=.30$  to  $r=.45$ . For compensatory primary control (CPC), there was a low inter-item correlation in the family domain ( $r=.21$ ), whereas correlations for the work and health domain were medium-sized. Regarding self-protection (CSC-SP), inter-item correlations were low (i.e.,  $r_s < .30$ ) in each domain of functioning. For goal disengagement (CSC-DE) and goal reengagement (CSC-RE), all inter-item correlations were medium to high (goal disengagement:  $r=.43 - r=.61$ ; goal reengagement  $r=.55 - r=.67$ ). Regarding the

domains of functioning, inter-item correlations were highest for the work domain and lowest for the family domain (except for SSC and CSC-DE where correlations were lowest for the health domain). Together, results suggest that, across domains, inter-item correlations are mainly moderate to high, except for low correlations regarding self-protection.

**Correlations of control strivings in each domain.** Correlations between control strivings are reported in Table 3 for the work domain, in Table 4 for the family domain, and in Table 5 for the health domain. For the work domain and the health domain, it can be seen that the goal engagement strategies of selective primary control, compensatory primary control, and selective secondary control were highly correlated with each other (work:  $r_s \geq .56$ , Table 3; health:  $r_s \geq .53$ , Table 5). For the family domain, correlations between SPC, CPC and SSC were medium to high ( $r_s \geq .39$ , Table 4). Self-protection and disengagement were correlated to a low to medium extent across all domains of functioning, with the correlation being lowest in the family domain ( $r=.12$ ) and highest in the health domain ( $r=.38$ ). Correlations between self-protection and reengagement ranged from  $r=.26$  to  $r=.38$ . Reengagement was correlated with disengagement to a medium to high extent (work:  $r=.49$ , family:  $r=.35$ , health:  $r=.50$ ), but also showed substantial correlations with goal engagement strategies, particularly SSC and CPC (Tables 3-5). Together, results suggest that there are substantial associations between strategies related to goal engagement, whereas associations between disengagement, self-protection, and reengagement are mainly modest.

**Confirmatory factor analysis.** Finally, we report results from a CFA. Given the theoretical and empirical background explicated above as well as the correlations observed empirically, we specified a model where the six items assessing SPC, CPC,

and SSC all loaded on a single goal engagement factor. In addition, we specified separate factors for self-protection, disengagement, and reengagement. The model is presented in Figure 1. This model provided an adequate fit across all domains of functioning: for the work domain,  $\chi^2(48, N = 1,412) = 480.428$ ,  $RMSEA$  (90% CI) = 0.080 (0.073-0.086),  $CFI = 0.93$ ,  $SRMR = 0.054$ ; for the family domain,  $\chi^2(48, N = 2,024) = 450.016$ ,  $RMSEA$  (90% CI) = 0.064 (0.059-0.070),  $CFI = 0.92$ ,  $SRMR = 0.045$ ; for the health domain,  $\chi^2(48, N = 516) = 212.754$ ,  $RMSEA$  (90% CI) = 0.082 (0.071-0.093),  $CFI = 0.91$ ,  $SRMR = 0.053$ . Factor loadings are reported in Table 6. For the goal engagement factor, it can be seen that most factor loadings were  $\geq .50$ , except from two items in the model for the family domain, item 5 ( $\lambda = .38$ ) and item 10 ( $\lambda = .43$ ). Regarding self-protection, factor loadings for item 2 were below .40 for the family and health domain and .42 for the work domain. Factor loadings for goal disengagement ranged from .66 to .85; factor loadings for goal reengagement ranged from .73 to .85 (Table 6).

Correlations between the four factors are reported in Table 7. Across all domains of functioning, correlations were lowest between goal engagement and goal disengagement (work:  $r = .26$ , family:  $r = .04$ , health:  $r = .31$ ). Correlations between goal disengagement and self-protection ranged from .21 in the family domain to .87 in the health domain. Goal reengagement was correlated with goal disengagement ( $rs \geq .53$ ) and self-protection ( $rs \geq .57$ ), but also showed substantial associations with the goal engagement factor ( $rs \geq .53$ ). High correlations were obtained between self-protection and goal engagement ( $rs \geq .84$  for the work and family domain and  $r = .69$  for the health domain; Table 7).

We also specified a model with one goal engagement factor and one goal dis-/reengagement factor (with items 2, 8, 3, 9, 6 and 11 loading on the latter factor). This



model had a poor fit: for the work domain,  $\chi^2(53, N=1412)=1161.827$ , *RMSEA* (90% CI)=0.122 (0.116-0.128), *CFI*=0.83, *SRMR*=0.092; for the family domain,  $\chi^2(53, N=2024)=1060.834$ , *RMSEA* (90% CI)=0.097 (0.092-0.102), *CFI*=0.80, *SRMR*=0.080; and for the health domain,  $\chi^2(53, N=516)=276.318$ , *RMSEA* (90% CI)=0.090 (0.080-0.101), *CFI*=0.87, *SRMR*=0.064. Taken together, results suggest that items reflecting goal engagement strategies all load on a single factor, whereas three separate factors need to be specified for disengagement, self-protection, and reengagement.

## Discussion

The present paper examined control strivings in the Innovation Sample of the German Socio-Economic Panel (SOEP-IS). First, research on the Motivational Theory of Development was summarized and the relevance of control strivings was explicated, with a special emphasis on potential research questions that can be addressed by integrating domain-specific control strivings in the SOEP-IS. Second, we examined the reliability and factor structure of the scales used to assess control strivings in the work, family, and health domains in the SOEP-IS. In the following, we will discuss the results of these analyses. Finally, we will sketch possible projects that make use of the rich SOEP data to investigate pivotal questions regarding domain-specific control strivings.

## **Reliability and Factor Structure of Domain-Specific Control Strivings Scales**

The items used to assess control strivings in the SOEP were chosen to represent different facets of the broader construct space. The breadth of the underlying constructs limits the associations that can be expected at the item level. This was reflected in the inter-item correlations obtained in the present study, which were of rather medium size for most types of control strivings. For example, MTD notes various different strategies of compensatory primary control such as seeking out help and using unusual means or ways to reach a goal. Although both of these strategies can fulfill similar roles (compensating limitations of available behavioral resources), they still reflect different ways of handling such limitations. As expected, there was evidence for selective primary control, selective secondary control, and compensatory primary control strategies operating together in a goal-engagement mode (Heckhausen, Wrosch, & Schulz, 2010). Across domains of functioning, SPC, SSC, and CPC were mostly highly correlated, and the corresponding items all loaded on a goal engagement factor. To reach a goal, individuals invest own effort and time, enhance motivational commitment to the chosen goal, and seek external help or use unusual means.

In line with previous findings (e.g., Hall et al., 2010; Wrosch & Sabiston, 2013), the present study shows that self-protection, disengagement, and reengagement should be considered separately. Although these strategies all refer to dealing with unattainable goals, they reflect different ways of accomplishing this and fulfill different primary functions. For example, self-protective strategies aim at protecting one's motivational resources, including cognitive strategies such as positive reappraisal. Interestingly, our results suggest that self-protection is not only related to disengagement but also to goal engagement. The engagement in long-term goals

includes hard times when opportunities for reaching the goal are temporarily blocked; strategies of self-protection might help to overcome these challenges and help to maintain goal engagement (see also Tomasik et al., 2013). Our results also suggest that it would be preferable to further distinguish between different kinds of self-protection strategies, i.e., avoiding self-blame vs. focusing on positive things (as reflected in the low inter-item correlations).

### **Future Research on Domain-Specific Control Strivings in the SOEP**

Making use of the rich SOEP data on individual working conditions and employment transitions, social relationships and marital transitions, and (changes in) health and well-being as well as regional-level information offers the potential to further study correlates and consequences of control strivings related to work, family, and health in the context of individual (and regional) differences in control opportunities. With repeated assessment, it will be possible to investigate changes in control strivings as well as their adaptive value in relation to major developmental transitions and life events. For example, using (the work-related) control strivings scales, it could be examined whether individuals getting unemployed and having good prospects of getting re-employed (due to living in a region with low unemployment rates and/or being highly skilled) benefit from high/increasing levels of work-related goal engagement, particularly investing own effort and time (selective primary control). In contrast, for individuals getting unemployed and having low prospects of getting re-employed, strategies of disengagement and self-protection might help to reduce negative effects on well-being.

Employing the health-related control strivings scales, the benefits and risks of control strivings for dealing with different health states and transitions could be further investigated. A range of diseases and health problems is assessed in the SOEP, including diseases with lower control potential (e.g., osteoarthritis) as well as diseases and health problems with higher control potential (e.g., hypertension). Based on MTD, it could be expected that strategies of health-related goal engagement are more beneficial for physical and mental well-being when dealing with diseases and health problems with higher control potential (see also Hall et al., 2010), whereas strategies of disengagement, self-protection, and reengagement are more beneficial in conditions offering lower control potential (e.g., late in life: Gerstorf, Heckhausen, et al., 2014).

In the family domain, individuals are also confronted with situations and events largely differing in control potential. For example, widowhood is characterized by offering low control potential; hence, it can be assumed that high/increasing levels of self-protection are beneficial for adaptation to this major life event. In contrast, relatively minor events such as interpersonal tensions offer higher control potential (within the limits of controllability characterizing interpersonal processes); strategies of goal engagement such as investing (more) time and effort to find a solution might thus be beneficial in these situations. Examining family/partnership-related control strivings might hence further our understanding of individual differences in adaptation to events and transitions in the family domain that have been observed in prior studies (including the SOEP; e.g., Lucas et al., 2003).

To summarize, the short scales used in the SOEP-IS adequately assess different types of control strivings in the domains of work, family, and health, reflecting central domains of adult development and being covered in the SOEP. Our

findings suggest that different strategies of self-protection need to be distinguished, i.e., avoiding self-blame vs. focusing on positive things. Hence, we recommend using these two items separately. Future research should examine associations of the domain-specific control strivings with indicators of successful development such as cognitive and affective dimensions of subjective well-being (external validity) to complement our analyses.

Overall, the control strivings scales offer the potential to stimulate research on pursuing goals and dealing with unattainable goals across the adult life-course and in the context of individual (and regional) differences in control opportunities. With repeated assessments, it will be possible to investigate changes in control strivings as well as their adaptive value in relation to major developmental transitions and life events. Using the approach chosen here, i.e., examining different types of control strivings in three important domains of functioning in a nationally representative sample, allows for extending existing research (Hall, 2008; Poulin & Heckhausen, 2007) and further our understanding of the regulation of life-span development.

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Table 1. *Items Used to Assess Control Strivings in the SOEP*

<b>Item #</b>	<b>Goal engagement</b>
	Selective primary control
1	Wenn sich mir Hindernisse in den Weg stellen, gebe ich nicht auf, bis ich sie überwunden habe. <i>When I encounter problems, I don't give up until I solve them.</i>
7	Wenn ich mit einer schwierigen Situation konfrontiert bin, tue ich alles, was ich kann, um die Situation zu verbessern. <i>When faced with a bad situation, I do what I can to change it for the better.</i>
	Compensatory primary control
5	Wenn ich ein Problem allein nicht bewältigen kann, bitte ich andere, mir zu helfen. <i>When I cannot solve a problem by myself, I ask others for help.</i>
12	Wenn ich beim Verfolgen eines Ziels nicht weiterkomme, suche ich nach neuen Wegen, um es doch noch zu erreichen. <i>If I can't attain a goal one way, I look for alternative ways to still get to it.</i>
	Selective secondary control
4	Wenn ich mich für ein Ziel entschieden habe, halte ich mir die Vorteile dieses Zieles stets vor Augen. <i>When I have decided on a goal, I always keep in mind its benefits.</i>
10	Wenn ich mich einmal für etwas entschieden habe, vermeide ich, mich mit Dingen zu beschäftigen, die mich ablenken könnten. <i>When I have decided on something, I avoid anything that could distract me.</i>
	<b>Self-protection (compensatory secondary control)</b>
2	Wenn ich ein Ziel nicht erreiche, versuche ich mir nicht selbst die Schuld zu geben. <i>When I find it impossible to attain a goal, I try not to blame myself.</i>
8	Selbst wenn alles schief läuft, kann ich oft noch etwas Positives in der Situation sehen. <i>Even when everything seems to be going wrong, I can usually find a bright side to the situation.</i>
	<b>Goal disengagement (compensatory secondary control)</b>
3	Wenn es mir unmöglich erscheint, ein Ziel zu erreichen, verringere ich meine Anstrengungen und schlage es mir aus dem Kopf. <i>When I find it impossible to attain a goal, I reduce effort towards that goal and put it out of my mind.</i>
9	Wenn ein Ziel für mich unerreichbar wird, höre ich auf, daran zu denken und es zu verfolgen. <i>I stop thinking about a goal that has become unattainable and let it go.</i>

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**Goal reengagement (compensatory secondary control)**

- 6 Wenn ich ein Ziel nicht erreichen kann, verfolge ich andere Ziele, die mir wichtig sind.

*If I cannot attain a goal, I put effort into other meaningful goals.*

- 11 Wenn ich ein Ziel nicht erreichen kann, denke ich über andere, neue Ziele nach, die ich verfolgen kann.

*If I cannot attain a goal, I think about other new goals to pursue.*

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*Note.* Item number refers to position within the questionnaire.

Table 2. *Inter-Item Correlations for Control Strivings in Three Domains of Functioning*

	Work	Family	Health
Selective primary control	.65	.48	.50
Compensatory primary control	.43	.21	.40
Selective secondary control	.45	.33	.30
Compensatory secondary control: self-protection	.26	.15	.17
Compensatory secondary control: goal disengagement	.61	.45	.43
Compensatory secondary control: goal reengagement	.66	.55	.67

*Note.* The pairwise deletion option resulted in different sample sizes for single cells (work:  $n_{\min}=1,381$ ,  $n_{\max}=1,401$ ; family:  $n_{\min}=1,985$ ,  $n_{\max}=2,010$ ; health:  $n_{\min}=481$ ,  $n_{\max}=503$ ). All correlations are significant ( $p < .05$ ).

Table 3. *Correlations of Control Strivings in the Work Domain*

	SPC	SSC	CPC	CSC-SP	CSC-DE
Selective primary control (SPC)					
Selective secondary control (SSC)	.61				
Compensatory primary control (CPC)	.67	.56			
Compensatory secondary control: self-protection (CSC-SP)	.45	.43	.44		
Compensatory secondary control: disengagement (CSC-DE)	.10	.31	.21	.26	
Compensatory secondary control: re-engagement (CSC-RE)	.39	.47	.50	.34	.49

*Note.* The pairwise deletion option resulted in different sample sizes for single cells ( $n_{\min}=1,372$ ,  $n_{\max}=1,388$ ). All correlations are significant ( $p < .05$ ).

Table 4. *Correlations of Control Strivings in the Family Domain*

	SPC	SSC	CPC	CSC-SP	CSC-DE
Selective primary control (SPC)					
Selective secondary control (SSC)	.50				
Compensatory primary control (CPC)	.49	.39			
Compensatory secondary control: self-protection (CSC-SP)	.36	.28	.30		
Compensatory secondary control: disengagement (CSC-DE)	<i>-.03</i>	.15	<i>.04</i>	.12	
Compensatory secondary control: re-engagement (CSC-RE)	.28	.33	.37	.26	.35

*Note.* The pairwise deletion option resulted in different sample sizes for single cells ( $n_{\min}=1,966$ ,  $n_{\max}=1,991$ ). Correlations in italics are not significant. All other correlations are significant ( $p < .05$ ).

Table 5. *Correlations of Control Strivings for the Health Domain*

	SPC	SSC	CPC	CSC-SP	CSC-DE
Selective primary control (SPC)					
Selective secondary control (SSC)	.63				
Compensatory primary control (CPC)	.56	.53			
Compensatory secondary control: self-protection (CSC-SP)	.34	.30	.22		
Compensatory secondary control: disengagement (CSC-DE)	.19	.29	.09	.38	
Compensatory secondary control: re-engagement (CSC-RE)	.38	.41	.40	.38	.50

*Note.* The pairwise deletion option resulted in different sample sizes for single cells ( $n_{\min}=474$ ,  $n_{\max}=491$ ). All correlations are significant ( $p < .05$ ).



Table 6. *Factor Loadings for Three Domains of Functioning*

	Work	Family	Health
Goal Engagement			
Item 1 (SPC)	0.75	0.64	0.69
Item 7 (SPC)	0.82	0.72	0.73
Item 5 (CPC)	0.58	0.38	0.52
Item 12 (CPC)	0.76	0.64	0.70
Item 4 (SSC)	0.72	0.63	0.68
Item 10 (SSC)	0.54	0.43	0.52
Self-protection			
Item 2	0.42	0.27	0.36
Item 8	0.63	0.55	0.50
Goal Disengagement			
Item 3	0.73	0.66	0.66
Item 9	0.85	0.69	0.66
Goal Reengagement			
Item 6	0.79	0.76	0.85
Item 11	0.84	0.73	0.79

*Note.*  $n_{work} = 1,412$ ,  $n_{family} = 2,024$ ,  $n_{health} = 516$ .

Table 7. *Factor Correlations for Three Domains of Functioning*

	Goal disengagement	Self-protection	Goal reengagement
Goal engagement	.26/.04/.31	.86/.84/.69	.61/.53/.56
Goal disengagement		.42/.21/.87	.64/.53/.73
Self-protection			.59/.57/.77

*Note.* The first value in each cell refers to the work domain, the second value to the family domain, and the third value to the health domain.  $n_{work} = 1,412$ ,  $n_{family} = 2,024$ ,  $n_{health} = 516$ .

Figure 1. *Factor Structure*

