

Organizational Welfare

The importance of self-control to human capital management

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Employees are the beating heart of the organization. Apart from the business plan of the organization and the marketplace, employees can make things move. Having good people in your team, your department, your organization is important since the variability of job performance among workers can be very large (Schmidt, Hunter, & Judiesch, 1990).

Hogan (2007) underscores the importance of human capital to the welfare of organizations. He stresses the importance of the selection process and holds managers accountable for recruiting and hiring people that fit the job and the organization. Nowadays, a great variety of selection parameters are available to managers. But to what degree do they predict future job performance and other organizational outcomes?

A parameter that is well-known in other research areas but as far as we know has not been extensively researched in the organizational context and the context of selection, is self-control. Self-control is about the self's capacity to alter or override dominant response tendencies and to regulate behavior, thoughts, and emotions (Bandura, 1989; Carver & Scheier, 1981, 1982; Metcalfe & Mischel, 1999; Rothbaum, Weisz, & Snyder, 1982; Vohs & Baumeister, 2004). People with high self-control are better able to control their thoughts, regulate their emotions and inhibit their impulses than people with low self-control (Baumeister, Bratslavsky, Muraven, & Tice, 1998). Therefore, this trait facilitates the promotion of desirable behavior and inhibits undesirable behavior (De Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2010).

Results from other research areas suggest that self-control might be promising for the organizational context. For example, the study of Duckworth and Seligman (2005) showed a positive association between high self-control and grade point average which might point at a positive association between self-control and performance in general. Concerning undesirable

behavior, low self-control was associated with risky and deviant behavior, like committing fraud (Vazsonyi, Pickering, Junger, & Helsing, 2001).

The present study investigates whether self-control facilitates desirable organizational outcomes and positive behavior and at the same time inhibits negative organizational outcomes and counterproductive behavior. Our aim is to highlight the importance of self-control in the organizational context and thus to the selection of new personnel. By comparing self-control to often used selection parameters in predicting important organizational outcomes and behavior we want to contribute to the understanding and knowledge of managers and recruiters in how to select 'good' employees and build healthy organizations. And we want to show that the importance of self-control is not limited to a certain type of job, but is rather a general condition that has to be met.

In the first part of the study we investigate the relevance of self-control to important organizational outcomes and behavior compared to well-known parameters used in personnel selection. As important positive organizational outcomes and behavior we considered performance and accommodation. As undesirable organizational outcomes and behavior we considered absenteeism, a major cost for organizations and counterproductive work behavior, like theft and sabotage. Next to self-control, as predictors of organizational outcomes and behavior, we differentiated between three types of often used selection parameters: 1) personality factors, 2) work-related factors, like level of education and years of professional experience, and additionally 3) general factors that are important to relationships, like trustworthiness and cooperativeness (Cotrell, Neuberg, & Li, 2007). The first part of the study answers the question: Is self-control a relevant predictor of important organizational outcomes and behavior compared to personality, work-related and other parameters commonly used in selection?

In the second part of the study we examined whether the importance of self-control

varies across professions when people have to hire an employee. To maximize the difference between the professions we chose a very task-oriented profession; a bookkeeper, a task/people oriented profession; a salesman and a very people oriented profession; a psychologist. Next to self-control participants were asked to rate personality, work-related and more general factors as not relevant or very relevant when hiring a bookkeeper, a salesman or a psychologist. We expect to find that for all three conditions self-control is rated as equally important and more important than other personality, work-related and general factors.

In the following we will reason why self-control might be related to important organizational outcomes and behavior considering results from other research areas. We distinguish between positive organizational outcomes (performance) and behavior (accommodation) and negative organizational outcomes (absenteeism) and behavior (counterproductive work behavior). Finally, we end the introduction with a research overview where we summarize our hypothesis.

The relevance of self-control to positive organizational outcomes and behavior

An important organizational outcome is performance. According to Schmidt and Hunter (1998) the difference in performance in dollars, between a below average worker (16th percentile) and a superior worker (84th percentile) is \$32.000 a year (when the average salary for a job is \$40.000 a year and performance has a normal distribution). So it is very important to know the parameters that predict future performance to some degree.

Self-control predicted performance in different settings. Remarkable results were found for the influence of self-control in the educational setting. Duckworth and Seligman (2005) found that high self-control predicted higher grade point average, higher scores on tests of academic achievement and better admission to selective high schools, as compared to low self-control. A higher grade point average was also found by Tangney, Baumeister and Boone (2004). Their results showed the association of high self-control with higher grades,

interpersonal success, adjustment, better relationships and personal skills. In both studies students with high self-control had an advantage over students with low self-control.

People with high self-control are better in controlling their impulses (Baumeister et al., 1998) and are able to focus on long-term goals instead of seeking instant gratification of their needs. Being able to focus on the long-term, stick to a plan and not getting distracted might be the key to better performance. Research of Mischel, Shoda and Peak (1988) showed that children who were able to wait and not chose for instant gratification at the age of 4 or 5 years old, showed more academic success, better ability to plan, ability to deal with frustration and stress and social competence ten years later, compared to the children that were not able to wait at the age of 4 or 5 years old. This suggests that being able to control your impulses is one of the reasons for academic success and maybe better performance in general. You can imagine that when you are better in controlling your impulses, you will be able to persist in a task and stick to a planning even when a tempting distraction is at hand. In that sense the educational setting is no different from the organizational context. So being a high performer in the organizational context could mean being focused on your long-term goals by controlling your impulses.

Another factor that influences performance and seems to be related to self-control is procrastination. Among students, Tice and Baumeister (1997) found that procrastination may indicate low self-control and a lack of regular study habits, which for example results in all-nighters. The procrastination thereby tends to produce significantly poorer performance overall, among students who procrastinate as compared to students who consistently keep on schedule and ahead of deadlines. Procrastination and keeping on schedule is not bound to the educational setting. We expect that also in a work environment low-self control might imply a lower ability to plan and manage time and therefore results in procrastination and poorer performance. High self-control might be positively associated with the ability to plan and

manage time. Following, we hypothesize that comparable to the study or school environment, self-control is positively related to performance in the workplace.

The positive organizational behavior focused on in this study is accommodation. As formulated by Finkel and Campbell (2001) accommodation is the willingness in a relation, to respond to potentially destructive behavior in a constructive way, by inhibiting impulses toward destructive responding. This is the key to building qualitative long-term relations. Interpersonal relations are important in the workplace. Being able to respond in a proper and constructive way to remarks of colleague's and maybe costumers is a skill that is required to build qualitative relations and indirectly influences organizational outcomes like customer satisfaction. In the same way, accommodation seems important in avoiding or handling conflict. Finkel and Campbell (2001) found that self-control is necessary to be able to inhibit the impulses toward destructive responding. That high self-control enables people to inhibit negative emotional responses was also found by Kieras, Tobin, Graziano and Rothbart (2005). Therefore, people with high self-control are able to make greater accommodation (Finkel & Campbell, 2001). Finkel and Campbell (2001) investigated romantic relationships, but we expect accommodation to work in the same way in the workplace. Therefore, we hypothesize that self-control is positively related to accommodation in the workplace.

The relevance of self-control to negative organizational outcomes and behavior

The following will consider the possible influence of self-control on negative organizational outcomes; absenteeism and negative organizational behavior. What might be the result of the work-attitude of students with low self-control, for example procrastination that results in all-nighters, is that these students report more sick days when study pressure increases and report more sick days in general (Tice & Baumeister, 1997). Sick days or absenteeism represent a great cost for organizations. Absenteeism of employees can be explained by two main reasons. Employees may be absent because they want to withdraw

from aversive work circumstances, which is called *voluntary sickness* (Bakker, Demerouti, De Boer, & Schaufeli, 2003; Johns, 1997). The other main reason for employees to be absent, is that absence is a reaction to distress caused by job demands. The absenteeism may be used as a coping mechanism to deal with stress, called *involuntary sickness* (Kristensen, 1991). The strength of self-control is being able to override dominant response tendencies (Vohs & Baumeister, 2004). Since voluntary sickness is rooted in a motivational process, it might be that self-control enables individuals to go to work even when they don't feel like going and even change their feelings about going. Considering involuntary sickness, the results of Tice and Baumeister (1997) mentioned before, show that students with low trait self-control reported more sick days when study pressure increased and more sick days in general. One can conclude that students with low self-control are more absent. We expect the same behavior for the workplace. Consequently, we hypothesize that trait self-control has a negative relation with voluntary and involuntary sickness in the workplace, in that people with high self-control report less and shorter periods of work-related sickness.

The negative behavior focused on in this study is counterproductive work behavior (CWB). Counterproductive Work Behavior consists of acts that harm or are intended to harm organizations. They include acts directed toward both organizations and individuals, including aggression (physical and verbal), sabotage, theft and withdrawal (Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006). Counterproductive work behavior is a great and often hidden cost for organizations. The link between self-control and deviant behavior was made earlier by Prat and Cullen (2000). They found a negative relation between self-control and criminal, violent, and antisocial behavior. Other research showed that adults low in self-control engage more often in deviant behavior, including risky driving, not wearing seatbelts, and using force or committing fraud (Vazsonyi et al., 2001). In the workplace Gibson and Wright (2001) associated low self-control with employees' delinquent acts. Guerrero

(unpublished) showed a similar relation for mental health workers where low self-control bred counterproductive work behavior. Marcus and Schuler (2004) argued that low self-control is the inability to consider long-term consequences, thus it should predict people's ability to manage their need for immediate gratification. If counterproductive work behavior is conduct that leads to long-term consequences, then self-control should be able to predict these behaviors that inhibit work productivity. The self-control theory proved the most powerful predictor of counterproductive work behavior in the study of Marcus and Schuler (2004). Consequently, we expect to find a negative relation between self-control and Counterproductive Work Behavior.

Research Overview

The present study investigated whether self-control facilitates desirable organizational outcomes and positive behavior and inhibits negative organizational outcomes and counterproductive behavior. Our aim is to highlight the importance of self-control in the organizational context and thus the relevance of self-control in the selection of new personnel.

In the first part of the study we investigated the relation of self-control with important organizational outcomes and behavior. We hypothesize that there is a positive relation of self-control with positive organizational outcomes; performance and with positive behavior; accommodation. In addition, we hypothesize that there is a negative relation of self-control with negative organizational outcomes; absenteeism and with negative behavior; counterproductive work behavior (e.g., sabotage and theft). Comparing the predictive value of self-control with often used selection parameters we expect to find that self-control is a better predictor of organizational outcomes and behavior than 1) personality factors, 2) work-related factors, 3) general factors that are important to relationships. Summarizing, the dependent variables in study one are: performance, accommodation, absenteeism and counterproductive work behavior. The independent variables are: self-control, personality factors: extraversion,

agreeableness, conscientiousness, neuroticism, openness to experience and honesty humility.

The work-related factors are: level of education, years of professional experience and professional know-how. As general factors we included physical appeal, trustworthiness, cooperation, intelligence, assertiveness and age.

In the second part of the study we investigated the importance of self-control compared to other factors, when people have to select a new employee. Next to self-control participants rated 1) personality factors, 2) work-related factors and 3) general factors as not important at all to very important. A comparison was made for a task-oriented job; a bookkeeper, a task/ people oriented job; a salesman and a people-oriented job; a psychologist. If self-control is an important factor in selection, then it should be important in all three profiles, while other factors will vary across conditions. Consequently, we hypothesize that self-control will be equally important across professions and more important than other personality-, work-related- or more general factors in selection of a new employee. In the second part of the study the independent variable is the type of profession: bookkeeper, salesman or psychologist. The dependent variables are self control, personality factors, work-related factors and general factors.

Method

Participants

Participants were 93 individuals, 40 men and 53 women. Participants had to satisfy two conditions to be included in the survey. First, a participant had to belong to the working part of the society. This did not include summer jobs or student jobs. We checked this by asking for years of professional experience since acquiring their highest education. Second, to be able to answer the questions concerning counterproductive work behavior in a proper way participants needed to work with at least two, physically present, colleagues. For example, we excluded entrepreneurs without personnel. No restrictions to age, level of education or other parameters were set.

There were three different versions of the survey: the bookkeeper, the salesman and the psychologist. Of all participants, 30 participants took the bookkeeper survey, 32 the salesman survey and 31 participants took the psychologist survey. Participants were 34.33 years old on average ($SD = 10.36$) and had 10.77 years of working experience on average ($SD = 10.42$). The mean level of education was higher vocational education, 'HBO' in the Dutch schoolsystem ($M = 6.34$, $SD = 0.89$).

Participants were recruited via social networks: personal networks, facebook, hyves and social media like twitter. Via a link participants had access to the survey. Of all the people that entered the survey, 86.3% percent completed the survey. Only the people that had fully completed the survey were included in the study.

Measures

Our study comprised two parts. In part one of the study, the influence of self-control and the other independent variables on the outcome variables was measured. In the second part of the study, the independent variables of study one were rated by level of importance for selection of, respectively, a bookkeeper, a salesman or a psychologist. The context of

selection asked for a slightly different operationalization of the different constructs of the independent variables. For example, to keep the study manageable for the participants we assessed the BIG 5 factors using the shorter BIG5 adjectives of Cotrell et al. (2007). In the following, we will describe the variables used in the first part, that is measures of the outcome variables performance, accommodation, absenteeism and counterproductive work behavior. Subsequently, we will describe the variables that were used in the first and the second part of the study.

Performance: To measure performance we used an adjusted version of the self-report scale of Singh, Verbeke and Roads (1996). The adapted scale consisted of 5 of the 6 items that directly assessed different aspects of performance: quantity of work, quality of work, the ability to reach goals, performance potential and professional know-how (e.g., “How do you rate yourselves in terms of the quantity of work you achieve?”; $\alpha = .61$). Participants responded on a 5-point scale (e.g., bad-good, 1 = *bad*, 2 = *below average*, 3 = *average*, 4 = *above average*, 5 = *good*). When we mention the construct performance in the results this means all items mentioned above. The ability to plan and manage time was removed from the scale, because it lowered internal consistency of the construct. Given the importance of the different items (all measuring different aspects of performance) to our research question, we (also) reported association and the predictive value of two items that showed a relation on the outcome parameters by itself. These items are: the item that measured the ability to plan and manage time (e.g., “How do you rate yourself in terms of your ability to plan and manage time?”) and the item that measured quality of performance (e.g., “How do you rate yourself in terms of quality of your performance?”). The latter was taken into the analyses as part of the construct performance and by itself. Before use the scale was translated in Dutch.

Accommodation: The scale used to measure accommodation was adapted from Rusbult, Martz and Agnew (1998) and consisted of 5 items (e.g., “When one of my colleagues behaves

in a bothersome way, then I discuss this with him/ her in a calm way”; $\alpha = .61$). Participants responded on a 5-point scale (e.g., not true at all – very true, 1 = *not true at all*, 2 = *not true*, 3 = *sometimes true*, 4 = *true*, 5 = *very true*).

Absenteeism: Absenteeism was measured by an adjusted version of the self-report scale developed by the World Health Organization to evaluate the indirect workplace costs of illness (Kessler, Ames, Hymel, Loeppke, & McKenas, 2004). The adapted scale consisted of 3 items. The scale had to be translated to Dutch before use. Two items measured involuntary sickness (e.g., “In the past three months, how many days did you miss an entire workday because of physical or mental illness?”; $\alpha = .64$). One item measured voluntary sickness (“In the past three months, how many days did you miss an entire workday because of other reasons?”). The item “In the past three months, how many days did you miss a part of you workday because of other reasons” was removed from the analysis, because it negatively influenced internal consistency. Participants had to mention the number of missed days.

Counterproductive Work Behavior (CWB): CWB was measured using a 33-item scale (Spector et al., 2006). It contained 5 subscales: abuse (harmful and nasty behaviors that affect other people), production deviance (purposely doing the job incorrectly or allowing errors to occur), sabotage (destroying the physical environment), theft, and withdrawal (avoiding work through being absent or late). The reliability of the total scale was $\alpha = .94$. Responses were made on a 5-point frequency scale (e.g., never- every day; 1 = *never*, 2 = *once or twice*, 3 = *once or twice per month*, 4 = *once or twice per week*, 5 = *every day*).

The following variables were used in part one and part two of the study, but in a different way. First, we describe how the relevant variable was operationalized in part one of the study and thereafter the operationalization of the variable in part two of the study. All the items in part two of the study were measured on the same 5-point scale (e.g., not important at

all- very important; 1 = *not important at all*, 2 = *not important*, 3 = *sometimes not important*, *sometimes important*, 4 = *important*, 5 = *very important*).

Self-control: Self-control was measured by 9 of the 11 items developed by Finkenauer, Engels and Baumeister (2005) (e.g., “I am lazy”, reversed item; $\alpha = .72$). Responses were made on a 5-point scale (e.g., not true at all – very true, 1 = *not true at all*, 2 = *not true*, 3 = *sometimes true*, 4 = *true*, 5 = *very true*). The items “I can resist temptations well” and “I do not easily get discouraged” were removed from the analyses, because they influenced the internal consistency negatively. In the second part of the study self-control was measured by 9 similar items (e.g., “Not lazy”; $\alpha = .64$).

Level of education: Level of education was measured by the question: “What is the level of your highest completed education?”. Participants could choose one of the 7 categories ranging from 1 = *primary school* to 7 = *university*. If the category of choice was not provided, participants filled in the field “otherwise”. In the second part of the study level of education was measured the single item “level of education”.

Professional know-how: Participants were asked for their view on their professional know-how by answering the question “How do rate yourself in terms of knowledge of the professional field you are working in now?” Responses were made on a 5-point Likert-scale (e.g., very low- very high, 1 = *very low*, 2 = *low*, 3 = *average*, 4 = *high*, 5 = *very high*). In the second part of the study professional know-how was measured by the single item “professional know-how”.

Professional Experience: Professional experience was measured by a question asking for total years of professional experience. In the second part of the study professional experience was measured by the single item “professional experience”.

Personality, BIG 5: To assess personality traits, the 30-item version of the Dutch adaptation (Gerris et al., 1998; see also Branje, Van Lieshout, & Van Aken, 2004) of the BIG

5 from Goldberg (1992) was used. This BIG 5 scale comprised five dimensions: extraversion (e.g., talkative; $\alpha = .85$), agreeableness (e.g., helpful; $\alpha = .83$), conscientiousness (e.g., neat; $\alpha = .91$), neuroticism (e.g., irritable; $\alpha = .80$), and openness to experience (e.g., creative $\alpha = .76$); each subscale is represented by six traits. Participants were asked to report to what extent the mentioned characteristic described him or her. Participants answered on a 5-point-scale (e.g., not true at all – very true, 1 = *not true at all*, 2 = *not true*, 3 = *sometimes true*, 4 = *true*, 5 = *very true*). In the second part of the study the BIG5 factors were assessed using the adjectives of Cotrell et al. (2007). Agreeableness was described by the adjectives: kind, warm and sympathetic. The alpha was $\alpha = .73$. Extraversion was described by the adjectives: outgoing, talkative and sociable. The alpha was $\alpha = .50$. Conscientiousness was described by the adjectives: organized, orderly and neat. The alpha was $\alpha = .79$. Emotional stability was described by even-tempered, calm and relaxed. We used the opposite of neuroticism because of the context of selection. After removing “even-tempered” the alpha was $\alpha = .55$. Openness to experience was described by the adjectives: creative, innovative and imaginative. The alpha was $\alpha = .75$.

Honesty-Humility: Honesty-Humility was measured using a 13 of the original 16-item scale (Ashton, Lee, De Vries, Perugini, Gnisci, & Sergi, 2006). Responses were made on a 5-point scale (e.g., not true at all – very true, 1 = *not true at all*, 2 = *not true*, 3 = *sometimes true*, 4 = *true*, 5 = *very true*). Participants responded to a proposition like “Having a lot of money is not important to me”. Three items were removed from the analyses: “If I want something from someone that I do not like, than I will act very friendly to get what I want”, “I would never participate in a bribe, not even when it is about a lot of money” and “I would not pretend to like someone to get things done”. These three items influenced internal consistency negatively. The alpha of the scale was $\alpha = .85$. In the second part of the survey honesty-humility was measured by the items used by Cotrell et al. (2007) (e.g., genuine, non-

pretentious and generous). After removing non-pretentious from the analyses the alpha was $\alpha = .68$.

Physical appeal: Physical appeal was measured by 3-items: attractive, beautiful and handsome of Cotrell et al. (2007). The participants responded to a proposition like “I find myself attractive”. The alpha of the scale was $\alpha = .85$. Responses were made on a 5-point scale (e.g., not true at all- very true, 1 = *not true at all*, 2 = *not true*, 3 = *sometimes true*, 4 = *true*, 5 = *very true*). In part two of the study physical appeal was measured by the same items. The alpha was $\alpha = .90$.

Trustworthiness: Trustworthiness was measured by 3-items: honest, loyal and dependable of Cotrell et al. (2007). The participants responded to a proposition like “I find myself loyal”. After removing “honest” from the scale, the alpha was $\alpha = .63$. Responses were made on a 5-point scale (e.g., not true at all- very true, 1 = *not true at all*, 2 = *not true*, 3 = *sometimes true*, 4 = *true*, 5 = *very true*). In part two of the study trustworthiness was measured by the same items, but now “loyal” was removed instead of “honest”. After removing “loyal” from the analyses the alpha was $\alpha = .71$.

Cooperation: Cooperation was measured by 3-items: sharing, reciprocity-minded, collaborative of Cotrell et al. (2007). The alpha was $\alpha = .56$. Responses were made on a 5-point scale (e.g., not true at all- very true, 1 = *not true at all*, 2 = *not true*, 3 = *sometimes true*, 4 = *true*, 5 = *very true*). In the second part of the study cooperation was measured by the same items. After removing “sharing” the alpha was $\alpha = .56$.

Intelligence: Intelligence was measured by 3-items: smart, knowledgeable and bright of Cotrell et al. (2007). The alpha was $\alpha = .77$. Responses were made on a 5-point scale (e.g., not true at all- very true, 1 = *not true at all*, 2 = *not true*, 3 = *sometimes true*, 4 = *true*, 5 = *very true*). In the second part of the study intelligence was measured by the same items. The alpha was $\alpha = .69$.

Assertiveness: Assertiveness was measured by 3-items: bold, ambitious and dominant of Cotrell et al. (2007). After removing “bold” the alpha was $\alpha = .43$. The responses were made on a 5-point scale (e.g., not true at all- very true, 1 = *not true at all*, 2 = *not true*, 3 = *sometimes true*, 4 = *true*, 5 = *very true*). In the second part of the study assertiveness was measured by the same items, but now “dominant” was removed instead of “bold”. After removing “dominant” the alpha was $\alpha = .61$.

Analysis

We will present the results in several sections. In the first section, we will present preliminary analyses. We report means and standard deviations for the general population and for men and women separately. Second, we will report the tests of our first hypotheses; that self-control is related to organizational outcomes and behavior. To test these hypotheses, we performed correlations. Third, to test the predictive value of self-control on organizational outcome variables as compared to the other independent variables (e.g., personality), a multiple regression on each outcome parameter was performed. Fourth, to examine which independent variables people consider as most important for the selection of a bookkeeper, a salesman, and a psychologist, respectively, we considered the means and standard deviations for each type of profession and compared the mean differences using a mixed analysis of variance. In these analyses, condition (bookkeeper versus salesman versus psychologist) was used as a between-subjects factor and 1) personality factors, 2) work-related factors and 3) general factors as a within-subjects factor (factor versus self-control). Finally, we conducted a number of exploratory analyses. In these analyses, we dived deeper into the results to discover possible remarkable findings other than predicted by the hypothesis.

Results

Part one

The relevance of self-control to organizational outcomes and behavior

The first question answered in the present study is whether self-control is a relevant trait in the workplace when it comes to important organizational outcomes and behavior. The second question was whether self-control is a better predictor than parameters used often in the selection of employees. To answer these questions, in the first part of this study, we tested the associations and predictive value of self-control for positive and negative organizational outcomes and behavior. We compared the predictive value of self-control to other parameters often used in selection of employees (e.g., personality, work-related factor and more general factors that are important in relationships).

Descriptive data, part one

We describe the characteristics of the study population in this section. Table 1a and Table 1b depict the overall means and standard deviations for all participants and for men and women separately. Mean differences were tested using an independent sample t-test.

Scores on the dependent variables are depicted by Table 1a. On the one hand men scored higher than women on positive behavior on the work floor, like the ability of accommodation or handling conflict ($t(91) = 3.12; p < .01$). On the other hand, men reported more counterproductive work behavior ($t(91) = 2.37; p < .05$) than women did, like abuse ($t(91) = 2.37; p < .05$) and sabotage ($t(91) = 2.00; p < .05$).

Table 1b depicts the scores of men and women on the independent variables. Women rated themselves as being more conscientious than men did ($t(91) = 2.05; p < .05$) and scored higher on honesty-humility ($t(91) = 3.01; p < .01$). Men were more open to experience ($t(91) = 3.53; p < .001$). Concerning intelligence and assertiveness men rated themselves higher ($t(91) = 2.09; p < .05$), assertiveness ($t(91) = 3.98; p < .001$). Men also rated themselves

higher in professional know-how ($t(91) = 1.96; p < .05$). No significant differences between men and women were found in level of education, work experience and age.

Table 1a

Descriptives and T-testing of the dependent variables for men and women

| | Total ($N = 93$) | | Men ($N = 40$) | | Women ($N = 53$) | | t | p |
|---------------------------------------|--------------------|------|------------------|------|--------------------|------|------|-----|
| | M | SD | M | SD | M | SD | | |
| <i>Positive outcomes and behavior</i> | | | | | | | | |
| Performance | 3.97 | 0.39 | 4.03 | 0.48 | 3.92 | 0.30 | 1.31 | .19 |
| Quality of performance | 3.95 | 0.52 | 3.93 | 0.66 | 3.96 | 0.39 | 0.32 | .75 |
| Planning and managing time | 3.85 | 0.74 | 3.80 | 0.72 | 3.89 | 0.75 | 0.56 | .58 |
| Accommodation | 3.62 | 0.47 | 3.78 | 0.44 | 3.49 | 0.45 | 3.12 | .00 |
| <i>Negative outcomes and behavior</i> | | | | | | | | |
| Involuntary absenteeism | 10.75 | 1.12 | 14.49 | 2.29 | 6.67 | 0.92 | 1.00 | .32 |
| Voluntary absenteeism | 0.78 | 1.89 | 1.00 | 2.26 | 0.62 | 1.56 | 0.95 | .34 |
| CWB | 1.17 | 0.27 | 1.25 | 0.38 | 1.10 | 0.10 | 2.37 | .02 |
| Production deviance | 1.15 | 0.40 | 1.23 | 0.54 | 1.09 | 0.24 | 1.42 | .16 |
| Withdrawal | 1.60 | 0.60 | 1.75 | 0.77 | 1.49 | 0.42 | 1.94 | .06 |
| Abuse | 1.12 | 0.27 | 1.20 | 0.39 | 1.12 | 0.27 | 2.37 | .02 |
| Sabotage | 1.09 | 0.26 | 1.16 | 0.37 | 1.04 | 0.11 | 2.00 | .05 |
| Theft | 1.10 | 0.32 | 1.14 | 0.45 | 1.07 | 0.16 | 1.00 | .32 |

Note. N = number of respondents; M = Mean; SD = Standard deviation; t = t-value; p = p-value

Table 1b

Descriptives and T- testing of the independent variables for men and women

| | Total (<i>N</i> = 93) | | Men (<i>N</i> = 40) | | Women (<i>N</i> = 53) | | <i>t</i> | <i>p</i> |
|---------------------|------------------------|-----------|----------------------|-----------|------------------------|-----------|----------|----------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | |
| Self-control | 3.39 | 0.49 | 3.33 | 0.51 | 3.44 | 0.48 | 1.08 | .28 |
| <i>Personality</i> | | | | | | | | |
| Extraversion | 3.63 | 0.65 | 3.73 | 0.68 | 3.55 | 0.63 | 1.28 | .20 |
| Agreeableness | 4.13 | 0.39 | 4.18 | 0.46 | 4.10 | 0.34 | 0.95 | .35 |
| Conscientiousness | 3.73 | 0.71 | 3.56 | 0.67 | 3.86 | 0.72 | 2.05 | .04 |
| Neuroticism | 2.33 | 0.59 | 2.27 | 0.65 | 2.38 | 0.54 | 0.94 | .35 |
| Openness to Exp. | 3.43 | 0.61 | 3.67 | 0.55 | 3.25 | 0.59 | 3.53 | .00 |
| Honesty-Humility | 3.84 | 0.54 | 3.66 | 0.58 | 3.98 | 0.47 | 3.01 | .00 |
| <i>Work related</i> | | | | | | | | |
| Level of education | 6.34 | 0.89 | 6.35 | 0.77 | 6.34 | 0.98 | 0.06 | .96 |
| Prof. Experience | 10.77 | 10.42 | 11.50 | 11.31 | 10.23 | 9.78 | 0.58 | .56 |
| Prof. know-how | 3.83 | 0.75 | 4.00 | 0.82 | 3.70 | 0.67 | 1.96 | .05 |
| <i>Other</i> | | | | | | | | |
| Physical appeal | 3.21 | 0.64 | 3.31 | 0.62 | 3.14 | 0.64 | 1.28 | .20 |
| Trustworthiness | 4.33 | 0.44 | 4.29 | 0.48 | 4.36 | 0.41 | 0.77 | .44 |
| Cooperation | 3.90 | 0.51 | 3.85 | 0.49 | 3.94 | 0.53 | 0.87 | .39 |
| Intelligence | 3.76 | 0.48 | 3.88 | 0.44 | 3.67 | 0.50 | 2.09 | .04 |
| Assertiveness | 3.26 | 0.66 | 3.55 | 0.61 | 3.04 | 0.62 | 3.98 | .00 |
| Age | 34.33 | 10.36 | 35.73 | 11.16 | 33.28 | 9.68 | 1.13 | .26 |

Note. *N* = number of respondents; *M* = Mean; *SD* = Standard deviation; *t* = *t*-value ; *p* = *p*-value

Testing the hypothesis, part one

Positive organizational outcomes and behavior

We hypothesized that self-control is positively associated with positive organizational outcomes, like performance and positive organizational behavior; accommodation. Pearson correlations were performed to test the association between self-control and positive organizational outcomes and behavior. Results are reported in Table 2a.

We found no association for self-control and performance on construct level. The construct performance consisted out of 5 aspects; the quantity of work, quality of work, the ability to reach goals, performance potential and professional know-how. Analyses did show a positive association for two aspects of performance by itself: perceived quality of performance ($r = .26; p < .05$) and the ability to plan and manage time ($r = .44; p < .001$). (The ability to plan and manage time was at first sight removed from the construct because it lowered internal consistency of the construct.) In addition, we found a positive association with accommodation ($r = .44; p < .001$).

These findings are consistent with our hypothesis and suggest that people who scored higher on trait self-control also scored higher on quality of performance and are at the same time better in planning and managing time and in dealing with conflict. The results suggest that self-control is a relevant trait when it comes to facilitating positive organizational outcomes and behavior.

Table 2a

Correlations of self-control with positive organizational outcomes and behavior

| | <i>r</i> | <i>N</i> |
|---------------------------------------|----------|----------|
| <i>Positive outcomes and behavior</i> | | |
| Performance | .15 | 93 |
| Quality of performance | .26* | 93 |
| Plan and manage time | .44*** | 93 |
| Accomodation | .44*** | 93 |

Note. *r* = correlation coefficient; *N* = number of respondents, degrees of freedom

* = significant correlation coefficient $p < .05$, ** $p < .01$, *** $p < .001$

Negative organizational outcomes and behavior

We hypothesized that self-control is negatively associated with negative organizational outcomes, like absenteeism and counterproductive work behavior, such as stealing and sabotage. Pearson correlations were performed to test association. Results are reported in Table 2b.

Analyses revealed a negative association between self-control and involuntary absenteeism; absenteeism through physical or mental sickness ($r = -.25$; $p < .05$). We also found a negative association between self-control and counterproductive work behavior ($r = -.27$; $p < .01$) and the factors production deviance ($r = -.30$; $p < .01$), withdrawal ($r = -.28$; $p < .01$), and abuse ($r = -.23$; $p < .05$). A marginal negative association was seen for theft ($r = -.19$; $p < .06$). Although no significant association with self-control was found for sabotage, it is noteworthy that the correlations are negative for all the factors of CWB.

Consistent with our hypothesis, respondents who scored higher on self-control, reported lower scores on absenteeism through physical or mental sickness. Higher scores on

self-control were also seen for respondents who scored lower on counterproductive work behavior like production deviance, withdrawal, and abuse. The negative association found might suggest that self-control inhibits negative organizational outcomes and behavior.

Table 2b

Correlations of self-control with negative organizational outcomes and behavior

| | <i>r</i> | <i>N</i> |
|---------------------------------------|----------|----------|
| <i>Negative outcomes and behavior</i> | | |
| Involuntary absenteeism | -.25* | 93 |
| Voluntary absenteeism | -.03 | 93 |
| CWB | -.27** | 93 |
| Production deviance | -.30** | 93 |
| Withdrawal | -.28** | 93 |
| Abuse | -.23* | 93 |
| Sabotage | -.14 | 93 |
| Theft | -.19† | 93 |

Note. *r* = correlation coefficient; *N* = number of respondents, degrees of freedom

* = significant correlation coefficient $p < .05$, ** $p < .01$, *** $p < .001$, † $p < .06$

The predictive value of self-control compared to personality factors

The previous analyses suggest that self-control has a high predictive value when it comes to important positive and negative organizational outcomes and behavior. In the following, we tested the hypothesis, that self-control may be a stronger predictor than traditional parameters used in selection of employees, such as personality and experience.

First, we hypothesized that self-control is a stronger predictor of positive and negative

outcomes and behavior in the workplace than the Big 5 personality traits and Honesty-Humility. To test this hypotheses, we conducted regression analyses, in which we compared the impact of self-control to 6 aspects of personality: Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to Experience and Honesty-Humility. Specifically, we regressed the different organizational outcomes simultaneously on the 6 personality traits and self-control. Results of the regression analysis for positive organizational outcomes and behavior are reported in Table 3a, for negative outcomes and behavior see Table 3b.

For positive organizational outcomes and behavior, no link was found for self-control and performance on construct level. Consistent with the above described findings, multiple regression did show a positive relation between self-control and two factors of performance: the quality of performance ($\beta = .294; p < .05$) and the ability to plan and manage time ($\beta = .373; p < .01$). In line with the previous correlation found for self-control and accommodation, multiple regression showed a positive relation between self-control and accommodation ($\beta = .275; p < .05$). Compared to the other personality traits, self-control showed the strongest link with the ability to plan and manage time and accommodation. For the quality of performance, agreeableness showed the strongest link ($\beta = .296; p < .01$).

When it comes to negative organizational outcomes and behavior previous correlations showed a negative association between self-control and involuntary absenteeism and several factors of CWB (Table 2b). The possible link of self-control with involuntary absenteeism was the strongest predictor, though it marginally reached significance ($\beta = -.259; p = .06$). The different aspects of CWB were best predicted by Honesty-Humility. A negative trend was seen for self-control but did not reach significance.

The hypothesis that self-control is a stronger predictor of positive and negative outcomes and behavior in the workplace than the Big 5 personality traits and Honesty-Humility, was partially confirmed. Self-control showed to be the strongest predictor for one

aspect of performance, the ability to plan and manage time and for accommodation. Concerning negative outcomes and behavior, involuntary absenteeism was best predicted by self-control. In line with previous analyses the direction of the relation between self-control and positive organizational outcomes and behavior is positive, whereas for negative organizational outcomes and behavior the relation is negative.

Table 3a

Regression analysis

Self-control and personality factors on positive organizational outcomes and behavior

| | | Performance | Quality of performance | Plan and manage time | Accommodation |
|---------------------------|---------|-------------|------------------------|----------------------|---------------|
| Self-control | β | .202 | .294* | .373** | .275* |
| <i>Personality traits</i> | | | | | |
| Extraversion | β | -.066 | -.163 | -.135 | .088 |
| Agreeableness | β | .331** | .296** | -.073 | .060 |
| Conscientiousness | β | -.041 | -.012 | .067 | -.076 |
| Neuroticism | β | .110 | .098 | -.103 | -.256* |
| Openness to Experience | β | .201† | .029 | .359*** | .005 |
| Honesty - Humility | β | -.110 | -.105 | .035 | .135 |

Note. CWB = Counterproductive Workbehavior β = Beta coefficient;

* = significant correlation coefficient $p < .05$, ** $p < .01$, *** $p < .001$, † $p < .06$

Table 3b

Regression analysis

Self-control and personality factors on negative organizational outcomes and behavior

| | | Involuntary absenteeism | Voluntary absenteeism | CWB | Production deviance | Withdrawal | Abuse | Sabotage | Theft |
|---------------------------|---------|----------------------------|--------------------------|---------|------------------------|------------|----------|----------|--------|
| Self-control | β | -.259† | -.085 | -.156 | -.107 | -.220 | -.117 | -.044 | -.186 |
| <i>Personality traits</i> | | | | | | | | | |
| Extraversion | β | .106 | -.126 | -.169 | -.086 | -.234* | -.119 | -.090 | -.137 |
| Agreeableness | β | -.056 | .120 | -.042 | .005 | .000 | -.070 | -.041 | -.014 |
| Conscientiousness | β | .155 | .012 | -.037 | -.131 | -.241† | .053 | .037 | .087 |
| Neuroticism | β | .122 | -.026 | -.019 | .136 | -.228 | .037 | .054 | -.064 |
| Openness to Experience | β | .107 | .067 | .102 | .007 | .130 | .104 | .106 | -.049 |
| Honesty - Humility | β | .035 | .055 | -.348** | -.224* | -.154 | -.377*** | -.288* | -.284* |

Note. CWB = Counterproductive Workbehavior β = Beta coefficient;

* = significant correlation coefficient $p < .05$, ** $p < .01$, *** $p < .001$, † $p < .06$

The predictive value of self-control compared to work-related factors

In selection of employees, level of education, years of experience and professional know-how of the employee, weigh heavily in the decision to hire an employee or not. We hypothesized that self-control is a better predictor of positive and negative organizational outcomes and behavior than these work-related factors. To test this hypothesis, we conducted regression analyses, in which we regressed the different organizational outcomes simultaneously on the work-related factors and self-control. Results for positive organizational outcomes and behavior are reported in Table 4a, for negative organizational outcomes and behavior see Table 4b.

In line with previous analyses, no link was found for self-control and the construct performance. Professional know-how predicted the overall construct performance best ($\beta = .628; p < .001$). For two factors of performance: the quality of performance and ability to plan and manage time, we did see a positive link with self-control. Also for accommodation the regression showed a positive relation between self-control and accommodation. In addition, compared to traditional parameters, self-control was found to have the strongest link with quality of performance ($\beta = .272; p < .01$), the ability to plan and manage time ($\beta = .453; p < .001$) and accommodation ($\beta = .417; p < .001$). Level of education showed a negative relation with quality of performance ($\beta = -.231; p < .05$) and professional know-how a positive relation with quality of performance ($\beta = .262; p < .05$). Accommodation was also predicted by years of professional experience ($\beta = .266; p < .05$).

Negative organizational outcomes and behavior were also well predicted by self-control compared to the often used work-related parameters mentioned above. The analysis showed that involuntary absenteeism was best predicted by self-control ($\beta = -.265; p < .01$). For voluntary absenteeism none of the parameters reached significance. Self-control was also the strongest predictor of counterproductive work behavior ($\beta = -.268; p < .01$), withdrawal

($\beta = -.266$; $p < .05$) and abuse ($\beta = -.230$; $p < .05$). Regression showed a negative relation between self-control and production deviance ($\beta = -.303$; $p < .01$), but years of experience was the strongest predictor ($\beta = -.325$; $p < .01$). Though the relation of self-control with sabotage and theft did not reach significance, a negative trend was seen.

The hypothesis that self-control is a stronger predictor than level of education, years of experience and professional know-how was confirmed for the quality of performance, the ability to plan and manage time, accommodation, involuntary absenteeism, counterproductive work behavior, withdrawal and abuse. In line with previous results the relation between self-control and positive organizational outcomes and behavior had a positive direction. The relation found between self-control and negative outcomes and behavior was negative.

Table 4a

Regression analysis

Self-control and work-related factors on positive organizational outcomes and behavior

| | | Performance | Quality of performance | Plan and manage time | Accommodation |
|-----------------------------|---------|-------------|------------------------|----------------------|---------------|
| Self-control | β | .107 | .272** | .453*** | .417*** |
| <i>Work related factors</i> | | | | | |
| Education level | β | .014 | -.231* | -.119 | .032 |
| Experience | β | .045 | .002 | -.008 | .266* |
| Prof. know-how | β | .628*** | .262* | .031 | .052 |

Note. CWB = Counterproductive Workbehavior β = Beta coefficient;

* = significant correlation coefficient $p < .05$, ** $p < .01$, *** $p < .001$, † $p < .06$

Table 4b

Regression analysis

Self-control and work-related factors on negative organizational outcomes and behavior

| | | Involuntary absenteeism | Voluntary absenteeism | CWB | Production deviance | Withdrawal | Abuse | Sabotage | Theft |
|-----------------------------|---------|----------------------------|--------------------------|---------|------------------------|------------|--------|----------|-------|
| Self-control | β | -.265** | -.041 | -.268** | -.303** | -.266* | -.230* | -.143 | -.188 |
| <i>Work related factors</i> | | | | | | | | | |
| Education level | β | .174 | -.077 | -.147 | -.176 | -.069 | -.168 | -.123 | -.105 |
| Experience | β | .259* | -.191 | -.173 | -.325* | -.084 | -.210 | -.160 | -.077 |
| Prof. know-how | β | .169 | .118 | .052 | .012 | -.082 | .136 | -.047 | -.065 |

Note. CWB = Counterproductive Workbehavior β = Beta coefficient;

* = significant correlation coefficient $p < .05$, ** $p < .01$, *** $p < .001$, † $p < .06$

The predictive value of self-control compared to general factors

Research found that other factors than the Big 5 personality traits and work-related factors play a role when people have to select a new employee (Cotrell et al., 2007). We hypothesized that self-control is a stronger predictor of positive and negative organizational outcomes and behavior than physical appeal, trustworthiness, cooperation, intelligence and assertiveness. We tested the hypothesis with multiple regression. Results for positive organizational outcomes and behavior are reported in Table 5a, negative organizational outcomes and behavior are reported in Table 5b.

The analyses showed a positive link between self-control and desirable organizational outcomes and behavior like the ability to plan and manage time ($\beta = .417; p < .001$) and accommodation ($\beta = .415; p < .001$). Self-control was the strongest link, other parameters in the regression did not reach significance. A possible relation between self-control and quality of performance approached significance ($\beta = .191; p = .068$). Trustworthiness predicted quality of performance best ($\beta = .254; p < .05$). In line with previous results, self-control did not predict the overall construct performance. Trustworthiness ($\beta = .323; p < .01$) and intelligence ($\beta = .225; p < .05$) did reach significance.

Self-control predicted negative organizational outcomes and behavior best. None of the additional predictors, physical appeal, trustworthiness, cooperation, intelligence and assertiveness, approached significance. Self-control showed a negative link with involuntary absenteeism ($\beta = -.271; p < .05$). In addition, self-control showed a negative relation with counterproductive work behavior ($\beta = -.239; p < .05$), production deviance ($\beta = -.264; p < .05$), withdrawal ($\beta = -.242; p < .05$) and abuse ($\beta = -.209; p < .06$). None of the predictors reached significance for voluntary absenteeism, sabotage and theft. Though, we saw a negative trend for self-control with sabotage and theft.

The hypothesis that self-control is a stronger predictor of positive and negative organizational outcomes and behavior compared to physical appeal, trustworthiness, cooperation, intelligence and assertiveness was confirmed for the ability to plan and manage time, for accommodation, involuntary absenteeism, CWB, production deviance, withdrawal and abuse.

Table 5a

Regression analysis

Self-control and general factors on positive organizational outcomes and behavior

| | | Performance | Quality of performance | Plan and manage time | Accommodation |
|--|---------|-------------|------------------------|----------------------|---------------|
| Self-control | β | .040 | .191 | .417*** | .415*** |
| <i>Factors of Cotrell, Neuberg and Li (2007)</i> | | | | | |
| Physical appeal | β | .063 | .016 | -.057 | -.060 |
| Trustworthiness | β | .323** | .254* | .133 | -.059 |
| Cooperation | β | -.121 | -.012 | -.035 | .120 |
| Intelligence | β | .225* | .106 | .017 | .044 |
| Assertiveness | β | .060 | -.140 | -.004 | .017 |

Note. CWB = Counterproductive Workbehavior β = Beta coefficient;

* = significant correlation coefficient $p < .05$, ** $p < .01$, *** $p < .001$, † $p < .06$

Table 5b

Regression analysis

Self-control and general factors on negative organizational outcomes and behavior

| | | Involuntary absenteeism | Voluntary absenteeism | CWB | Production deviance | Withdrawal | Abuse | Sabotage | Theft |
|--|---------|----------------------------|--------------------------|--------|------------------------|------------|--------|----------|-------|
| Self-control | β | -.271* | -.057 | -.239* | -.264* | -.242* | -.209† | -.134 | -.145 |
| <i>Factors of Cotrell, Neuberg and Li (2007)</i> | | | | | | | | | |
| Physical appeal | β | -.049 | .098 | .055 | .039 | .109 | .046 | .032 | .067 |
| Trustworthiness | β | -.006 | -.031 | -.130 | -.163 | -.160 | -.065 | -.071 | -.158 |
| Cooperation | β | .120 | .160 | -.099 | .006 | -.128 | -.108 | -.068 | -.030 |
| Intelligence | β | .160 | .042 | -.061 | -.079 | .050 | -.099 | .015 | -.134 |
| Assertiveness | β | .041 | -.093 | .161 | .153 | .045 | .194 | .172 | .028 |

Note. CWB = Counterproductive Workbehavior β = Beta coefficient;

* = significant correlation coefficient $p < .05$, ** $p < .01$, *** $p < .001$, † $p < .06$

Part two

What do people find important when hiring a new employee?

Part one of the study suggested that self-control is a very relevant trait to important organizational outcomes and behavior. Self-control showed a stronger predictive value to positive and negative organizational outcomes and behavior than most other factors. This suggests that self-control might be a more relevant trait for selection purposes than many of these factors that are used often in the practice of selection.

In part two of the study we investigated whether people recognize the relevance of self-control to the actual hiring process. People were asked to judge self-control and parameters often used in selection of employees. We included the Big 5 personality traits; a well-known classification of personality, Honesty-Humility because of its negative association with criminal and deviant behavior and work-related factors like level of education and professional know-how. Finally, we included the characteristics found by Cotrell et al. (2007) in their search for what people desire in an employee. Participants judged the characteristics as not relevant at all to very relevant in selection of the best employee.

To compare the scores between different types of professions, we created three scenario's. In the first scenario, the participant had to judge the characteristics for a task-oriented profession; a bookkeeper. In the second scenario the participant judged the characteristics for a task/ people oriented profession; a salesman. The third scenario concerned a people oriented profession; a psychologist. We hypothesized that self-control will be judged as equally important across the professions, while other characteristics will vary across the scenario's.

So, the question is: do participants identify self-control as a parameter that actually predicts performance, accommodation, absenteeism and counterproductive work behavior?

Descriptive data, part two

Table 6 describes the means and standard deviations of the different characteristics as judged by the participants. Scores for the general population and on the three professions are reported separately.

Participants rated four characteristics as ‘*relevant- to very relevant*’ across professions. Trustworthiness scored on average $M = 4.49$ ($SD = 0.47$). Honesty-humility scored $M = 4.37$ ($SD = 0.47$). As a work-related factor, professional know-how scored above 4.0 out of 5 ($M = 4.25$, $SD = 0.56$). Participants rated self-control as $M = 4.14$ on average ($SD = 0.33$).

For the bookkeeper, the task oriented profession, five characteristics scored above 4.0 on average. Self-control scored $M = 4.25$ ($SD = 0.29$). The personality factors that scored above 4.0 were conscientiousness ($M = 4.26$, $SD = 0.48$) and honesty-humility ($M = 4.47$, $SD = 0.43$). One work-related factor scored above 4.0; professional know-how ($M = 4.47$, $SD = 0.51$). Of the factors of Cotrell et al. (2007) trustworthiness was valued as very relevant for a bookkeeper ($M = 4.57$, $SD = 0.43$).

For the salesman, the task/ people oriented profession, participants judged three characteristics as ‘*relevant- to very relevant*’. Self-control scored $M = 4.10$ ($SD = 0.35$). One personality factor above 4.0; honesty-humility ($M = 4.30$, $SD = 0.49$). Trustworthiness scored $M = 4.44$ ($SD = 0.52$).

For the psychologist, the people oriented profession, self-control scored $M = 4.07$ ($SD = 0.33$). The only personality factor that scored ‘*relevant- to very relevant*’ was honesty-humility ($M = 4.37$, $SD = 0.47$). Work-related factors above 4.0 were professional know-how ($M = 4.32$, $SD = 0.48$) and level of education ($M = 4.10$, $SD = 0.47$). Participants also valued the factors trustworthiness ($M = 4.48$, $SD = 0.56$) and cooperation ($M = 4.06$, $SD = 0.38$) of Cotrell et al. (2007) as ‘*relevant- to very relevant*’.

Table 6

Descriptives and Anova testing of the selection variables for the bookkeeper, the salesman and the psychologist

| | Total ($N = 93$) | | Bookkeeper ($N = 30$) | | Salesman ($N = 32$) | | Psychologist ($N = 31$) | | $F(2,90)$ | p |
|---------------------|--------------------|------|-------------------------|------|-----------------------|------|---------------------------|------|-----------|-----|
| | M | SD | M | SD | M | SD | M | SD | | |
| Self-control | 4.14 | 0.33 | 4.25 | 0.29 | 4.10 | 0.35 | 4.07 | 0.33 | 2.66 | .08 |
| <i>Personality</i> | | | | | | | | | | |
| Extraversion | 3.55 | 0.57 | 3.20 | 0.48 | 3.77 | 0.58 | 3.66 | 0.48 | 10.42 | .00 |
| Agreeableness | 3.82 | 0.54 | 3.57 | 0.52 | 3.91 | 0.50 | 3.98 | 0.52 | 5.66 | .00 |
| Conscientiousness | 3.89 | 0.57 | 4.26 | 0.48 | 3.74 | 0.47 | 3.68 | 0.58 | 11.73 | .00 |
| Emotional stability | 3.80 | 0.53 | 3.77 | 0.43 | 3.64 | 0.60 | 3.98 | 0.49 | 3.59 | .03 |
| Openness to Exp. | 3.20 | 0.67 | 2.93 | 0.65 | 3.36 | 0.69 | 3.29 | 0.59 | 3.91 | .02 |
| Honesty-Humility | 4.37 | 0.47 | 4.47 | 0.43 | 4.30 | 0.49 | 4.37 | 0.47 | 1.11 | .34 |

Note. N = number of respondents; M = Mean; SD = Standard deviation; F = F-value of the ANOVA test; df ; degrees of freedom; p = p-value

Table 6, continuance

| | Total (<i>N</i> = 93) | | Bookkeeper (<i>N</i> = 30) | | Salesman (<i>N</i> = 32) | | Psychologist (<i>N</i> = 31) | | <i>F</i> (2,90) | <i>p</i> |
|--------------------|------------------------|-----------|-----------------------------|-----------|---------------------------|-----------|-------------------------------|-----------|-----------------|----------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | |
| <i>Workrelated</i> | | | | | | | | | | |
| Level of education | 3.91 | 0.54 | 3.83 | 0.59 | 3.81 | 0.54 | 4.10 | 0.47 | 2.73 | .07 |
| Prof. Experience | 3.42 | 0.80 | 3.50 | 0.57 | 3.22 | 0.97 | 3.55 | 0.77 | 1.59 | .21 |
| Prof. know-how | 4.25 | 0.56 | 4.47 | 0.51 | 3.97 | 0.59 | 4.32 | 0.48 | 7.32 | .00 |
| <i>Other</i> | | | | | | | | | | |
| Physical appeal | 2.39 | 0.75 | 2.26 | 0.64 | 2.71 | 0.77 | 2.19 | 0.74 | 4.78 | .01 |
| Trustworthiness | 4.49 | 0.47 | 4.57 | 0.43 | 4.44 | 0.52 | 4.48 | 0.46 | 0.59 | .55 |
| Cooperation | 3.92 | 0.51 | 3.80 | 0.53 | 3.89 | 0.58 | 4.06 | 0.38 | 2.16 | .12 |
| Intelligence | 3.85 | 0.42 | 3.88 | 0.34 | 3.79 | 0.48 | 3.89 | 3.89 | 0.54 | .59 |
| Assertiveness | 3.33 | 0.71 | 3.18 | 0.70 | 3.45 | 0.82 | 3.35 | 0.59 | 1.14 | .33 |

Note. *N* = number of respondents; *M* = Mean; *SD* = Standard deviation; *F* = F-value of the ANOVA test; *df*; degrees of freedom; *p* = p-value

Testing the hypothesis, part two

We expected that participants would rate self-control as equally important when selecting a bookkeeper, a salesman or a psychologist, while other characteristics would vary in importance for the different types of professions. Subsequently, we examined whether participants recognized self-control as more important than other characteristics across the types of professions in selecting the best employee.

First, we tested the hypothesis that participants rated self-control as equally important for the three types of professions. A one way ANOVA tested this hypothesis. Results are reported in Table 6.

Consistent with our prediction, the ANOVA did not reach significance $F(2, 90) = 2.66$. Nevertheless, a marginal trend emerged. An independent samples t-test showed a significant difference between the importance of self-control for the bookkeeper ($M = 4.25$) and the psychologist ($M = 4.07$).

We may partially confirm our hypothesis that self-control is rated equally important from task- to people oriented professions. Participants recognized the importance of self-control across professions, though a marginal difference was seen for the bookkeeper and the psychologist. It seems that the type of profession does not or only marginally determine the importance of self-control to a profession.

Was self-control rated as more important than other factors?

We hypothesized that participants would recognize self-control as being more important than other characteristics across the three types of professions. We compared the importance of self-control to 1) personality factors, 2) work-related factors and to 3) more general factors that are important in relationships. To investigate possible differences of self-control and the different factors between the three types of professions we performed a mixed between-within subjects analysis of variance.

Considering personality, we expected self-control to be more important than extraversion, agreeableness, conscientiousness, emotional stability, openness to experience and honesty-humility comparing the three types of professions. We performed a mixed analysis of variance with condition (bookkeeper versus salesman versus psychologist) as a between-subjects factor and personality (personality trait versus self-control) as a within-subjects factor.

For extraversion versus self-control, the analysis revealed a main effect for personality, $F(1, 90) = 111.32; p < .001$, indicating that self-control was rated as being more important ($M = 4.14, SD = 0.33$) than extraversion ($M = 3.55, SD = 0.57$) across all conditions. We also found a main effect for condition, $F(2, 90) = 3.14; p = .048$. Post-hoc tests revealed that, overall, the bookkeeper received significantly lower ratings ($M = 3.73$) than the salesman ($M = 3.94$). These main effects were moderated by an interaction, $F(2, 90) = 15.88; p = .001$. Post-hoc tests revealed that the difference between self-control and extraversion was most pronounced for the bookkeeper. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66; p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For extraversion, a main effect emerged, $F(2, 90) = 10.42; p < .001$. Post-hoc tests with Bonferroni correction revealed that participants rated that the bookkeeper ($M = 3.20$) as needing less extraversion than the salesman ($M = 3.77$) and the psychologist ($M = 3.66$). The salesman and the psychologist did not differ from each other.

For agreeableness versus self-control, the analysis revealed a main effect for personality, $F(1, 90) = 36.69; p < .001$, indicating that self-control was rated as being more important ($M = 4.14, SD = 0.33$) than agreeableness ($M = 3.82, SD = 0.54$) across all conditions. We did not find a main effect for condition, $F(2, 90) = 0.94$. The bookkeeper,

salesman or psychologist did not receive significantly higher or lower ratings than the other conditions. An interaction was found for personality and condition, $F(2, 90) = 12.49; p < .001$. Post-hoc tests revealed that the difference between self-control and agreeableness was most pronounced for the bookkeeper. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66; p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For agreeableness, a main effect emerged, $F(2, 90) = 5.66; p < .001$. Post-hoc tests with Bonferroni correction revealed that participants rated salesman ($M = 3.91$) as needing more agreeableness than the bookkeeper ($M = 3.57$). The psychologist ($M = 3.98$) also needed more agreeableness than the bookkeeper. The salesman and psychologist did not differ significantly in importance of agreeableness.

For conscientiousness versus self-control, the analysis revealed a main effect for personality, $F(1, 90) = 29.84; p < .001$, indicating that self-control was rated as being more important ($M = 4.14, SD = 0.33$) than conscientiousness ($M = 3.89, SD = 0.57$) across all conditions. We also found a main effect for condition, $F(2, 90) = 9.60; p < .001$. Post-hoc tests revealed that, overall, the bookkeeper received significantly higher ratings ($M = 4.25$) than the salesman ($M = 3.92$) and the psychologist ($M = 3.87$). Ratings between the salesman and the psychologist did not differ significantly. These main effects were moderated by an interaction, $F(2, 90) = 7.70; p < .001$. Post-hoc tests revealed that the difference between self-control and conscientiousness was most pronounced for the psychologist. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66; p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For conscientiousness, a main effect emerged, $F(2, 90) = 11.73; p < .001$. Post-hoc tests with Bonferroni correction revealed that participants rated the bookkeeper ($M = 4.26$) as needing more conscientiousness than the

salesman ($M = 3.74$) and the psychologist ($M = 3.68$). The salesman and the psychologist did not differ from each other.

For emotional stability versus self-control, the analysis revealed a main effect for personality, $F(1, 90) = 41.56$; $p < .001$, indicating that self-control was rated as being more important ($M = 4.14$, $SD = 0.33$) than emotional stability ($M = 3.80$, $SD = 0.53$) across all conditions. We did not find a main effect for condition, $F(2, 90) = 1.90$; We found a significant interaction between personality and condition that moderated effects, $F(2, 90) = 5.90$; $p < .01$. Post-hoc tests revealed that the difference between self-control and emotional stability was most pronounced for the bookkeeper and the salesman. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For emotional stability, a main effect emerged, $F(2, 90) = 3.59$; $p < .05$. Post-hoc tests with Bonferroni correction revealed that participants rated the psychologist ($M = 3.98$) as needing more emotional stability than the salesman ($M = 3.64$). No differences were found for the other conditions.

For openness to experience versus self-control, the analysis revealed a main effect for personality, $F(1, 90) = 173.05$; $p < .001$, indicating that self-control was rated as being more important ($M = 4.14$, $SD = 0.33$) than openness to experience ($M = 3.20$, $SD = 0.67$) across all conditions. We found no main effect for condition, $F(2, 90) = 1.11$. The effects were moderated by an interaction, $F(2, 90) = 6.67$; $p < .01$. Post-hoc tests revealed that the difference between self-control and openness to experience was most pronounced for the bookkeeper. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For openness to experience, a main effect emerged, $F(2, 90) = 3.91$; $p < .05$. Post-hoc tests

with Bonferroni correction revealed that participants rated the salesman ($M = 3.36$) as needing more openness to experience than the bookkeeper ($M = 2.93$). The other conditions did not differ from each other.

For honesty-humility versus self-control, the analysis revealed a main effect for personality, $F(1, 90) = 34.43$; $p < .001$, indicating that honesty-humility ($M = 4.37$, $SD = 0.47$) was rated as being more important than self-control ($M = 4.14$, $SD = 0.33$) across all conditions. We found no main effect for condition, $F(2, 90) = 1.97$ and no interaction between personality and condition $F(2, 90) = 0.33$. Post-hoc tests revealed that the difference between self-control and honesty-humility was most pronounced for the psychologist. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For honesty-humility no main effect emerged, $F(2, 90) = 1.11$. No differences were found between the conditions.

For the comparison of self-control with the personality factors, the results above suggest that self-control is rated more important than extraversion, agreeableness, conscientiousness, emotional stability and openness to experience across conditions. Honesty-humility was rated as more important than self-control across conditions. For honesty-humility versus self-control no main effect for condition was found.

Comparing self-control with work-related factors, we expected self-control to be more important than level of education, years of professional experience and professional know-how. We performed a mixed analysis of variance with condition (bookkeeper versus salesman versus psychologist) as between-subjects factor and the work-related factor (work-related factor versus self-control) as a within-subjects factor.

For level of education versus self-control, the analysis revealed a main effect for level of education and self-control together, $F(1, 90) = 14.20$; $p < .001$, indicating that self-control

was rated as being more important ($M = 4.14$, $SD = 0.33$) than level of education ($M = 3.91$, $SD = 0.55$) across all conditions. We did not find a main effect for condition, $F(2, 90) = 1.15$. We did find an interaction of level of education together with self-control and condition $F(2, 90) = 4.82$; $p < .01$. Post-hoc tests revealed that the difference between self-control and level of education was most pronounced for the bookkeeper. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For level of education, a marginal main effect emerged, $F(2, 90) = 2.73$; $p = .07$. No significant differences were found between the conditions.

Comparing years of professional experience with self-control, the analysis revealed a main effect for years of professional experience together with self-control, $F(1, 90) = 70.33$; $p < .001$, indicating that self-control was rated as being more important ($M = 4.14$, $SD = 0.33$) than years of experience ($M = 3.42$, $SD = 0.80$) across all conditions. We found no main effect for condition $F(2, 90) = 1.91$ and no interaction between condition and self-control together with years of experience, $F(2, 90) = 1.55$. Post-hoc tests revealed that the difference between self-control and years of experience was most pronounced for the salesman. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For years of experience no main effect emerged, $F(2, 90) = 1.59$ and no differences were found between the conditions.

Comparing self-control with professional know-how, the analysis revealed a marginal effect self-control together with professional know-how $F(1, 90) = 3.97$; $p = .055$, indicating that professional know-how ($M = 4.25$, $SD = 0.56$) was rated as being more important than self-control ($M = 4.14$, $SD = 0.33$) across all conditions. We also found a main effect for

condition, $F(2, 90) = 6.99$; $p < .01$. Post-hoc tests revealed that, overall, the bookkeeper received significantly higher ratings ($M = 4.36$) than the salesman ($M = 4.04$), no significant difference was found for the bookkeeper or the salesman and the psychologist ($M = 4.20$). These main effects were moderated by an interaction, $F(2, 90) = 4.62$; $p < .05$. Post-hoc tests revealed that the difference between self-control and professional know-how was most pronounced for the bookkeeper and the psychologist. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For professional know-how, a main effect emerged, $F(2, 90) = 7.32$; $p < .001$. Post-hoc tests with Bonferroni correction revealed that participants rated that the psychologist ($M = 4.32$) needed more professional know-how than the salesman ($M = 3.97$). Also the bookkeeper ($M = 4.47$) needed more professional know-how than the salesman. Between the psychologist and the bookkeeper no significant difference was found.

The results suggest that for the comparison between self-control and the work-related factors across the conditions, self-control was rated as more important across conditions than level of education and years of professional experience. Professional know-how was rated as more important than self-control, especially for the bookkeeper and the psychologist.

Finally we tested self-control versus the more general factors: physical appeal, trustworthiness, cooperation, intelligence and assertiveness. Condition (bookkeeper versus salesman versus psychologist) was the between-subjects factor and the general factors were used as the within-subjects factor (general factor versus self-control).

For self-control versus physical appeal, the analysis revealed a main effect for self-control together with physical appeal, $F(1, 90) = 391.19$; $p < .001$, indicating that self-control was rated as being more important ($M = 4.14$, $SD = 0.33$) than physical appeal ($M = 2.39$, SD

= 0.75) across all conditions. We also found a main effect for condition, $F(2, 90) = 4.52$; $p < .05$. Post-hoc tests revealed that, overall, the salesman received significantly lower ratings ($M = 3.41$) than the psychologist ($M = 3.13$). The ratings of the bookkeeper did not differ significantly from the ratings of the salesman or the psychologist. These main effects were moderated by an interaction, $F(2, 90) = 4.34$; $p < .05$. Post-hoc tests revealed that the difference between self-control and physical appeal was most pronounced for the bookkeeper and the psychologist. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For physical appeal, a main effect emerged, $F(2, 90) = 4.78$; $p < .01$. Post-hoc tests with Bonferroni correction revealed that participants rated the salesman ($M = 2.71$) as needing more physical appeal than the psychologist ($M = 2.19$) and the bookkeeper ($M = 2.26$), which did not differ from each other.

Comparing self-control with trustworthiness, the analysis revealed a main effect for self-control together with trustworthiness, $F(1, 90) = 93.29$; $p < .001$, indicating that trustworthiness ($M = 4.49$, $SD = 0.47$) was rated as being more important than self-control ($M = 4.14$, $SD = 0.33$) across all conditions. We found no main effect for condition, $F(2, 90) = 1.41$ and no interaction effect $F(2, 90) = 0.67$. Post-hoc tests revealed that the difference between self-control and trustworthiness was most pronounced for the psychologist. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For trustworthiness, a marginal main effect emerged, $F(2, 90) = 0.59$; $p = .55$, but no significant differences were found between the conditions.

For self-control and cooperativeness, the analysis revealed a main effect for self-

control together with cooperativeness, $F(1, 90) = 16.15$; $p < .001$, indicating that self-control was rated as being more important ($M = 4.14$, $SD = 0.33$) than cooperativeness ($M = 3.92$, $SD = 0.51$) across all conditions. We did not find a main effect for condition, $F(2, 90) = 0.36$. The main effect was moderated by an interaction, $F(2, 90) = 5.37$; $p < .01$. Post-hoc tests revealed that the difference between self-control and cooperativeness was most pronounced for the bookkeeper. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For cooperativeness, no main effect emerged, $F(2, 90) = 2.16$ and no significant differences were found between the conditions.

Comparing self-control versus intelligence, the analysis revealed a main effect for self-control together with intelligence, $F(1, 90) = 38.41$; $p < .001$, indicating that self-control was rated as being more important ($M = 4.14$, $SD = 0.33$) than intelligence ($M = 3.85$, $SD = 0.42$) across all conditions. We did not find a main effect for condition, $F(2, 90) = 1.23$. The main effects were moderated by an interaction, $F(2, 90) = 1.56$. Post-hoc tests revealed that the difference between self-control and intelligence was most pronounced for the bookkeeper and the salesman. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66$; $p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For intelligence, no main effect emerged, $F(2, 90) = 0.59$ and no significant difference was found between the conditions.

Comparing self-control and assertiveness, the analysis revealed a main effect for self-control together with assertiveness, $F(1, 90) = 110.87$; $p < .001$, indicating that self-control was rated as being more important ($M = 4.14$, $SD = 0.33$) than assertiveness ($M = 3.33$, $SD = 0.71$) across all conditions. We did not find a main effect for condition, $F(2, 90) = 0.25$. The

interaction of the main effects marginally reached significance, $F(2, 90) = 2.82; p < .065$.

Post-hoc tests revealed that the difference between self-control and assertiveness was most pronounced for the bookkeeper. Specifically, levels of self-control did only marginally differ across conditions, $F(2, 90) = 2.66; p = .075$. Post-hoc tests with Bonferroni correction revealed that participants rated that bookkeepers ($M = 4.25$) needed more self-control than psychologists ($M = 4.07$). For assertiveness no main effect emerged, $F(2, 90) = 1.14$ and no significant differences were found between the conditions.

The results suggest that self-control was rated more important across conditions than physical appeal, cooperativeness, intelligence and assertiveness. Participants rated trustworthiness as more important than self-control across conditions. No main effect of type of profession was found.

Exploratory analyses

Participants judged three characteristics to be very important, whatever the type of profession was: self-control, honesty-humility and trustworthiness. To investigate association between these three characteristics we performed Pearson correlations. We found strong positive associations between all three characteristics indicating that the constructs are related. The strongest correlation was found for honesty-humility and trustworthiness ($r = .82; p < .001$). Correlations are reported in Table 7.

Table 7

Correlations of self-control, honesty-humility and trustworthiness

| | Self-control | Honesty-humility | Trustworthiness |
|------------------|--------------|------------------|-----------------|
| Self-control | 1 | | |
| Honesty-humility | .62*** | 1 | |
| Trustworthiness | .66*** | .82*** | 1 |

Note. r = correlation coefficient; * = significant correlation coefficient

$p < .05$, ** $p < .01$, *** $p < .001$

Discussion

Does self-control in the organizational context on the one hand facilitate positive outcomes and behavior and on the other hand inhibit negative outcomes and behavior? And if so, is self-control compared to often used selection parameters a better predictor of positive and negative organizational outcomes and behavior and thus relevant for selection of new employees? The first part of the present research addressed these questions.

We found that self-control was positively associated with aspects of performance: the quality of performance and the ability to plan and manage time. In addition, we found a positive association for self-control and accommodation. For negative organizational outcomes and behavior, analyses revealed a negative association between self-control and involuntary absenteeism. For counterproductive work behavior a strong negative association was found with self-control, especially for production deviance, withdrawal and abuse. A marginal significant negative association was seen for theft. These results suggest that self-control may be able to facilitate positive outcomes and behavior in the organizational context and inhibit negative outcomes and behavior. This might indicate that self-control is very important to organizational welfare and thus for the management of human capital.

Subsequently, we compared the predictive value of self-control with 1) personality, 2) work-related and 3) general factors that are used often in the selection of new employees. We found that self-control has a higher predictive value than most other factors which highlights the relevance of self-control for the selection process.

In predicting positive organizational outcomes and behavior, self-control was the best predictor of the ability to plan and manage time and accommodation, compared to all other factors. Comparing self-control with personality factors, the quality of performance was best predicted by agreeableness and self-control. Compared to work-related factors self-control also predicted the quality of performance best. For negative organizational outcomes and

behavior, involuntary absenteeism was best predicted by self-control, compared to personality, work-related and general factors. Comparing the predictive value of self-control to personality factors, honesty-humility predicted counterproductive work behavior and all the aspects of CWB best, except for withdrawal. Withdrawal showed the strongest relation with extraversion and conscientiousness. Comparing the predictive value of self-control to work-related factors and more general factors, self-control predicted as well involuntary absenteeism as counterproductive work behavior best (especially for production deviance, withdrawal and abuse).

In the second part of the study we addressed the question whether self-control would be rated as equally important for all types of professions, saying that self-control is important independent from whether the type of profession is task oriented or people oriented. For all three types of professions participants rated self-control as important. Though the ANOVA comparing the three groups did not reach significance a marginal difference was found comparing the extremes; the bookkeeper and the psychologist.

The last question answered was whether participants recognized the importance of self-control to organizational outcomes and behavior and subsequently rated self-control as more important than other factors when selecting a new employee. Self-control was rated more important by participants than most personality, work-related and general factors, except for honesty-humility, professional know-how and trustworthiness. Honesty-humility and trustworthiness were rated important independent from the type of profession. Professional know-how was most important for the bookkeeper and the psychologist. We may conclude that participants did recognize the importance of self-control to the selection process together with honesty-humility, professional know-how and trustworthiness.

Implications and Future Research

The positive relation found between aspects of performance and self-control is in line with earlier findings of Duckworth and Seligman (2005) who found a higher grade point average and academical success for students with more self-control, just like Tangney et al. (2004) did. Our results suggest that the 'success' of self-control can be translated to different contexts: from the educational setting to the organizational setting. Interesting is that self-control, in the present study, did not show a relation with the quantity of work, the ability to reach goals, performance potential and professional know-how. The relation found was limited to the ability to plan and manage time and the quality of performance. The positive relation found between self-control and the ability to plan and manage time seems to be in line with the results of Mischel et al. (1988) who also found a relation between self-control and the ability to plan. The negative relation found between self-control and procrastination (Tice & Baumeister, 1997) might also confirm the positive relation between self-control and the ability to plan and manage time.

The relation between self-control and the quality of performance has not been mentioned before in research as far as we know. We could speculate that delivering high quality work to an employee is the same as working for a high grade to a scholar (Duckworth & Seligman, 2005). It is the same motivational process that makes people want to perform regardless of the context. Could it be that most people want to perform, for example delivering good work or working for a high grade, but not all people can turn this motivation into action? We could speculate that the people with high self-control can turn this motivation into action, while others cannot, because people with high self-control are able to give a steady work effort and are able to plan and manage time.

The ability to control impulses (Baumeister et al., 1998) and the gratification study of Mischel et al. (1988) suggest that self-control makes you focus on the long-term gain, even

when facing temptations. For that reason we expected to find a positive relation between self-control and the ability to reach goals, but we did not. We also did not find a relation between self-control and the quantity of work. We could speculate that if there isn't a direct relation, there might be an indirect relation between self-control and the quantity of work via the ability to plan and manage time. It seems logical that when someone is better in planning and managing time, someone can also get more things done. In the present study we did not find such a relation. We also did not find a positive relation between self-control and performance potential or professional know-how. We did find a high positive correlation between self-control and honesty-humility. People with high self-control in general scored high on honesty-humility, which could mean that participants with high self-control have trouble giving non-humble answers when it comes to self-rating their performance. A better way to measure performance might be a combination of self-rating, supervisor rating and peer/ colleague rating.

Our results suggest that it is merely the ability to plan and manage time related to self-control that lies at the heart of the relation between self-control and performance, like higher grade point average and academic success found in other studies. Future research should focus on the relation between self-control and the ability to plan and manage time. Research in other populations should consider the direct relation of self-control with different aspects of performance and test a possible indirect relation via the ability to plan and manage time, especially for 'the quantity of work'.

In the present study we found a strong positive relation of self-control with accommodation which suggests that like in romantic relations, self-control is needed to make accommodation in work relations, for example between colleague's. Self-control predicted accommodation best compared to all the other factors. Finkel and Campbell (2001) formulated accommodation as the willingness to respond constructively to potentially

destructive behavior, by inhibiting impulses toward destructive responding. Where self-interested motives appear relatively automatic, motives that take into account the other's outcomes require greater cognitive processing (Dehue, McClintock, & Liebrand, 1993). It is probably the same when avoiding or handling conflict in the workplace. Not self-interest but the common interest needs to be considered and to be able to do this primary self-oriented responses need to be inhibited. That self-control and social competence are positively related was already seen by Mischel et al. (1988) where parents rated children with more self-control at the age of 4 or 5 years old, as being more socially competent as adolescents. Finkel and Campbell (2001) conclude by saying that self-control lies at the heart of transformation of motivation. Individuals who possess the ability to control the self, are able to inhibit self-interested impulses to potentially destructive behavior, in favor of more pro-relationship responses. The setting of a romantic relationship is different from relations with colleague's or customers, but the clue how to build long-term sustainable relationships and how to deal with conflict might be very much the same. So self-control seems to have a prominent role in building and maintaining relations in the workplace.

Concerning negative organizational outcomes and behavior, we found a negative association between self-control and involuntary absenteeism; absenteeism through physical or mental illness. No significant negative relation was seen with voluntary absenteeism; absenteeism for example to withdraw from aversive work circumstances. Because voluntary sickness is rooted in a motivational process and self-control is the ability to override dominant response tendencies we expected to find particularly for voluntary absenteeism a negative relation with self-control. A possible explanation could be the operationalization of the construct that will be explicated later in the section limitations. We did find a negative relation between self-control and involuntary sickness in the organizational context. In the educational context Tice and Baumeister (1997) showed that students with low self-control

reported more sickdays. A possible explanation could be procrastination. Not being able to work towards long-term goals without the pressure of a deadline can cause a procrastinator to work from deadline to deadline, which causes more stress and fatigue and subsequent sickness than someone who works steadily towards long-term goals. Lower stress levels in relation to high self-control were also found by Mischel et al. (1988). So it seems that the heart of the 'protecting' function of self-control towards sickness is the ability to plan and manage time. This could be the explanation for the educational and the organizational context. Future research should point out if self-control in this way has a protecting function towards sickness.

Together with honesty-humility, self-control predicted counterproductive work behavior best, especially production deviance, withdrawal and abuse. Outside of the workplace research already showed the relation between self-control and deviant behavior like not wearing seatbelts or committing fraud (Vazsonyi et al., 2001). Our results suggest that the workplace is no different from society. The negative relation of self-control with counterproductive work behavior is clear. Honesty-humility is a recent but well-known predictor of delinquent behavior at the workplace (Lee, Ashton, De Vries, 2005). Our study underscores the power of honesty-humility as a predictor of delinquent behavior at the workplace. Together with self-control we would have a very strong predictor of deviant behavior in the workplace.

In the second part of the study we found that next to self-control, trustworthiness and honesty-humility were judged as very important when selecting a new employee. This result is in line with the study of Cotrell et al. (2007) who showed that trustworthiness was the most valued factor when it comes to what people desire in others. This counted for an employee but also for a friend and other types of relations. One could say that trust is a necessary condition for almost any type of relation. In the exploratory analyses we found a strong positive

correlation between trustworthiness and self-control. Righetti and Finkenauer (in press) found that perceived trait and state self-control affected whether people judged someone as trustworthy or not. The importance of honesty-humility and the link with self-control and trustworthiness is less clear. But these three factors seem to be necessary conditions that have to be met to build good relations and are in this way crucial to organizational outcomes and behavior. The relations between the three aspects are not completely clear yet, but one can imagine that self-control is necessary to be able to trust someone (Righetti & Finkenauer, in press). Trusting someone could mean having faith in him or her being honest and not taking advantage of you. Maybe we can say that self-control makes individuals more accountable, because someone shows more social and less impulsive behavior.

Strengths and Limitations

A strength of this study is that the population and thus the results seem to be representative for a larger group. Mean values of descriptive data are close to values found in earlier studies, for example the study of De Vries, Ashton and Lee (2009). The same holds for the gender differences found. In our results women scored higher than men on honesty-humility. Lee and Ashton (2004) reported the same difference between men and women. We found relatively low scores on neuroticism in the whole population, which might be the consequence of the general high level of education of our study population (De Vries et al., 2009). The difference between men and women in openness to experience was also reported by De Vries et al. (2009). The difference found in conscientiousness between men and women is not a common difference per se. We do not expect differences in for example personality factors like extraversion to influence the reliability or validity of the results found.

A limitation of this study is the way we measured performance. To be able to be more specific it might be better to measure the different aspects of performance separately, but with more than one item. To have a more complete picture, self-reports of performance should be

complemented with reports by managers and/ or colleague's. Another construct that did not show the expected relations was voluntary absenteeism; absenteeism through other reasons than physical or mental illness. This could mean that participants did not understand the question or had difficulties in recalling the exact amount of absent days. Another explanation could be that participants might be not completely honest in reporting voluntary absenteeism. Another operationalization of voluntary (and involuntary) absenteeism might give better results. For example, the operationalization of Shapira-Lishchinsky and Rosenblatt (2009) where a difference in absence frequency and duration was made by reporting every single absence incident separately. This way participants do not give a general indication over the last three months but will have to recall every absence incident which forces them to be more specific.

A general struggle in social research, as in this study, is the nature of the associations found. We cannot demonstrate the causality of the relations found. Future research should focus on testing the relations found in the present study for self-control and the outcome parameters in populations that differ from this population in level of education, age and years of professional experience, to show whether the relations found are robust.

Concluding remarks

Self-control is at the very heart of organizational welfare. It seems to play a key role when it comes to facilitating positive organizational outcomes and behavior and inhibiting negative organizational outcomes and behavior. Because of its predictive value self-control seems to have great potential for the selection process of employees compared to other selection parameters.

Noteworthy are the strong positive relations found for self-control with the ability to plan and manage time, the quality of performance and the positive relation found with accommodation. Accommodation in work relations seems to follow the same rules as in

romantic relations. For negative organizational outcomes and behavior, self-control was a strong predictor of involuntary absenteeism and counterproductive work behavior compared to factors often used in selection.

In the present study the ability to plan and manage time related to self-control played a central role and might be at the heart of the relation between self-control and performance. It might also be the underlying explanation of the ‘protecting’ function that self-control seems to have towards stress and subsequent illness. In addition, our results show that in the context of selection self-control, honesty-humility and trustworthiness are most important when it comes to predicting organizational outcomes and are valued most across professions.

Our research highlights the value of interdisciplinary research. The ‘success’ and ‘predictive value’ of self-control can be translated to different contexts: from the educational setting, the society and the romantic relationship to the organizational setting. Future research should investigate in what way self-control can be introduced in the actual hiring process and point out training possibilities of current employees.

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