Self-control and optimism are distinct and complementary strengths

Charles S. Carver

Department of Psychology, University of Miami, Coral Gables, FL 33124, United States

ARTICLE INFO

Article history:
Received 14 October 2013
Received in revised form 6 February 2014
Accepted 14 February 2014

Keywords:
Optimism
Self-control
Hostility

ABSTRACT

Optimism and self-control are two traits that have been linked to a wide range of positive life outcomes—indeed, to many of the same outcomes. Does that suggest the two are somehow redundant? In this study measures of optimism and self-control were related to each other and to a set of scales measuring socially problematic tendencies. Optimism correlated only .30 with self-control, suggesting that they are fairly distinct. Both correlated significantly with anger, hostility, verbal aggression, borderline tendencies, and endorsement of a “code of honor.” Multiple regression analyses determined that optimism and self-control made distinct contributions to predicting all of these outcomes other than verbal aggression. Findings are consistent with a view in which both optimism and self-control have important self-regulatory functions, but functions that differ from one another.

1. Introduction

In the past two decades, psychology has turned increasing attention to properties of human experience that represent strengths, or virtues (e.g., Peterson & Seligman, 2004). Two examples of traits representing such strengths are optimism (Scheier, Carver, & Bridges, 1994) and self-control (Tangney, Baumeister, & Boone, 2004). Higher levels of each of these traits have been found to be related in multiple ways (Tangney et al., 2004; de Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2012; Segerstrom, 2006). Indeed, many of the benefits of one of these traits are strongly reminiscent of benefits of the other.

Self-control is related to greater psychological well-being, more academic success, and better interpersonal relations, and to less evidence of substance abuse, eating disorder, and aggression (Tangney et al., 2004). People high in self-control are better able to inhibit negative emotions (Kieras, Tobin, Graziano, & Rothbart, 2005), and are more accommodating to their partners in close relationships, thus experiencing less interpersonal conflict (Finkel & Campbell, 2001). People low in self-control also engage in more behaviors that constitute health risks, such as greater use of tobacco and alcohol (Wills, Walker, Mendoza, & Ainette, 2006), and higher dietary levels of saturated fat (Wills, Isasi, Mendoza, & Ainette, 2007). Indeed, self-control is beneficial throughout life (Moffitt, Poulton, & Caspi, 2013).

For many of these findings for self-control, there exists a parallel finding for optimism. Optimism relates to greater psychological well-being (Carver et al., 2010), greater persistence in pursuit of educational goals (Solberg Nes, Evans, & Segerstrom, 2009), better interpersonal relations (Räikkönen, Matthews, Flory, Owens, & Gump, 1999), and greater ease in forming social networks (Brissette, Scheier, & Carver, 2002). People high in optimism are better able to inhibit negative emotions (Assad, Donnellan, & Conger, 2007), and they work harder (or more effectively) at close relationships, thus experiencing less interpersonal conflict (Srivastava, McGonigal, Richards, Butler, & Gross, 2006). Optimists engage in more health promoting behaviors and fewer health-damaging behaviors than pessimists: they are less likely to report drinking problems (Ohannessian, Hesselbrock, Tennen, & Affleck, 1993), they are less likely to smoke (Tindle et al., 2009), less likely to be sedentary (Steptoe, Wright, Kunz-Ebrecht, & Iliffe, 2006; Tindle et al., 2009), and have better diets, in terms of fruit and vegetable consumption (Boehm, Williams, Rimm, Ryff, & Kubzansky, 2013) and dietary fat intake (Scheier & Carver, 1992).

These similar patterns of associations raise an intriguing question. Is there more overlap or connection between these two constructs than has been realized? Clearly they differ from one another on their surface. The dimension of optimism concerns expectations about one’s future. Predictions for optimism derive from the logic of expectancy-value motivation theories, in which confidence is associated with greater effort and persistence toward desired goals (Carver & Scheier, in press; Carver et al., 2010). The dimension of self-control, in contrast, is about acting in disciplined ways, restraining problematic impulses and avoiding distractions.
in order to reach goals. Predictions for self-control derive from the logic of optimizing outcomes by choosing one’s actions thoughtfully instead of impulsively. Thus there are distinct differences in the core elements ascribed to the two constructs.

Nonetheless, personality traits inherently face the problem that traits link to other traits, and it can be difficult to attribute outcomes unambiguously. Is optimism important because optimists act with greater self-control? Is self-control important because it reflects confidence and greater motivation toward one’s goals? Do these two constructs have more connection than has been realized? Or are they instead complementary strengths, both of which help people deal more effectively with life’s challenges? The study reported here addresses these questions. Because some of the clearest benefits of self-control are in areas of interpersonal functioning (de Ridder et al., 2012), this study focused on interpersonal well-being versus disruption. To that end, participants completed measures of aggressiveness; borderline personality tendencies, which are characterized by interpersonal difficulties; and endorsement of a “code of honor,” in which the defending of one’s personal honor and status leads to abrasive interpersonal relations.

2. Method

Participants were 165 undergraduates (97 female) at the University of Miami, who completed self-report measures in group sessions. Self-control was measured by the 13-item short version of the Self-Control Scale (Tangney et al., 2004), a measure of general self-control tendencies. Optimism was measured by the 6-item Life Orientation Test-Revised (LOT-R; Scheier et al., 1994). Both measures consist of statements, to which participants responded on a 5-point scale (1 = “I agree a lot”; 5 = “I disagree a lot”). Scales for each measure were scored by averaging item responses, after reverse coding as necessary. Scoring was such that higher values indicate higher self-control (M = 3.21, SD = .70, α = .81) and higher optimism (M = 3.57, SD = .83, α = .81), respectively.

2.1. Measures of social disruption

2.1.1. Aggression Questionnaire Short Form (AQ)

The AQ (Buss & Perry, 1992) assesses four aspects of aggression using a 5-point scale. Bryant and Smith (2001) developed a shorter version, omitting items with low or multiple loadings, as well as items with reverse-scored wording, yielding a 12-item scale that is psychometrically more sound than the original (Bryant & Smith, 2001). Responses were made on a 1–5 scale, and were averaged for each subscale. Subscales are Anger (3 items, e.g., “I have trouble controlling my temper,” M = 2.32, SD = 1.01, α = .67), Hostility (3 items, e.g., “I wonder why I am so bitter about things,” M = 2.58, SD = 0.91, α = .64), Verbal Aggression (3 items, e.g., “I often find myself disagreeing with people,” M = 2.55, SD = 0.93, α = .70), and Physical Aggression (3 items, e.g., “I have threatened people I know,” M = 1.98, SD = 1.05, α = .74). The four subscales correlated from .26 (hostility with verbal aggression) to .60 (anger with verbal aggression), M = .44.

2.1.2. McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD)

The MSI-BPD (Zanarini et al., 2003) is a screening instrument for borderline personality disorder. This 10-item true–false self-report measure (false = 0, true = 1) was derived from the borderline personality disorder module of the Diagnostic Interview for DSM-IV Personality Disorders, a reliable semi-structured interview for Axis II disorders. Each DSM diagnostic criterion is assessed by a single item, with the exception of paranoia/dissociation, which is assessed by two items. The MSI-BPD has shown good specificity (.85) and sensitivity (.81) compared to clinical interviews (Zanarini et al., 2003). In this sample, reliability was adequate (α = .75) with 14.5% of the sample scoring at or above the cutoff score of 7 (Zanarini et al., 2003; M = 3.27, SD = 2.80). Because 6 participants failed to use the true–false format, N for this variable = 159.

2.1.3. Code of honor

McCullough, Pederson, Schroder, Tabak, and Carver (2013) used items from preexisting scales (Berry, Worthington, O’Connor, Parrott, & Wade, 2005; Brezina, Agnew, Cullen, & Wright, 2004; Eisenberger, Lynch, Aselage, & Rohdieck, 2004; Stewart, Schreck, & Simons, 2006) to create a measure of endorsement of a “code of honor.” It assesses approval of revenge (7 items, e.g., “If someone treats me badly, I feel I should treat them even worse”), endorsement of “street code” beliefs (10 items, e.g., “Sometimes, you have to fight to uphold your honor or put someone in his or her place”), and negative attitudes towards forgiveness (7 items, e.g., “I try to forgive others even when they don’t feel guilty for what they did” [reverse-coded]). Responses were made on a 1–5 scale, and were averaged, after appropriate reversals such that higher scores represent greater endorsement of the code of honor (M = 2.46, SD = .61 α = .88).

3. Results

The Self-Control Scale correlated .30 with the LOT-R, a positive association, as would be expected, but not so strong as to suggest that the measures are redundant. The correlations of self-control and optimism with the measures of social disruption are displayed in the first two columns of Table 1. As can be seen there, both optimism and self-control were inversely related to all other scales,

Table 1

<table>
<thead>
<tr>
<th>Bivariate correlations</th>
<th>Multiple regression</th>
<th>R-square change when added last</th>
<th>Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-control</td>
<td>Optimism</td>
<td>Sex</td>
</tr>
<tr>
<td>Anger</td>
<td>-.35***</td>
<td>-.25***</td>
<td>-.29***</td>
</tr>
<tr>
<td>Hostility</td>
<td>-.37***</td>
<td>-.41***</td>
<td>-.28***</td>
</tr>
<tr>
<td>Verbal agg</td>
<td>-.20***</td>
<td>-.22***</td>
<td>-.13</td>
</tr>
<tr>
<td>Physical agg</td>
<td>-.40***</td>
<td>-.11</td>
<td>-.37***</td>
</tr>
<tr>
<td>Borderline</td>
<td>-.35***</td>
<td>-.32***</td>
<td>-.34***</td>
</tr>
<tr>
<td>Code of honor</td>
<td>-.32***</td>
<td>-.24***</td>
<td>-.25***</td>
</tr>
</tbody>
</table>

N = 165, except for analyses involving the Borderline screener, where N = 159.

* p < .05.
** p < .01.
*** p < .001.
with one exception: optimism was unrelated to physical aggression.

A series of multiple regression analyses was then conducted on each measure of disruption, in each case simultaneously entering self-control, optimism, and sex (as a control variable). The next 3 columns of Table 1 display the results of these analyses (β weights for each predictor). For the most part, these results echoed the correlations. Self-control and optimism made independent contributions to prediction of anger, hostility, borderline tendencies, and endorsement of a code of honor. As in the correlations, optimism was unrelated to physical aggression; unlike the correlations the association of self-control with verbal aggression slipped from significance. Gender made a significant contribution to prediction of two of the outcomes.

Finally, regression models were run in which optimism was entered after the other two variables and (separately) self-control was entered after the other two variables. Change in r-square for these last steps are displayed in the next 2 columns of Table 1.

The final column displays the overall R-square for the entire model.

4. Discussion

This study tested whether the two personality traits of self-control and optimism rely on a common core, or a shared strength. That possibility was raise by similarities in the patterns in which these two measures have been associated with other variables in prior work. The answer the data provided is a clear no. The traits are complementary strengths, each contributing uniquely to prediction of several measures of social disruption. Obviously there are limitations to the study. All the measures were self-report rather than behavioral, and as is commonly the case there is some concern about content overlap between predictors and outcomes. The findings do not by any means indicate that both constructs contribute independently to all of the many outcomes to which they have been linked. Indeed, it seems likely that there are outcomes to which only one of the two constructs will relate (as was the case for physical aggression in this study). Nonetheless, the findings do militate against a view in which the two constructs are simply variations on a shared theme.

The independent contributions of these variables to the dependent measures of this study are consistent with a view in which both traits under study have adaptive self-regulatory functions, but functions that differ from one another. Self-control as a construct draws on a line of theory in which evaluations about the best paths to positive long-term outcomes are used to choose what behaviors to engage in or refrain from. Optimism as a construct draws on a line of theory in which confidence about eventual good outcomes is held to keep the person engaged in efforts to foster those outcomes. These two processes are conceptually distinct, they likely influence behavior in different ways and at different stages in behavior, but both contribute in important ways to successful self-regulation.

References


