ABSTRACT. Does working on developing character strengths and relative character weaknesses cause lower life satisfaction than working on developing character strengths only? The present study provides a preliminary answer. After 76 college students completed the Values in Action Inventory of Strengths (C. Peterson & M. E. P. Seligman, 2004), the authors randomly assigned them to work on 2 character strengths or on 1 character strength and 1 relative weakness. Combined, these groups showed significant gains on the Satisfaction With Life Scale (E. Diener, R. A. Emmons, R. J. Larsen, & S. Griffin, 1985), compared with a 32-student no-treatment group. However, there was no significant difference in gain scores between the 2-strengths group and the 1-character-strength-and-1-relative-character-weakness group. The authors discuss how focusing on relative character weaknesses (along with strengths) does not diminish—and may assist in increasing—life satisfaction.

Keywords: character strengths, Values in Action Inventory of Strengths, weaknesses

THE DISCIPLINE OF PSYCHOLOGY, as critiqued by the positive psychology movement, has been overly focused on negative emotions, disorders, and weaknesses (Aspinwall & Staudinger, 2003a; Bolt, 2004; Carr, 2004; Compton, 2005; Csikszentmihalyi & Csikszentmihalyi, 2006; Frisch, 2006; Keyes & Haidt, 2003; Linley & Joseph, 2004; Peterson & Seligman, 2004; Seligman, 2002; Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002). Myers (2007) noted that since 1887, Psychological Abstracts has indexed 17 articles on negative emotions for every 1 article on positive emotions.

Most of the literature that has emerged in positive psychology in the previous decade has emphasized the importance of focusing on developing the strengths of clients in clinical and nonclinical populations. There appear to be many
ethical, rational, and perhaps empirical reasons for this. Some researchers seem to advocate ignoring weaknesses and disorders and focusing only or primarily on strengths and happiness. Carr (2004) stated that positive psychology focuses on enhancing subjective well-being “rather than [on] remediating deficits” (p. 2). Referring to nonclinical populations, Hodges and Clifton (2004) encouraged focusing on strengths rather than on weaknesses. They also encouraged changing the therapeutic paradigm to focus on helping others to excel in a few areas rather than becoming average in many. Regarding executive coaching, Kauffman and Scoular (2004) urged researchers to focus on strengths rather than on weaknesses (p. 293). In the context of teaching courses on positive psychology, Bayliss (2004) noted that there is support in the positive psychology movement to view work with strengths as more productive and rewarding than trying to bolster remediate character weaknesses. In terms of the prevention of disorders, Seligman (2003) wrote, “The major strides in prevention have resulted from a perspective focused on systematically building competency, not on correcting weaknesses” (p. xv).

Some researchers in the positive psychology movement believe that a good life is lived by developing one’s strengths much more than by remediating one’s relative weaknesses. For example, according to this movement, if an individual has one virtue at the 60th percentile and another virtue at the 5th percentile, he or she theorizes that more happiness can be found by developing the virtue from the 60th to the 80th percentile rather than by developing the other virtue from the 5th to 25th percentile.

Although the general emphasis in positive psychology is on strengths, many clinical researchers have recognized the need for clients to balance or integrate their psychological work on both strengths and weaknesses. Peterson and Seligman (2004) wrote, “We write from the perspective of positive psychology, which means that we are as focused on strength as on weakness and as much on ‘building’ as ‘repairing,’ and as much on ‘fulfilling’ as ‘healing’ lives” (p. 4; also in Peterson & Park, 2004). Aspinwall and Staudinger (2003b) believed that many researchers in the positive psychology field seek to complement the work on negative psychological states by expending efforts on understanding and facilitating character strengths. There has been concern that an overemphasis on positive strengths and happiness may distract clinicians—and perhaps funding agencies—from the needs of individuals with psychological disorders, and that psychology as a field may devote too much of its energy into life coaching nonclinical populations. In this regard, Peterson (2006) noted, “As the attention of positive psychology turns to interventions intended to cultivate the good life, let us not overlook the troubled among us” (p. 46).

Lopez, Snyder, and Rasmussen (2003) discouraged the singular therapeutic focus on weakness and disorders. Lopez et al. called for researchers and clinicians to strive for a balance between weaknesses and strengths in the individual and environmental contexts. The value of this balance can be applied to clinical and nonclinical populations. Over the past few years, we have had students in many
of our classes complete the Values in Action Inventory of Strengths (VIA-IS; Peterson & Seligman, 2004) and have used the information from that inventory to tailor strengths-building exercises for each student. We were intrigued that, after we reviewed the results of their top five strengths, our students, within minutes, were eager to find out what their weaknesses were. We wondered whether this reaction was a manifestation of the fundamental negative bias (for a review of this and related concepts, see Wright & Lopez, 2002) and whether working on both one’s character strengths and relative character weaknesses would lead to greater or lesser life satisfaction compared with working only on one’s strengths. After surveying the literature in the positive psychology field, we found no data-based research that directly answered these questions, particularly regarding working with the character strengths identified in the VIA-IS.

Consistent with basic positive psychology objectives, our small preliminary study empirically examined how life satisfaction in a nonclinical population would be influenced by developing only strengths or by addressing both one character strength and one relative character weakness. Psychology students in three courses (all taught by the second author) were randomly divided within each course to work on (a) two of their top VIA-IS-identified character strengths or (b) one of their top strengths and one of their relatively weakest character strengths for 12 weeks of an academic semester. Students in two other psychology courses (taught by the first author) were recruited to serve as a general comparison group and were, thus, not invited to work on their character strengths or weaknesses. Although this is an exploratory study, it seems rational—in light of the tenets of positive psychology—to assume that focusing half of one’s effort on a major character weakness may be somewhat discouraging. Therefore, we framed our main hypothesis as follows: Student participants who complete 12 weekly strengths logs on one character strength and one relative character weakness will show less gain in life satisfaction than will student participants who complete weekly strengths logs on only two of their top strengths (and not on a weakness). Our secondary hypothesis was as follows: Student participants who work on weekly strengths logs will show more life satisfaction than will a comparison group of students who do not explicitly work on their character strengths.

Method

Participants

Participants were 131 undergraduate students enrolled at Lewis-Clark State College, a small state college in the U.S. Pacific Northwest with a student population of approximately 3,300 undergraduates. The intervention group comprised 81 students and constituted one sophomore-level and two junior-level classes (i.e., Developmental Psychology, Adult Development, and Educational Psychology,
respectively; all 81 students were enrolled in courses taught by the second author). The intervention group was randomly divided into the following two groups determined by a coin toss (which allowed a few more participants into one group than the other): (a) a two-strengths group of students \( (n = 37) \) who worked on two of their strongest character strengths for 12 weeks and (b) a one-strength, one-weakness group of students \( (n = 44) \) who worked on one of their strongest character strengths and one of their weakest character strengths for 12 weeks. The comparison group comprised 50 students in two sophomore-level classes (i.e., Developmental Psychology and Biological Bases of Behavior; both courses were taught by the first author).

The average age of the students was 25.35 years \( (SD = 8.95 \text{ years}; \text{range 18–52 years}) \). A one-way analysis of variance (ANOVA) revealed no significant difference in the ages of the three groups at the beginning of the study, \( F(2, 128) = 0.60, p = .55 \), or at the end of the study, \( F(2, 105) = 0.26, p = .77 \). Of the sample participants, 72% were women.

A one-way chi-square revealed no differences in the gender composition of the three groups at the beginning of the study, \( \chi^2(2, N = 131) = 5.72, p = .06 \), or at the end, \( \chi^2(2, N = 108) = 4.57, p = .10 \). The breakdown of ethnicity was as follows: 86% were Euro-American, 6% were Native American, 3% were Asian, 3% were Latino, 3% were mixed, and 4% indicated other. To compare the three groups in terms of ethnicity, all non-Euro-Americans groups were collapsed, and otherwise most of the cells had expected frequencies of less than five. A one-way chi-square revealed no differences in ethnicity (Euro-Americans vs. others) between the three groups at the beginning of the study, \( \chi^2(2, N = 131) = 4.75, p = .09 \), or at the end, \( \chi^2(2, N = 108) = 4.93, p = .09 \).

On the basis of the 131 pretests, an ANOVA showed no significant differences among the three groups on the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), \( F(2, 128) = .10, p = .90 \). There was large attrition in the comparison group because of students dropping courses or missing the posttest class day. We began with 50 students in the comparison group classes, and 32 completed the SWLS posttest. However, \( t \) tests showed no significant difference between SWLS pretest scores of the 18 participants who dropped out and those of the 32 participants who completed the task, \( t(48) = -0.02, p = .98 \). Alternatively, the attrition in the intervention group was relatively low, with only 5 of the 81 participants dropping out; yet the participants who dropped out had significantly lower SWLS pretest scores than did the 76 participants who completed their weekly strengths logs and the SWLS posttest, \( t(79) = 2.41, p = .02 \). Regarding the 108 students who completed the SWLS pre- and posttests, at the beginning of the study there were still no significant differences among the three groups, \( F(2, 128) = .07, p = .93 \); between the two intervention groups, \( t(74) = .27, p = .79 \); or between the combined intervention and comparison groups, \( t(106) = .27, p = .79 \) (see Table 1).
TABLE 1. Life satisfaction scores for student participants \((N = 108)\)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(M)</td>
<td>(SD)</td>
<td>(M)</td>
</tr>
<tr>
<td>Two strengths</td>
<td>24.26</td>
<td>6.41</td>
<td>25.52</td>
</tr>
<tr>
<td>One strength, one weakness</td>
<td>23.85</td>
<td>6.49</td>
<td>25.95</td>
</tr>
<tr>
<td>Comparison</td>
<td>23.69</td>
<td>5.95</td>
<td>22.91</td>
</tr>
<tr>
<td>Interventions combined</td>
<td>24.04</td>
<td>6.42</td>
<td>25.75</td>
</tr>
</tbody>
</table>

Measures

**VIA-IS** (Peterson & Seligman, 2004). The VIA-IS is a self-report Web-based questionnaire with 240 items using a 5-point Likert-type scale ranging from 1 (very much like me) to 5 (very much unlike me). The VIA-IS taps 24 different character strengths derived from six universal virtues; each strength is represented by 10 items on the questionnaire. This creates 24 subscales, all of which have decent internal consistency \((\alpha > .70)\) and temporal stability (for the 4-month test–retest, \(r \sim .70\); Peterson & Seligman, 2004). A variety of studies using the VIA-IS revealed its promising usefulness and validity (e.g., Park, Peterson, & Seligman, 2004, 2006; Peterson, Park, & Seligman, 2006). Validity evidence included that “self-nominations of strengths correlate substantially with the matching scale scores \((rs > 0.5)\)” (Park et al., 2006, p. 124) and that “ratings by friends or family members of a respondent’s top strengths correlate moderately with the matching scale scores for most of the 24 strengths” \((rs \sim .3;\) Park et al., 2006, p. 124).

**SWLS** (Diener et al., 1985). The SWLS comprises five items scored on a 7-point Likert-type scale ranging from 1 (strongly agree) to 7 (strongly disagree) that measure life satisfaction and well-being as a whole. It has good internal consistency \((\alpha = .87)\) and temporal stability (for the 2-month test–retest, \(r = .82\)), and it has been validated through a wide range of studies (Pavot & Diener, 1993). In the present study, the SWLS had an internal consistency of .84. The 131 participants in the present study appeared to be in the average range on the SWLS for American college students, with a mean of 23.6 \((SD = 6.3;\) viz. Pavot & Diener). Pavot and Diener reviewed scores from five samples of American college students \((M = 23.0–25.2, SD = 5.8–6.4)\).
Procedure

The Institutional Review Board at Lewis-Clark State College approved the present study. In addition, we obtained informed consent from and debriefed all participants. Participants in the intervention group completed the VIA-IS and SWLS at the beginning of the spring 2006 semester. The Web-based VIA-IS provided a ranking of the 24 character strengths for each participant. We randomly assigned participants in the intervention group to work on (a) two character strengths or (b) one character strength and one relative weakness. Participants in the two-strengths group then chose two strengths from their top five character strengths (as reported on the VIA-IS results) to focus on for 12 weeks. Members of the one-strength, one-weakness group selected one strength from their top five character strengths and one strength from their lowest or weakest five character strengths (as reported in their VIA-IS results) to focus on for the 12-week intervention.

During the following 12 weeks, the participants wrote strengths logs, one group focusing on two character strengths that they had selected and the other group working on one character strength and one relative character weakness that they had selected. Once per week, the participants wrote four short paragraphs, two short paragraphs each to the following two prompts for one of their strengths: “Describe an event or occurrence in the past when you used this strength successfully; or describe hearing about or seeing someone else use this strength successfully (friend, relative, movie, book, etc.)” and “Describe a plan or situation for the upcoming week in which you will apply this strength.” Then, if the participants had been randomly assigned to work on two of their strengths, they would write two more paragraphs about their other strength using the aforementioned two prompts. If they had been randomly assigned to work on one character strength and one relative character weakness, then their second two paragraphs would address these same two prompts regarding the weakness that they had chosen to work on during the intervention. All members of the intervention group were invited to complete these four paragraphs every week for 12 weeks; both intervention groups completed the strengths logs at a rate of 96–97%. The second author read each of these weekly logs, wrote encouraging comments (e.g., “Well thought-out plan” or “Great example of this strength”) on the logs, and returned them to the participants each week of the intervention. The second author also found something positive yet realistic to comment on in each log entry. The students who constituted these intervention groups were given course credit for completing each of their weekly strengths logs (each log was worth 10 points of a 1,000-point course total).

At the end of the semester, 35 participants of the group working on two character strengths completed the SWLS posttest; and, of the group of participants working on one character strength and one character weakness, 41 completed the SWLS posttest. In addition to having the participants complete the SWLS posttest, we asked them, “Based on the last 12 weeks as a whole, how much effort did you put
into developing your two assigned character strengths, based on using the weekly logs, and following through on the plans you wrote on the logs?’ Participants reported responses on a 7-point scale ranging from 1 (almost none) to 7 (huge).

The students in the comparison group simply completed the SWLS at the beginning and end of the semester during the same weeks when the students in the intervention group completed them. Also, the students in the comparison group did not write any weekly strengths logs.

Results

To test the main hypothesis, we compared the gain scores on the SWLS for participants who were randomly assigned to work on two of their character strengths and those who were randomly assigned to work on one character strength and one relative character weakness. The two-strengths group (n = 35) showed a gain of 1.26 points (SD = 4.27 points) on the SWLS, whereas the one-strength, one-weakness group (n = 41) showed a gain of 2.10 points (SD = 4.06 points) on the SWLS. However, this difference was not significant, t(74) = −.88, p = .38 (see Table 1).

A test of the secondary hypothesis, between the intervention group in general (n = 76) and the comparison group (n = 32), found a significant difference in gain scores on the SWLS. The intervention group gained an average of 1.71 points (SD = 4.15 points) on the SWLS, and the comparison group lost an average of .78 points on the SWLS, t(106) = 2.86, p = .005, two-tailed (medium effect size), η² = .07 (see Table 1).

Because this was a preliminary study, there was an unexpected finding. Although there were no significant gender differences on the SWLS pretest, t(74) = .46, p = .64, a 2 × 2 (Intervention × Gender) ANOVA on the gain scores revealed a significant interaction, F(1, 72) = 4.10, p = .047 (small effect size), η² = .05, and a significant main effect for gender, F(1, 72) = 7.08, p = .010 (medium effect size), η² = .09, but no significant main effect for intervention, F(1, 72) = 1.02, p = .32 (see Table 2). A test for simple effects showed that male participants gained significantly more in life satisfaction than did female participants when focusing on two character strengths, t(33) = −2.88, p = .007 (large effect size), η² = .20. This likely accounts for the main effect of male participants’ showing more gains than female participants. None of the other simple effects were significant. In the comparison group, there was no gender difference in gain scores. Correlating age and gain scores in the intervention group was nonsignificant, r = −.03.

Also, after taking the SWLS posttest, participants in the intervention group answered one item—regarding how much effort they put into developing their two assigned character strengths—on a 7-point Likert-type scale ranging from 1 (almost none) to 7 (huge). The intervention participants felt that they worked diligently in developing their character strengths; the mean score was 5.12 (SD = 1.17; a score of 5 corresponded to making a lot of effort). However, there was no
TABLE 2. Mean and standard deviations of gains on life satisfaction in intervention groups, by gender

<table>
<thead>
<tr>
<th>Intervention</th>
<th></th>
<th>Two strengths</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gender</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>Female</td>
<td>M</td>
<td>0.58</td>
<td>3.51</td>
</tr>
<tr>
<td>Male</td>
<td>M</td>
<td>6.50</td>
<td>6.46</td>
</tr>
<tr>
<td>Overall</td>
<td>M</td>
<td>1.26</td>
<td>4.27</td>
</tr>
</tbody>
</table>

significant correlation between their level of reported effort and amount of gain on the SWLS ($r = .08$).

**Discussion**

Our main hypothesis was not supported; participants who focused on one character strength and one relative character weakness showed as much gain in life satisfaction (2.10 points) as did those who focused only on two character strengths (1.26 points). Working simultaneously on one character strength and one relative character weakness was not a disadvantage. However, the fact that both groups worked on strengths and made gains supported the positive psychology emphasis of focusing on strengths. Focusing on strengths is supported by the greater gains of male participants working on strengths only. Previous research has found that although female participants are more likely to experience depression than are male participants, the literature on well-being and happiness has consistently found little or no gender differences (Fujita, Diener, & Sandvik, 1991; Myers & Diener, 1995). This apparent contradiction has been attributed to women’s experiencing emotions more strongly than men do (Fujita, et al.). Seligman, Steen, Park, and Peterson (2005) reported no gender differences on their baseline or follow-up assessments, but it is unclear whether they looked for any interactions between gender and their interventions to increase happiness. It will be interesting to determine whether the interaction found in the present study will be replicated in future studies.

Our secondary hypothesis appears to have been supported; the two combined intervention groups showed significantly more gain in life satisfaction than a comparison group that was not assigned to work on character strengths or weaknesses. This indicates that writing weekly logs of examples of the use of character strengths
and writing plans to use those character strengths (and getting weekly feedback from a sympathetic professor on those examples and plans) may have an effect on increasing life satisfaction. However, this conclusion is much more tentative than are the findings concerning our main hypothesis. Participants’ receiving weekly encouragement on their strengths logs (rather than on strengths and weaknesses) may have caused increased life satisfaction. Nevertheless, because the group with the one character strength and one relative character weakness made at least as much gain in life satisfaction as did the group with strengths only, we conclude that working on one’s weaknesses in such a context may enhance and not detract from one’s subjective well-being.

Drawbacks to the research design include the facts that there was no random assignment for the intervention and comparison groups, and that the second author taught the intervention group’s courses and, thus, was privy to the desired results. However, the professor for the comparison group (the first author) was kept blind to the intervention. Also, two of the three classes in the intervention group were junior level and one was sophomore level, whereas both classes in the comparison group were sophomore level. This could have affected the outcome in some way, although it seems that there is often not much difference between sophomore- and junior-level courses, and there was no difference in SWLS pretest scores between groups. In addition, the attrition of 5 participants from the intervention group who had significantly lower SLWS pretest scores than did the 76 participants who completed the study may have reduced the gain score difference between the intervention and comparison groups.

The external validity of our study was affected by all our participants’ being college students in psychology classes (although there was a variety of majors taking those classes) from one locale and by the majority’s being Euro-Americans. To make generalizations about whether it is better to work on strengths only or on strengths and relative weaknesses, researchers will need to explore gender interactions, choosing participants who are more diverse, and particularly choosing clinical populations. Internal validity would have been strengthened if we had an intervention group that worked only on their weaknesses. Also, to determine whether simply writing and getting encouragement increased life satisfaction as much as working on strengths, the design of the present study would have been improved if we had included a placebo group of participants who wrote about something other than strengths on a weekly basis and got warm comments from a professor once per week for 12 weeks. Seligman et al.’s (2005) placebo group wrote down early memories daily for 1 week. This appeared to increase the participants’ happiness levels briefly, but within 1 week, they returned to their baseline levels.

The present intervention shared some similarities with two of the five positive psychology interventions that Seligman et al. (2005) described. In Seligman et al.’s Three Good Things in Life intervention, the participants wrote down three things that went well for them that day and the causal explanations for why they
went well; they did this every night for 1 week. In our intervention, participants wrote down a description of a successful use of their assigned strength (which presumably is similar to “something that went well for them”) once per week for 12 weeks. However, in our study, the participants were allowed to write a description of their own “successful use” of the strength, or they could write about someone they had heard about or observed (including a character in a book or movie). The other intervention of Seligman et al.’s study that was similar to ours was called Using Signature Strengths in a New Way. This overlapped with our intervention in that our participants also completed the VIA-IS and addressed at least one character strength every week for 12 weeks. They responded to the prompt “Describe a plan or situation for the upcoming week in which you will apply this strength” and then were encouraged to enact their plan. It is likely that many of them used a signature strength in a new way during these weekly enactments.

Seligman et al. (2005) tested their participants (with the Steen Happiness Index) several times after their 1-week intervention to examine the long-term effect of their interventions; after 6 months, the participants of the Three Good Things and Using Signature Strengths in a New Way interventions showed the greatest positive effect for the five interventions they had used. Also, after 6 months, the participants in those two interventions showed significantly higher levels of happiness than did the placebo control groups. This type of postintervention follow-up is important and would have been a good addition to our study.

Overall, we align the present small preliminary study with the repeated call by Linley, Joseph, Harrington, and Wood (2006) for an integration of strengths and weaknesses: “The big challenge facing positive psychology is... the synthesis of positive and negative aspects of human experience, such that we really might enjoy a unified, integrated psychology” (p. 7).

AUTHOR NOTES

Teri Rust is a professor of psychology at Lewis-Clark State College. Her research interests are classroom assessments and predicting college performance using positive psychology variables. Rhett Diessner is a professor of psychology at Lewis-Clark State College. His research interest is the psychology of beauty: natural beauty, artistic beauty, moral beauty, spiritual beauty, and beautiful ideas. Lindsay Reade is a senior research assistant at Lewis-Clark State College. Her current research interests focus on effective pedagogy.

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