Empirical interest in virtues and their benefits has increased in recent years. In the present study, we test the efficacy of a workbook intervention to promote humility. Participants (N = 59) were randomly assigned to a humility condition (n = 26; 7.5-hour workbook) or a control condition (n = 33; non-action). Participants in the humility condition reported greater increases in humility across time than did participants in the control condition, who did not change in humility over time. Participants in the humility condition also increased in forgiveness and patience and decreased in general negativity more than did participants in the control condition. Our findings demonstrate the efficacy of the intervention with both religious and non-religious individuals, consistent with both a Christian and secular classical valuing of humility.

"Do nothing out of selfish ambition or vain conceit, but in humility consider others better than yourselves. Each of you should look not only to your own interest, but also the interests of others."
—Paul (Phil 2:3–4)

"I have three precious things which I hold fast and prize. The first is gentleness; the second is frugality; the third is humility, which keeps me from putting myself before others. Be gentle and you can be bold; be frugal and you can be liberal; avoid putting yourself before others and you can become a leader among men."
—Lao Tzu

The study of virtues draws interdisciplinary interest from scholars in many domains, such as psychology, religion, and spirituality, and they pervade many aspects of our personal, professional, and spiritual lives. The empirical study of virtues is a central focus of the positive psychology movement. Worthington and Berry (2005) differentiated two types of virtues: warmth and conscientiousness-based virtues. Warmth-based virtues (e.g., humility, love, forgiveness, compassion) are aimed toward motivating behaviors oriented to achieve an inner peace, comfort, and harmony. They tend to govern internal processes as opposed to societal interactions, though they often make societal interactions more pleasant. Conscientiousness-based virtues (e.g., patience, justice, responsibility, and self-control) are aimed at fairness, reciprocity, and cooperation between self and others. These virtues are more inhibitory and explicitly directed at governing behavior within society. The focus of the present study is humility, a warmth-based virtue, and the efficacy of a workbook intervention to promote it.

Whereas the study of many virtues (e.g., forgiveness, gratitude) has flourished, the study of humility has developed more slowly. This virtue is both difficult to measure (e.g., someone who claims to be humble might be bragging about their humility) and difficult to promote through intervention. Even so, scholars propose that humility involves having an accurate view of self, evidenced by honest self-evaluation and willing-
ness to accept one's strengths and weaknesses (Davis, Worthington, & Hook, 2010; Worthington, 2008). Humility also involves restraint of egoistic motives and promotion of other-oriented behaviors (Davis et al., 2010; Worthington, 2008).

Although there is little extant research on humility, the work that has been done demonstrates promising benefits of humility. For example, Krause (2010) found higher levels of humility to be associated with better overall, self-rated physical health. Those high in humility also tend to endorse better quality in their interpersonal relationships, higher academic performance, higher patience and empathy, and higher ratings of job performance (Davis et al., 2013; Peters, Rowatt, & Johnson, 2011).

Humility has also been noted as a potentially necessary component for any kind of personal transformation, particularly in response to an intervention, wherein one must abandon pride and embrace help from another person or resource (Breggin, 2011). Indeed, some psychologists and religious traditions consider humility to be a master virtue—a gateway to other virtues. For example, Seligman (2002) theorized that humility regulates the ego, thereby opening individuals to other virtues and even enhancing mood.

For this reason, many religious traditions promote humility—before the Sacred and one another—as an avenue for self-transcendence (Bollinger & Hill, 2012; Davis et al., 2010). Not only does humility allow for greater self-transcendence for a stronger relationship with the Sacred, it is this minimizing of and transcendence above the self that allows for other-oriented virtue and existence for a greater good than oneself. This develops strength of character and a worldview that expands beyond self-interest, which is common to many religious doctrines (Bollinger & Hill, 2012). Thus, it stands to reason that those with a predisposition to religious and spiritual tendencies may be more readily able to promote humility in their lives.

For example, many have argued that humility is at the root of Christianity. Paul's poetic passage in Philippians 2 is the well-known encouragement to the faithful to practice humility above self-interested activities. Many times in the Gospel according to Matthew, we see Jesus instruct his followers to conceal their prayers and their good-deeds instead of calling attention to their virtue. For Augustine, humility was central; for Aquinas, it was a master virtue; Luther and Calvin were advocates; and for C. S. Lewis, it was essential (see Myers, 1995).

Interventions to Promote Humility

Despite its centrality to many religions and many theorized benefits, as noted above, no psychological interventions have yet been developed to promote humility. Interventions for other virtues such a forgiveness and self-control have been attempted within psychotherapy and psychoeducation, but not for humility. Thus, we chose to create a humility intervention, based upon the structure of Worthington's REACH Forgiveness intervention (2003), but in workbook form.

We consider that a workbook might be the ideal way for a person to seek humility. First, workbook format interventions can be easily administered and disseminated; they require neither a therapist nor a psychoeducational group. A workbook can be completed on one's own and at one's own pace. In addition, workbook interventions have been used successfully to promote other types of virtues, including forgiveness and patience (Greer, Worthington, Lin, Lavelock, & Griffin, in preparation; Harper, Worthington, Griffin, Lavelock, & Vrana, 2013, in preparation; Lavelock, Worthington, Greer, Lin, & Griffin, in preparation). Finally, and most importantly, the workbook climate itself seems appropriate for promoting humility. Humility, by definition, is particularly difficult to develop in the presence of others—even a psychotherapist or others within a psychoeducational or Christian education group. The presence of others may present a paradox of toting one's goodness for others to see and heightening one's self-awareness, which is not ideal for seeking to transcend the self with humility. Humility is a quiet, often private experience that lends itself well to individual contemplation, even if the end result may be invisibly demonstrated among others. Thus, we think that a workbook intervention, rather than one that is interpersonally contextualized, might be particularly efficacious.

The humility workbook intervention was designed to be appropriate for both religious and secular audiences. It takes on average 7.5 hours to complete (as reported by participants in the current study), during which the participant completes six sections and 65 multi-modal exercises to promote humility. In creating this workbook, we drew heavily from theoretical work by Tangney (2005), as well as Peterson and Seligman (2004). Tangney (2005) suggests five tenets of humility: acknowledging limitations, openness to ideas, perspective of abilities and achievement within the big picture, low self-focus, and value of all things. Peterson and Seligman (2004) offered several possible strategies.
for promoting humility: (a) developing an accurate view of self; (b) inducing a sense of awe, transcendence, or inspiration; (c) having individuals intentionally perform menial tasks; (d) seeking forgiveness for one’s transgressions; (e) keeping a gratitude journal; and (f) intentionally sacrificing in one’s relationships (Peterson & Seligman, 2004). These were the theoretical foundations of our intervention workbook.

The Present Study

The purpose of the present study was to examine the efficacy of a humility workbook intervention. We randomly assigned college students to a humility condition, in which they completed the 7.5-hour workbook, or a control condition, in which they merely completed assessments at similar intervals. We tested two hypotheses: first, insofar as humility functions as a master virtue, we hypothesized that participants in the humility condition would not only show greater increases in humility, but also show greater increases in forgivingness, patience, and self-control than the control condition. Second, per the above literature on religious traditions and humility, we hypothesized that religiosity (i.e., religious commitment, spiritual transcendence) would predict participants’ responses to the intervention, such that participants who reported higher levels of religious commitment and spiritual transcendence at baseline would increase in humility more than participants who reported lower levels of these traits.

Method

Participants

Undergraduate students (N = 70) from a large mid-Atlantic university volunteered to participate in exchange for course credit in a study to evaluate the efficacy of a workbook intervention designed to promote humility. Participants were randomly assigned to two conditions: the humility condition (n = 37), which involved completion of a 7.5-hour workbook (described below), or the control condition (n = 33), which involved completing assessments (no intervention). Fifty-nine participants completed all assessments and were included in subsequent analyses (see CONSORT flow chart in Figure 1). The sample ranged in age from 18–48 years (M = 21.34, SD = 4.97) and was 79.3% female. The sample was diverse in terms of ethnicity, including 49.2% Caucasian/White, 28.8% African American/Black, 8.5% Hispanic, 1.7% Asian-American, 3.4% Native American, and 8.5% Other.

Measures

We elected to use trait measures to assess our outcome variables so that we could have more meaningful results in the context of our follow-up design. To have significant results on trait measures at a two-week follow-up suggests strong potential for our workbook intervention.

Humility. Trait humility was assessed with the 10-item Modesty/Humility (MH) subscale of the Values in Action Strengths Inventory (VIA; Peterson & Seligman, 2004). The VIA is a 240-item instrument that assesses 24 different character strengths. Items (e.g., “I don’t act as if I’m a special person”) are scored on a rating scale from 1 = strongly disagree to 5 = strongly agree. Higher scores indicate higher levels of trait humility. The MH showed adequate evidence of internal consistency, with a Cronbach’s alpha of .70 (Peterson & Seligman, 2004); however, no evidence for construct validity was provided in available scale development literature. Across time points, the Cronbach’s alpha ranged from .61 to .82 in the present study.

Forgivingness. Trait forgivingness was assessed with the 10-item Trait Forgivingness Scale (TFS; Berry, Worthington, O’Connor, Parrott, & Wade, 2005). Items (e.g., “I have always forgiven those who have hurt me”) were rated on a 5-point rating scale, ranging from 1 = strongly disagree to 5 = strongly agree. The TFS showed evidence of internal consistency, with Cronbach’s alphas ranging from .74 to .80 (Berry et al., 2005). It also showed evidence of construct validity, being positively correlated with agreeableness, empathic concern, and perspective taking, and negatively correlated with anger, rumination, and hostility (Berry et al., 2005). Across time points, the Cronbach’s alpha in the present sample ranged from .67 to .80.

Patience. The 10-item Patience Scale (PS-10; Schnitker & Emmons, 2007) was used to assess trait patience. Items (e.g., “In general, waiting in lines doesn’t bother me”) were rated using 5-point rating scale, ranging from 1 = very much unlike me to 5 = very much like me. The PS-10 showed evidence of internal consistency, with a Cronbach’s alpha of .78 (Schnitker & Emmons, 2007). Schnitker and Emmons (2007) presented evidence of construct validity in the way of varying degrees of relatedness between PS-10 scores and subscales of the VIA Strengths Inventory (Peterson and Seligman, 2004). Significant correlations also
FIGURE 1
CONSORT Flow Chart

Enrolled (N = 70)

Allocation

Assigned to Humility Condition (n = 37)
Completed T1 (n = 37)
Completed Humility Workbook (n = 26)
Attrition (n = 11)

Assigned to Control Condition (n = 33)
Completed T1 (n = 33)
Completed T3 (n = 26)
Attrition (n = 0)

Analyzed (n = 26)

Analyzed (n = 33)

occurred between the PS-10 and measures of religious behaviors and spiritual transcendence. The Cronbach’s alpha in the present sample across time points ranged from .81 to .83.

Self-control. The 13-item Brief Self-Control Scale (BSCS; Tangney, Baumeister, & Boone, 2004) was used to assess trait self-control. Items (e.g., “I am good at resisting temptation”) were rated using a 5-point scale, ranging from 1 = very much unlike me to 5 = very much like me. It also showed evidence of construct validity via correlations with impulse control, better grades, better relationships, and better psychological adjustment, even when controlling for social desirability bias (Tangney, Baumeister, & Boone, 2004). The BSCS showed initial evidence of internal consistency, with Cronbach’s alphas ranging from .83 to .85 (Tangney et al., 2004). The Cronbach’s alpha in the present sample ranged from .86 to .88.

Religious commitment. The 10-item Religious Commitment Inventory (RCI-10; Worthington et al., 2003) was used to assess individuals’ commitment to a religion. Participants rated their agreement with each item (e.g., “My religious beliefs lie behind my whole approach to life”) on a 5-point Likert scale from 1 = not at all true of me to 5 = totally true of me. In a variety of samples, Worthington et al. (2003) found Cronbach’s alpha coefficients ranging from .88 to .98 and reported evidence for construct validity in the way of strong correlations of the RCI-10 with single-item measures of religiosity and spirituality and with one’s value of salvation. The Cronbach’s alpha for the present sample was .93.

Spiritual transcendence. The 8-item Spiritual Transcendence Index (STI; Seidlitz et al., 2002) was used to assess someone’s sense of spiritual transcendence. Items (e.g., “My spirituality gives me a sense of fulfillment”) were rated on a six-point rating scale, ranging from 1 = strongly disagree to 6 = strongly disagree. The STI demonstrated initial evidence of internal consistency, with a Cronbach’s alpha of .97 (Seidlitz et al., 2002). It also demonstrated evidence
of construct validity via correlations with having a religious affiliation, with the Duke Religion Index (DUREL; Koenig, Parkerson, & Meador, 1997), particularly the intrinsic religion subscale, and with items assessing spiritual/mystical experiences. The Cronbach's alpha for the present sample was .98.

The “PROVE” Humility Workbook. Participants were guided through the workbook organized based on the acronym PROVE. The structure of the workbook into sections and exercises was inspired by Worthington’s REACH Forgiveness intervention manual (Worthington, 2003). Each section of the humility workbook focused on one of the five steps to the acronym PROVE: (a) Pick a time when you weren’t humble; (b) Remember the place of your abilities and achievements within the big picture; (c) Open yourself and be adaptable; (d) Value all things to lower self-focus; (e) Examine your limitations and commit to a humble lifestyle. These steps were engaged using a variety of methods, such as answering open-ended questions about one's experience with humility (e.g., “Is there anything different when two people act humbly toward each other versus when it only goes one way?”), responding to YouTube videos about humility, drawing representations of humility, and identifying pop culture references to reinforce the benefits of humility.

The workbook began with instructions and self-monitoring assessments intended to focus the participant on his or her experience with humility. It is in this section that participants begin to think about a situation in which or a person with whom they have difficulty being humble; this becomes the target situation for the rest of the workbook. Self-monitoring assessments were used only to provide feedback to participants and were not analyzed as outcomes or person variables in the study.

Six sections, including roughly 10 exercises each, then defined humility and prompted the participant to move through the above steps to introduce and promote humility, after which an identical group of self-monitoring assessments was given so that the participant could get an idea of his or her progress. Prior to the present study, the workbook was edited by experts in the field of humility research, as well as pilot-tested on undergraduates for comprehension, readability, average time to completion (range = 6.67 hours to 12.27 hours; average time = 8.92 hours), and other recommendations (N = 6) prior to its use in this study. The workbook took about 7.5 hours to complete on average in the present study. A copy of the workbook can be requested from the corresponding author.

Procedure

Participants were recruited through introduction to psychology courses over the course of two semesters. After registering for the study, participants completed the assessments listed in the above Measures section. After these Time 1 assessments were returned, participants were randomly assigned to either the humility condition, in which participants were emailed their workbook for completion, or the control condition, in which participants were emailed to complete an identical battery of Time 2 assessments in approximately four weeks. Participants who were randomly assigned to the humility condition were given two weeks to complete and return the workbook to the researcher, after which the workbook was checked for completion. Finally, after four weeks (two weeks after the humility condition participants completed the intervention), all participants were emailed the Time 2 assessments.

Results

Means and standard deviations for all measures across time points are reported in Table 1. The data were first checked for normality, missing data, and outliers. All variables met the assumptions of normality with levels of skewness and kurtosis being less than 1.0 in absolute value. There were no outliers outside the ranges of expected values. Intercorrelations of constructs are reported in Table 2.

Eleven participants were eliminated from subsequent analyses because they only completed Time 1 assessments. To examine whether participants who did not complete the study differed from participants who did complete the study, we conducted a one-way multivariate analysis of variance (MANOVA) to examine the initial values of the four outcome variables (i.e., humility, forgivingness, patience, and self-control) at Time 1, as well as religious commitment and spiritual transcendence. There was no multivariate effect, multivariate $F(6, 63) = 0.32, p = .926$, which suggests that participants retained in the analyses and participants who dropped prematurely from the study did not significantly differ on any variable of interest in the present study.

To examine whether remaining participants differed from each other on the outcome variables at Time 1, we conducted another one-way MANOVA on all measures, including religious commitment and spiritual transcendence, at Time 1. No measures were significantly different from one another between conditions at Time 1, multivariate $F(6, 52) = 0.32, p = .923$.

Humility workbook completion time ranged from 2.25 hours to 22.50 hours ($M = 7.51$ hours, $SD = 3.70$ hours).
### TABLE 1
Means and Standard Deviations for Trait Measures (N = 59)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Control Condition</th>
<th>Humility Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait Forgivingness Scale (TFS)</td>
<td>Time 1 M 33.39 SD 5.73</td>
<td>Time 2 M 33.45 SD 6.11</td>
</tr>
<tr>
<td>Values in Action (VIA) - Measure of Trait Humility</td>
<td>VIA M 33.42 SD 4.87</td>
<td>VIA M 33.13 SD 5.88</td>
</tr>
<tr>
<td>Patience Scale (PS)</td>
<td>PS M 36.48 SD 6.67</td>
<td>PS M 36.47 SD 6.97</td>
</tr>
<tr>
<td>Self-Control Scale (SCS)</td>
<td>SCS M 41.15 SD 8.95</td>
<td>SCS M 40.69 SD 9.34</td>
</tr>
<tr>
<td>Religious Commitment Inventory (RCI)</td>
<td>RCI M 23.52 SD 12.16</td>
<td>RCI M 23.27 SD 12.27</td>
</tr>
<tr>
<td>Spiritual Transcendence Index (STI)</td>
<td>STI M 29.85 SD 13.68</td>
<td>STI M 32.27 SD 13.68</td>
</tr>
</tbody>
</table>

Note. Possible values for the TFS (Trait Forgivingness Scale) measure of forgiveness range from 10–50; Possible values for the VIA (Values in Action) measure of humility range from 9–45; Possible values for the PS (Patience Scale) measure of patience range from 10–50; Possible values for the SCS (Self-Control Scale) measure of self-control range from 13–65; Possible values for the RCI (Religious Commitment Inventory) measure of religious commitment range from 10–50; Possible values for the STI (Spiritual Transcendence Index) measure of spiritual transcendence range from 8–48.

### TABLE 2
Time 1 Alphas and Intercorrelations of Religious Commitment, Spiritual Transcendence, and all Virtues Measures at Time 1 (N = 58)

<table>
<thead>
<tr>
<th>VIA</th>
<th>TFS</th>
<th>PS</th>
<th>SCS</th>
<th>RCI</th>
<th>STI</th>
</tr>
</thead>
</table>
| VIA | α = .610
| TFS | .047 | α = .665
| PS  | .306 | .497* | α = .810
| SCS | .238 | .198 | .288 | α = .864
| RCI | .180 | .124 | .186 | .119 | α = .925 |
| STI | .182 | .156 | .140 | .053 | .772* | α = .978 |

Note. TFS = Trait Forgivingness Scale; VIA = Values in Action (humility); PS = Patience Scale; SCS = Self-Control Scale; RCI = Religious Commitment Inventory; STI = Spiritual Transcendence Index.

Hypothesis 1

In Hypothesis 1, we predicted that those in the humility condition would show greater change in humility and in other virtues relative to the control condition. To test this hypothesis, a 2 (Humility v. Control) × 2 (Time 1, Time 2) mixed MANOVA was conducted using treatment condition as a between-subjects
factor and time as a within-subjects factor. Dependent variables included measures for humility, forgivingness, patience, and self-control. There was a significant condition by time interaction effect on the outcome measures, multivariate $F(4, 54) = 3.72, \ p = .010$. Thus, we conducted univariate ANOVAs for each dependent variable to determine the locus of effect. If the condition by time interaction for a particular dependent variable was significant, then we conducted simple main effects analyses to compare Time 1 and Time 2 scores for each condition.

**Effect of the humility intervention on trait humility.** There was a significant condition by time interaction effect on trait humility, $F(1, 57) = 7.84, \ p = .007$. Humility values increased significantly over time within the humility condition, $F(1, 57) = 11.25, \ p = .001$. The effect size was $d = 0.35$. No significant change in trait humility occurred in the control condition (see Figure 2).

**Effect of the humility intervention on trait forgivingness.** There was a significant condition by time interaction effect on trait forgivingness, $F(1, 57) = 8.25, \ p = .006$. Trait forgivingness values increased significantly over time within the humility condition, $F(1, 57) = 15.21, \ p = .001$. The effect size was $d = 0.40$. No significant change in trait forgivingness occurred in the control condition (see Figure 3).

**Effect of the humility intervention on trait patience.** There was a significant condition by time interaction effect on trait patience, $F(1, 57) = 6.30, \ p = .015$. Trait patience values increased significantly over time within the humility condition, $F(1, 57) = 11.14, \ p = .001$. The effect size was $d = 0.28$. No significant change in trait patience occurred in the control condition (see Figure 4).

**Effect of the humility intervention on trait self-control.** There was no significant condition by time interaction effect on trait self-control, $F(1, 57) = 1.08, \ p = .303$.

**Hypothesis 2**

In Hypothesis 2, we predicted that religious commitment and spiritual transcendence would predict better outcomes for participants in the humility condition. Because we were not interested in the change of religious commitment or spiritual transcendence over time in this study but rather their predictive value for changes in humility, we did not conduct a similar anal-

![Humility Scores](image-url)

* $p < .05$. ** $p < .01$. *** $p < .001$.
FIGURE 3
Mean Forgivingness Scores

Forgivingness Scores

<table>
<thead>
<tr>
<th>TFS Score</th>
<th>Time 1</th>
<th>Time 2</th>
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<tbody>
<tr>
<td>40</td>
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</table>

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

FIGURE 4
Mean Patience Scores

Patience Scores

<table>
<thead>
<tr>
<th>PS Score</th>
<th>Time 1</th>
<th>Time 2</th>
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* p < .05, ** p < .01, *** p < .001.
Discussion

In this roughly seven-hour workbook study of the first known intervention to attempt to promote humility, we found that participants increased significantly over time on trait humility within the humility condition, with an effect size of $d = 0.35$, while the participants in a non-action control condition did not change. These observed changes occurred under challenging design circumstances; participants had been randomly assigned to work on a workbook not of their own choosing (participants knew this was a study of "virtue" intervention, not specifically humility), and we measured trait changes in humility, not state. Not knowing that this was a study of humility specifically implies that our participants were not necessarily predisposed to wanting to become more humble, but rather that they were open to becoming more virtuous in general. Thus, our workbook may be helpful even for those who are not looking to grow humility in their lives. Further, measuring trait changes strengthens the implications of our study, as the results more likely indicate authentic, meaningful, and lasting changes in our outcome variables.

These findings might indicate that the research informing the exercises for this workbook were a valid selection for improving humility. The incorporation of engagement in the five tenets of humility as posited by Tangney (2005) (i.e., acknowledging limitations, openness to ideas, perspective of abilities and achievement within the big picture, low self-focus, and value of all things) for this intervention demonstrated consistency with higher scores on trait humility measures. Other aspects of humility, noted in previous research by Peterson and Seligman (2004), which were woven into the exercises of the workbook (e.g., inducing awe and recording thoughts of gratitude) could be individualized to each participant's experience in the workbook format.

We are skeptical that interventions work specifically due to the content of the intervention. Factors such as expectancy, hope, and non-specific factors almost certainly played some part in the changes that accompanied completion of the workbook (for a review of non-specific therapeutic factors, see Wampold, 2001). The control condition and random assignment certainly minimized some of the non-specific factors, yet the mere investment of seven and a half hours of work on average in completing a workbook can establish a propensity to respond positively to questionnaires that purport to measure the effect of the workbook. We are encouraged by our findings because there was some generalization across virtues, which is consistent with virtue theorists who argue that virtues are unitary (Charry, 2011; Worthington & Berry, 2005).

Yet, from a methodological standpoint, we were encouraged because not all of the virtues were equally affected by completing the workbook. For example, while humility, forgiveness, and patience were increased, we found that self-control was not influenced by the workbook.

An ironic effect of this workbook stems from the idea introduced by Breggin (2011) that humility is often necessary for the success of any kind of intervention, in which one must abandon pride and accept the aid of another person or resource who can help you in ways in which you cannot help yourself. Because our intervention increased humility surrounding a certain event in our participants' lives, as well as a more humble personality, by Breggin's logic, these humility outcome measures were achieved only because the participants were humbled enough to increase their humility during the intervention. In other words, it took humility to get humility. It may be that the type of person who chooses to participate in a study of virtue intervention already has this inclination or predisposition for humility.

Once a higher level of humility is attained, however, it seems that the door is potentially open to a number of other virtues. Our results were consistent with Hypothesis 1, such that promoting humility also increased forgiveness and patience. These findings demonstrate that the humility intervention did not simply extend to other warmth-based virtues (Worthington & Berry, 2005; Berry, Worthington, Wade, Witvliet, & Kiefer, 2005) but to conscientiousness virtues like patience as well. Consistent with Berry and Worthing-
ton (2005), humility promotion did produce stronger effect sizes in warmth-based virtues (humility and forgiveness) than in conscientiousness-based virtues (patience). Yet, humility was not so bound by its classification as a warmth-based virtue that its effects did not extend to the conscientiousness-based virtue of patience. Thus, promoting humility can be an efficient route to strengthening other virtues, and in this way, humility may be considered a "master virtue."

Finally, our findings did not support Hypothesis 2. Neither religious commitment nor spiritual transcendence related with or contributed to the improvement of humility over time. Overall, this is hopeful news because these findings demonstrate that the effects of a humility intervention are not limited to individuals who have a strong commitment to their religious doctrine or congregation. Individuals who were religious benefited from the intervention, but so did individuals who were not particularly religious. Our findings demonstrate the accessibility of humility to religious and non-religious populations, as well as the spiritual and the non-spiritual.

Limitations

Many limitations suggest that replication using the present workbooks is in order. We used a small convenience sample of mostly women in the psychology curriculum at a state university. Whereas a total sample of 70 is not small for interventions of 5 or more hours, the sample remains too small and too geographically contextualized for us to comfortably generalize to the overall population.

Because the present study was a part of a larger study, we were not able to assess for outcome measures at post-test, which may have been informative for our hypotheses. Still, the fact that the improvements across many outcome measures were persistent at a two-week follow-up demonstrates the robust potential of a workbook intervention to promote humility.

An additional assessment limitation is that religious affiliation was not assessed in the demographic survey. With this knowledge, we could have determined the spread of religious affiliation in a way that informed Hypothesis 2. For example, had the majority of our participants not endorsed a religious affiliation, it would make perfect sense for religious commitment to provide null predictive results.

A final assessment limitation of this study is the tendency toward self-reports for assessing outcome variables, and particularly the use of the MH scale for assessing trait humility. Because modesty and humility are distinct constructs and because humility is perhaps inaccurately assessed by self-report measures, a more relational measure such as the Relational Humility Scale (Davis et al., 2011) may have provided better information about the humility of our participants (for a review of humility measurement strategies, see Davis et al., 2010). However, due to the design of our study, performing behavioral and other-report measures was not a realistic option. Thus, we chose self-report measures with strong psychometric support and hope to take advantage of recent measurement advances, such as the consideration of other-report, in future studies.

The present study did not include a condition in which participants completed 7.5 hours of an alternative activity; rather, our control participants simply completed pre and post-test measures. Having control participants engage in such of an activity may have altered the results. To address this concern, we have tested the humility workbook against a positivity workbook (consisting of only mood-related content), as well as a non-action control condition in another study (Lavelock et al., in preparation). Consistent with the present study, findings support that the humility workbook leads to greater increases in humility than both the positivity workbook and non-action.

The choice of a privately-completed workbook rather than psychoeducational group or psychotherapy was also a limitation. On one hand, we cannot guarantee that the participants were engaged or participating fully in each workbook activity. To minimize this potential treatment infidelity, we were careful in the design of each workbook to make certain that the participants could not simply breeze through the workbook by making up answers but actually had to watch the videos, read the quotes, and complete all prescribed aspects in order to complete the workbook. The fact that the workbook was completed in the end was support of at least minimal engagement. On the other hand, however, we argued that a workbook minimized the self-consciousness about a participant’s motives by taking the observer (i.e., other group members or psychotherapist) out of the picture.

It is important to remember that the humility workbook had not been tested previously. Thus, we sought to minimize potential issues by collecting feedback in a pilot study to allow revision for the present study.

Research Agenda

The current study illustrates the potential of further development of virtue interventions. We are revising the current humility workbook (e.g., removing redundant exercises, condensing exercises for efficiency’s sake, etc.) for use in future studies intended to
replicate the findings of this research and to examine other potential outcomes that may be correlated with humility promotion. Importantly, humility's function as a "master virtue" should be examined further, both with replication and by casting a broader net of virtue outcome measures. In particular, the self-directed workbook intervention administered in the present study conforms to Kazdin and Rabbitz's (2013) mandate for mental health treatments that may be easily disseminated to a broad range of people who might be unreached by traditional mental health services. Upon replication of current study findings, clinical implications and optimal intervention circumstances and engagement should be explored.

Additional outcomes should be examined as they relate to humility promotion, such as physical health as suggested by Krause (2010), perhaps in terms of cardiovascular health, cortisol release as an indicator of stress, or longevity. Mental health too could be understood in light of humility by measuring such outcome variables as depression, anxiety, or insomnia. Findings in support of humility as a protective factor for these health outcomes, as well as findings in support of pride as a risk factor, can continue to bridge positive psychology and health psychology, as many virtues like forgiveness as well as other factors have already begun. Furthermore, future studies may benefit from a conceptualization of humility as fundamentally relational (Davis et al., 2013). By examining predictors and outcomes that are interpersonal in nature, as well as by incorporating other-report, we can more readily understand the social implications of humility.

Humility interventions should be considered in a number of populations. This might include use within Christian adult communities, use within other religious contexts, and use with people with completely secular or non-religiously spiritual motives. While our sample is racially and ethnically diverse, all participants were located in the same community, the same university, and the same curriculum, and by the nature of college samples age diversity was limited. Testing the effects of a humility intervention on multiple populations of diverse backgrounds and personality types may shed light on who may have the most to gain from such an intervention.

Conclusion

Overall, these findings are consistent with the young and quiet field of humility research. Perhaps humility has hidden beneath the surface of other virtues, and with its explicit promotion and subsequent minimizing of the self for the greater good, we can better understand its effects. It remains unknown how exactly religiosity and spirituality might contribute or relate to humility interventions, but with a humble understanding of our own limitations and suggestions for research to serve this greater good, we hope to reach a deeper understanding of humility's far-reaching effects and associations.

In general, our goal was to learn more about promoting humility so we can help people be virtuous when they want to be, both for their own well-being and in the interest of others. Previous research on virtue-promoting therapy, psychoeducation, and awareness have all been researched to some degree, but to truly make an impact on society, the population needs to be able to make these changes themselves. We hope that this has been an early step in the positive psychological attempt to help promote self-directed virtue development.

References


Author Information

LAVELOCK, CAROLINE R. MS. Correspondence: Everett L. Worthington, Jr., 806 West Franklin St. PO Box 842018, Virginia Commonwealth University, Richmond, VA 23284. Title: Doctoral student. Degree: MS (Counseling Psychology) Virginia Commonwealth University. Specializations: positive psychology, humility, patience, and virtue interventions

WORTHINGTON JR., EVERETT L. Ph.D. Address: Department of Psychology, Virginia Commonwealth University, 806 West Franklin Street, PO Box 842018, Richmond, VA 23284-2018. Website: www.evworthington-forgiveness.com. Email: eworth@vcu.edu. Title: Professor of Psychology (Counseling Psychology). Degree: PhD (Counseling Psychology) University of Missouri-Columbia. Specializations: forgiveness and other virtues, religion and spirituality in counseling and marriage, the Hope-Focused Couple Approach to marriage/couple enrichment

DAVIS, DON E. PhD. Address: Department of Counseling and Psychological Services, Georgia State University, P.O. Box 3980, Atlanta, GA 30302-3980. Title: Assistant Professor of Counseling and Psychological Services, Georgia State University. Degree: PhD (Counseling Psychology) Virginia Commonwealth University; BA (Psychology) Yale University. Specializations: humility, forgiveness, positive psychology, religion/spirituality.

GRIFFIN, BRANDONJ. Correspondence: Everett L. Worthington, Jr., 806 West Franklin St. PO Box 842018, Virginia Commonwealth University, Richmond, VA 23284. Title: Graduate student. Degree: BA (Religious Studies, Intervention, and Psychology) Southwest Baptist University. Specializations: positive psychology, self-forgiveness, moral injury, religion, philosophy, and gratitude

REID, CHELSEA A. Correspondence: Everett L. Worthington, Jr., 806 West Franklin St. PO Box 842018, Virginia Commonwealth University, Richmond, VA 23284. Title: Doctoral candidate. Degree: MS (Experimental Psychology—Social), Virginia Commonwealth University. Specializations: relationships, belonging, attitude alignment, forgiveness, and nostalgia

HOOK, JOSHUA N. Address: University of North Texas, 1155 Union Circle #311280, Denton, TX 76203. Email: joshua.hook@unt.edu. Title: Assistant Professor of Psychology. Degree: BS (Psychology) University of Illinois at Urbana-Champaign; MS (Counseling Psychology) Virginia Commonwealth University; PhD (Counseling Psychology) Virginia Commonwealth University. Specializations: humility, forgiveness, religion/spirituality.

VAN TONGEREN, DARYL R. Ph.D. Address: Department of Psychology, Hope College, Skea Science Center, 35 East 12th Street, Holland, MI 49423-3605. Email: vantongeren@hope.edu. Title: Assistant Professor of Psychology. Degree: BA (Psychology) Colorado Christian University; MA (Experimental Psychology) University of Colorado, Colorado Springs; PhD (Social Psychology) Virginia Commonwealth University. Specializations: social psychological approaches to meaning, religion, and virtues.