Using your strengths

Strengths use and its relation to stress in Sweden

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Abstract

Introduction: Stress is a widespread problem and in Sweden many of the long-term sick are due to stress related causes. Discussions about how to reduce stress are present. Positive psychology offers one potential way to reduce stress. One intervention that has strong benefits is to know one's strengths of character, this has benefits both in reducing depression and stress as well as increasing well-being. Coaching psychologists stand on the platform of positive psychology and may play a key role in guiding healthy people preventive through reduced risk for stress related health adversatives. The aim of this essay is to investigate impact of strengths on perceived stress and well-being.

Method: A test battery containing questionnaires about psychological well-being, subjective well-being, strengths of character, strengths use and stress were put together and administered via internet to the participants.

Results: A total of 21 participants answered the questionnaire (10 male). The main finding includes that stress were positively correlated with satisfaction with life, psychological well-being and negatively correlated with negative affect. Strengths use was positively correlated with psychological well-being and positive affect. A multiple regression analysis showed that only negative affect and strengths use was strong predictor of perceived stress.

Conclusion: As strengths use are related to stress in two ways, both by predicting presence of stress and by increasing well-being, which in turn are related to lower perceived stress.

Keywords: Positive psychology, Stress, Well-being, Coaching, Strengths of character, Strengths use

Introduction

Stress and burnout is common in today’s society. In Sweden, among other countries, the rate of sick leave has increased in the last years (Socialstyrelsen, 2003; Försäkringskassan Analys och Prognos, 2014). According to the Swedish social agency around 80 percent of all sick leaves are due to stress and stress related symptoms (Socialstyrelsen, 2003). Further, the numbers of sick leave has increased with four times for women and two times for men between 1992 and 2002 (Socialstyrelsen, 2003). 2012 there were 25 000 more cases of sick leave due to psychological diagnosis than 2009 (Försäkringskassan Analys och Prognos, 2014). The most prominent groups are high paid young workers and persons working close with other people, such as care professionals and school personnel (Socialstyrelsen, 2003).

Stress is a state in which a person is out of homeostasis (Novak, Hamel, Kelly, Dettmer, & Meyer, 2013). When discussion stress in work-related environments it is useful to distinguish between good and bad stress. Stress can be due to rewarding events, which is stress that leads to positive responses, or due to aversive events, which then leads to negative responses (Le Fevre, Kolt, & Matheny, 2006). When talking about stress it is often referred to as an inability to handle the demands of everyday life (or work load) with the control that is given. Stress is a reaction in the body that causes hormonal changes. If these changes do not return to homeostasis it is called chronic stress and may lead to burnout and other related diseases (Socialstyrelsen, 2003). Stress in the workplace can be explained by a model by Karasek (1979 in Socialstyrelsen, 2003), in which he states that control and demand of work is the factors associated with work-related stress. However, this model is criticized by Rodrigues, Bravo, Peiro, and Schaufeli, (2001) and additional factors have been added, including support and locus of control. One study did examine control, demand, locus of
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control and support on 542 persons in five different countries and found that high demands, low control, low support and external locus of control were correlated with job-dissatisfaction (Rodrigues et al., 2001). However, how effectively we adjust to the demands in the stressful situation may be more important than the level of stress itself (Rodrigues et al., 2001; Socialstyrelsen, 2003).

The long-term sick leave talks for itself, we have an increase in the amount of long-term sick leave and most of the cases are due to stress and other psychological factors (Socialstyrelsen, 2003). Researchers among other are speculating in how we can decrease and prevent these kinds of long-term work leave. They are suggesting therapy and medication (Socialstyrelsen, 2003), however, there may be even other possible strong interventions. In the area of positive psychology, researchers try to find what makes people feel good (Linley & Jospeh, 2004). Research of positive psychology includes all research that looks at human flourishing, including positive emotions, positive traits and positive institutions (Seligman, Steen, Park, & Peterson, 2005). Flourishing can be seen as a life that is fulfilled and meaningful for the purpose of its own sake (Linley & Jospeh, 2004).

From ancient times, happiness and the good life has been a debate. Socrates talked about a good life, eudaimonia, in which you ought to live in line with life and the self, whereas others talked about hedonia, to seek pleasure in the moment and live an enjoyable life (Ryan & Deci, 2001). Henderson and Knight (2012) present an integrated view of how we can combine the philosophical standpoints. They integrate hedonic feelings with eudaimonic feelings and argue that we need both of them in order to be flourishing (Henderson & Knight, 2012). However, research on eudaimonia and hedonia can be done by looking at orientations or feelings. Orientation is a tendency to prefer hedonic or eudaimonic activities. A feeling on the other hand is which feelings the activities bring when executed (Vittersö, Söholt, Hetland, Thoresen, & Röjsamb, 2010). Schueller and Seligman (2010) studied orientations and feelings when looking at different pathways to well-being. They included three pathways, positive emotions, engagement and meaningfulness. They found that subjective well-being (feeling of pleasure) was correlated stronger with engagement and meaning than with positive emotions. They also found that objective well-being (as indicated by educational and occupational attainments) showed negative correlation with an orientation towards pleasure and a positive correlation with engagement and meaning (Schueller & Seligman, 2010). These findings suggest that orientations towards happiness are important for which activities we should engage in to maximize well-being, as there are individual differences in which activities that increase well-being (Schueller & Seligman, 2010). This is also argued by Vittersö et al. (2010) who states that a person with an hedonic orientation towards happiness gets stronger increase in well-being when engaging in hedonic activities(activities that bring pleasure), whereas people with an orientation towards eudaimonia show greatest well-being increase when engaging in eudaimonic activities (activities that bring meaning).

However, in order to be flourishing it is suggested that we need to have both hedonic and eudaimonic feelings (Henderson & Knight, 2012). This is also suggested by Seligman, which states that we need to have positive emotions, engagement, positive relations, meaningfulness and accomplishments in order to be flourishing (Seligman, 2011). So happiness is then the positive subjective feeling decided by the person, and well-being is both happiness and aspects that are creating feelings of meaning and engagement (McMahan & Estes, 2011). Well-being consists of both hedonic and eudaimonic feelings, and to distinguish between them the concepts of psychological well-being (eudaimonia) and subjective well-being (hedonia) are used. Subjective well-being includes two components, one cognitive (life satisfaction) and one affective (including positive and negative emotions: Ryan & Deci,
2001). Whereas psychological well-being includes six aspects: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance (Ryff, 1989).

Strengths is by Wood, Linley, Maltby, Kashdan and Hurling, (2011) defined as an inborn characteristic that when used makes us feel good. However, Peterson and Seligman (2004) have put forth a manual of 24 such strengths that they call strengths of character or signature strengths. In positive psychology interventions based on strengths are developed. Research has shown that different strengths are related to well-being in different ways. For example Park, Peterson, and Seligman (2004) investigated the relation between individual strengths and life satisfaction on adults that had answered one online survey of strengths of character. They found that the strengths of hope, zest, gratitude, love and curiosity were related to life satisfaction. Some interventions have been seen to create stronger and faster changes in well-being. Some examples of stronger interventions are use of signature strengths and gratitude. In one study where they examined strengths use and gratitude they found that these two interventions caused lasting well-being changes. Moreover, other interventions such as identifying your strengths and write about “when I am at my best” only caused transient changes in well-being (Seligman et al., 2005). Interventions based in strengths involves both discovering ones strengths and learn how to use them in new ways (Seligman et al., 2005).

Strengths are something that can be seen in an individual and is morally valued (Peterson & Park, 2004). There are additional criteria, however, for example Linley, Willars and Biswas-Diener (2010) emphasize three criteria in which we can assess strengths. [1] Strengths gives energy, [2] strength is often used and [3] when it is used the result is good. Strengths are something that we already have but many of us do not use that much, an inborn tendency to feel good when executing a certain behavior. When we use our strength we feel good, as we both are energized and feel good about the result. Strength use is not about doing one thing, but rather to find ways in which the self feels good and is happy. The most well-being increase is seen when we learn to use unrealized strengths (Wood et al., 2011).

To know about strengths, to know which orientation to happiness we have, and to know how we can live a more fulfilling life is important as it may protect us from the setbacks of a negative event (Fredrickson, 2001). When we have positive emotions the hormonal homeostasis is restored, whereas when we have negative feeling the cortisol levels are elevated and systems to avoid danger is activated (Barak, 2006; Novak et al., 2013). If stress can be prevented with easy and cost effective methods such as use of strengths, it would benefit not only at risk persons but also society in large.

This essay will look at strengths and strengths use, and it’s relation to perceived stress. Also, specific strengths have been seen to correlate with well-being and should also be related to stress (Park, Peterson, & Seligman, 2004). One further aspect is that no found article looks at psychological well-being but rather subjective well-being.

The aim and hypothesis of the essay is to look at: 1.1: High scorers on strengths use show lower levels of perceived stress. 1.2: High scores on curiosity, zest, hope, gratitude, love are related to lower levels of perceived stress. 1.3: The high scorers on psychological well-being show lower perceived stress. 2. The second aim of this essay is to examine the casual relationship between perceived stress, well-being and strengths use.
Methods

Participants
The test battery was open for answers between the 25 of February 2015 and 20 April 2015. A total of 21 responses were collected. The total sample consisted of 10 male and 11 female, 9 of which had completed 3 years of university studies or more. 17 of the participants were below 30 due to university sample, and only five were working or combining work and studies. Due to a small sample size analyses do not include age differences. However, gender differences are seen and analyzed but a t-test showed no significant differences between gender groups (see table 1).

Table 1
Characteristics of sample

<table>
<thead>
<tr>
<th>n</th>
<th>Gender</th>
<th>Level of education</th>
<th>Current occupation</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Less than three year of university studies</td>
<td>Studying</td>
<td>Below 30</td>
</tr>
<tr>
<td>11</td>
<td>Male</td>
<td>Three or more years of university studies</td>
<td>working</td>
<td>Above 30</td>
</tr>
<tr>
<td>10</td>
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<td></td>
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</tbody>
</table>

Note. Table represents characteristics of sample. N= 21. There are no significant differences between characteristics.

Measurement
Positive affect and negative affect schedule (PANAS). The PANAS is developed by Watson et al. (1988) and consist of two subscales, positive affect and negative affect. The PANAS includes 10 positive words (e.g. enthusiastic, interested, and determined among others) and 10 negative words (e.g. scared, afraid, and upset among others). The participants rate how often they have felt the feeling in the last week, on a scale from 1 “very seldom or not at all” to 5 “extremely often”. The scale show good psychometric properties, with an internal consistency between $\alpha=0.86-0.90$ for the positive affect and $\alpha=0.84-0.87$ for the negative affect. Also the test retest reliability is good showing 0.68 for PA and 0.71 for NA in general (Watson & Clark, 1988).

Satisfaction with life scale (SWLS). The SWLS (Diener, Emmons, Larsen, & Griffin, 1985) is a brief measure consisting of five items (e.g. “In most ways my life is close to my ideal” and “The conditions of my life are excellent”). The participant are asked to rate how well the item fits the on a scale from 1 “strongly disagree” to 7 “strongly agree”. They are then summed together and a higher score indicate higher well-being (Pavot & Diener, 2009). Pavot and Diener has recently reviewed the psychometric properties and found that the internal consistency ranged from $\alpha=0.79 - 0.89$ and that the test retest reliability are ranging from 0.5 for 10 weeks and 4 years to 0.84 for one month (Pavot & Diener, 2009).

Ryff psychological well-being scale (PWB). The psychological well-being scale is theoretically driven and developed by Ryff (1989). The psychological well-being dimensions
are autonomy (e.g. “I tend to be influenced by people with strong opinions”), environmental mastery (e.g. “The demands of everyday life often get me down”), positive relations (e.g. “Maintaining close relationships has been difficult and frustrating for me”), purpose in life (e.g. “I sometimes feel as if I’ve done all there is to do in life”), personal growth (e.g. “For me, life has been a continuous process of learning, changing, and growth”) and self-acceptance (e.g. “I like most aspects of my personality”). Factor analyses provide support for six different subscales one higher order dimension which they call psychological well-being (Ryff & Keyes, 1995). Each subscale has shown good psychometric properties for the full 14 item scale, the internal consistency range from 0.86 for autonomy to 0.93 for self-acceptance (environmental mastery 0.90, Positive relations 0.91, purpose in life 0.90, personal growth 0.87). Further the test retest reliability range from 0.81 for environmental mastery and personal growth to 0.88 for autonomy (positive relations 0.83, purpose in life 0.82, self-acceptance 0.85; Ryff., 1989). Also a shorter version is developed with three items per scale and the internal consistency range from 0.33 on purpose in life to 0.56 for positive relations (self-acceptance 0.52, environmental mastery 0.49, personal growth 0.40, autonomy 0.37) (Ryff & Keyes, 1995).

Perceived stress scale (PSS). The PSS measures perceived stress and as such the feelings of stress. The scale is developed by Cohen, Kamarck & Mermelstein (1983) and consists of 14 items, 7 of which are positively worded (e.g. “In the last month, how often have you dealt successfully with irritating life hassles”) and 7 negative worded (e.g. “In the last month, how often have you felt that you were unable to control the important things in your life”). The participants are asked to answer on a likert scale from 0 “never” to 4 “very often”. Test of psychometric properties show good internal consistency α=0.84–0.86 and test retest reliability were 0.85 for 2 days and 0.55 for six weeks (Cohen, Kamarck, & Mermelstein, 1983).

Values in action (VIA). The values in action are a classification system of strengths (Peterson & Seligman, 2004). The aim is to create a classification manual additional to the DSM classification of pathology. The classification is theoretically driven and consists of 6 classes of virtues. A virtue is a broad category that has been valued by philosophers and thinkers through history. Each virtue consists of subgroups, strengths, that all are connected with the virtue but yet distinct from one another. A total of 24 strengths are included in the questionnaire, but not all of them are easy to measure. The long version consists of 10 items per scale, resulting in 240 questions which take about 45 minutes to complete (Peterson & Seligman, 2004). For this reason shorter version has been developed. The psychometric properties for the 240 version of the scale is good with an internal consistency ranging from 0.72-0.91 whereas the test retest reliability range from 0.46-0.68 for 6 months (Park & Peterson, 2006; Linley, et al., 2007). The short version used in this test battery is a two item scale developed by Furnham and Lester (2012).

Strengths use scale (SUS). The strengths use scale is developed by (Wood et al., 2011). It consists of 14 items(e.g. “I am regularly able to do what I do best” and “I always play to my strengths”), and the participant are asked to answer on a likert scale from 1 “strongly disagree” to 7 “strongly agree”). The internal consistency is 0.97 and all the items are correlated with one structure.

Statistics
For the statistical analyses IBM SPSS statistics version 22 were used. The scores were manually counted and then inserted into SPSS. Significance tests for gender and age differences were performed. Further, correlation analyses between the different variables were
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made and a multiple regression analysis was performed to examine how the different variables predicted perceived stress.

**Procedure**

In order to investigate if stress were related to strengths use, strengths and well-being, a test battery was put together. This battery was meant to measure subjective well-being (positive affect, negative affect and life satisfaction), psychological well-being (including autonomy, environmental mastery, purpose in life, positive relations, personal growth and self-acceptance), strengths, strengths use and perceived stress. The battery was done as an online survey using google forms and the invites were sent via email. The first questions of the survey were information about the study, confidentiality and withdrawal. In order to continue the survey they had to check the box “I have understood”. Otherwise they could click “no” and be thanked for their participation.

**Results**

**Strengths use and perceived stress**

The results show a moderate negative correlation between the strengths use and perceived stress ($r = -0.581$, $N=21$, $p = 0.006$, two tailed, see table 2). These results support the first hypothesis: that high strengths use would be correlated with lower ratings of perceived stress.

**Individual strengths and perceived stress**

The second hypothesis was to examine if the five character strengths (zest, curiosity, humor, gratitude and hope) associated with well-being also were related to lower perceived stress. However, this hypothesis was not supported by this dataset. The only significant correlation with perceived stress were seen in a negative correlation with persistence ($r = -0.438$, $N=21$, $p =0.047$), see table 2). In order to examine if the data set did support previous findings that these five strengths (zest, curiosity, humor, gratitude and hope) were related to well-being a correlation analysis were performed (see table 2 for a summary of all correlations).

**Perceived stress and well-being**

Correlation analyses between well-being and stress showed significant results. As presented in table 2 perceived stress were negatively correlated with satisfaction with life ($r = -0.379$, $N=21$, $p =0.030$, two-tailed), and the overall scores on psychological well-being ($r = -0.515$, $N=21$, $p =0.017$, two tailed). A positive correlation were further found between perceived stress and negative affect ($r =0.593$, $N=21$, $p =0.005$, two tailed). However, there were no significant correlation between perceived stress and positive affect ($r =-0.379$, $N=21$, $p =0.090$, two tailed).

<table>
<thead>
<tr>
<th></th>
<th>SWLS</th>
<th>PA</th>
<th>NA</th>
<th>PWB</th>
<th>PSS</th>
<th>SUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWLS</td>
<td>1</td>
<td>.454</td>
<td>-.488</td>
<td>.600</td>
<td>-.473</td>
<td>.249</td>
</tr>
<tr>
<td>PA</td>
<td>.454</td>
<td>1</td>
<td>.028</td>
<td>.778</td>
<td>-.379</td>
<td>.709</td>
</tr>
<tr>
<td>NA</td>
<td>-.488</td>
<td>.028</td>
<td>1</td>
<td>-.170</td>
<td>.593</td>
<td>-.161</td>
</tr>
<tr>
<td>PWB</td>
<td>.600</td>
<td>.778</td>
<td>-.170</td>
<td>1</td>
<td>-.379</td>
<td>.675</td>
</tr>
<tr>
<td>PSS</td>
<td>-.473</td>
<td>-.379</td>
<td>.593</td>
<td>-.515</td>
<td>1</td>
<td>-.581</td>
</tr>
<tr>
<td>SUS</td>
<td>.249</td>
<td>.709</td>
<td>-.161</td>
<td>.675</td>
<td>-.581</td>
<td>1</td>
</tr>
<tr>
<td>Curiosity</td>
<td>.199</td>
<td>.252</td>
<td>-.069</td>
<td>.260</td>
<td>-.202</td>
<td>.328</td>
</tr>
</tbody>
</table>

Table 2

*Correlation coefficients between well-being, perceived stress, strengths use and individual strengths*
Using your strengths

| Love of learning | .361 | .651** | -.117 | .463* | -.292 | .549** |
| Judgment | -.004 | -.123 | -.205 | .018 | -.057 | -.071 |
| Creativity | .344 | .395 | -.141 | .378 | -.370 | .324 |
| Courage | .265 | .217 | -.009 | .360 | -.291 | .448* |
| Persistence | .238 | .184 | -.227 | .100 | -.438* | .371 |
| Integrity | .416 | .251 | -.397 | .277 | -.336 | .130 |
| Kindness | .379 | .080 | -.406 | -.022 | .005 | .096 |
| Love | .266 | .312 | -.277 | .141 | -.185 | .493* |
| Fairness | -.008 | -.029 | -.187 | .016 | -.102 | .187 |
| Leadership | .483* | .138 | -.178 | .312 | -.418 | .280 |
| Self-regulation | .023 | .168 | .093 | .102 | -.095 | .307 |
| Prudence | .264 | -.123 | -.466* | .006 | -.301 | .058 |
| Humility | .054 | -.024 | .056 | -.009 | -.040 | -.311 |
| Appreciation of beauty | .346 | .336 | -.494* | .360 | -.359 | .376 |
| Gratitude | .369 | .575** | .089 | .535* | .050 | .373 |
| Hope | .206 | -.064 | -.463* | .137 | -.189 | .076 |
| Spirituality | .252 | .481* | -.065 | .511* | -.178 | .522* |
| Forgiveness | .458* | .082 | -.629** | .131 | -.406 | .081 |
| Humor | .220 | .429 | -.034 | .515* | -.191 | .400 |
| Zest | .295 | .313 | -.135 | .138 | -.202 | .173 |
| Citizenship | .260 | -.069 | -.200 | .214 | -.374 | .247 |
| social intelligence | .095 | -.065 | .143 | -.178 | .186 | -.147 |
| Wisdom | -.037 | .160 | .016 | .105 | .052 | .158 |

**Note.** Table represents Pearson's correlation coefficients. * represent significance at the 0.05 level and ** represent significance at 0.01 level (two-tailed). SWLS: Satisfaction with life scale, PA: Positive affect, NA: Negative affect, PWB: Psychological well-being, PSS: Perceived stress scale, SUS: Strengths use scale

**Routes to perceived stress**

According to the data in table 2, no multi co-linearity was found regarding the predictor variables in the multiple regression backward analysis. All relevant predictor variables (subjective well-being, psychological well-being and strengths use) were included in the initial model. This first model explained 61.3 percent of the variance on perceived stress (see table 3). However, positive affect did not statistically increase the model and where thus removed from the analysis giving that satisfaction with life, negative affect, psychological well-being and strengths use were entered into the second model. The second model explained 61.2 percent of the variance on perceived stress. The third model included negative affect, psychological well-being and strengths use and explained 61.0 percent of the variance on perceived stress. The fourth model only included Negative affect and strengths use. This model explained 59.4 percent of the variance on perceived stress. These results suggest that the only significantly contributions to the perceived stress were negative affect and strengths use (see table 3). In order to examine this effect further a correlation analysis between strengths use, stress and negative affect were performed. This analysis showed that stress was significantly correlated with negative and strengths use. However, negative affect and strengths use were not significantly correlated (see table 2).
Table 3

Multiple regression coefficients and statistics

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
<th>F</th>
<th>p</th>
<th>B</th>
<th>β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>0.783</td>
<td>0.613</td>
<td>0.484</td>
<td>4751 (5,15)</td>
<td>0.008</td>
<td>41.662</td>
<td>-0.269</td>
<td>-0.439</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>0.454</td>
<td>0.453</td>
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<td></td>
<td></td>
<td>0.083</td>
<td>0.071</td>
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<td></td>
<td></td>
<td></td>
<td>-0.136</td>
<td>-0.88</td>
</tr>
<tr>
<td>Model 2</td>
<td>0.782</td>
<td>0.612</td>
<td>0.514</td>
<td>6.298 (4,16)</td>
<td>0.003</td>
<td>40.967</td>
<td>-0.250</td>
<td>-0.408</td>
</tr>
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<td></td>
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<td>0.475</td>
<td>0.474</td>
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<td>-0.107</td>
<td>-0.069</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.171</td>
<td>-0.118</td>
</tr>
<tr>
<td>Model 3</td>
<td>0.781</td>
<td>0.610</td>
<td>0.541</td>
<td>8.845 (3,17)</td>
<td>0.001</td>
<td>38.101</td>
<td>-0.237</td>
<td>-0.386</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>-0.237</td>
<td>-0.169</td>
</tr>
<tr>
<td>Model 4</td>
<td>0.771</td>
<td>0.594</td>
<td>0.549</td>
<td>13.169 (2,18)</td>
<td>0.000</td>
<td>37.749</td>
<td>-0.305</td>
<td>-0.498</td>
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<td></td>
<td></td>
<td></td>
<td>0.514</td>
<td>0.513</td>
</tr>
</tbody>
</table>

Note. Table represents statistics from a multiple regression analysis.

Discussion

Using your strengths correlates with the levels of perceived stress in this sample. Also, the specific strengths; hope, zest, gratitude, love and curiosity (Park & Peterson, 2006; Park, Peterson, & Seligman, 2004) correlated with well-being and did not correlate with the levels of perceived stress. Nor did it correlate with well-being in the suggested way. Third, the levels of psychological well-being were hypothesized to correlate with the levels of perceived stress. This suggestion was supported by the data in this study. Fourth, a regression analysis was performed in order to investigate a model of well-being and its impact on perceived stress. The model that fitted the data best suggested that negative affect and strengths use were the only significant predictors of perceived stress.

Strengths use and perceived stress

Strengths use, or our ability to use strengths in everyday life, is a task that is effective to increase well-being (Proctor, Maltby, & Linley, 2011). In this study we found that strengths use were related both to the levels of perceived stress and a significant predictor of perceived stress. Strengths use has also been suggested to enhance goal processes and need satisfaction (Linley, Nielsen, Gillett, & Biswas-Diener, 2010), further supporting the hypothesis that strengths use is beneficial for buffering against stress. However, the correlation may be due to other factors, which can be more related to well-being rather than strengths use. This may be due to previous finding indicating that knowing your strengths is related to increased well-being (Seligman, Steen, Park, & Peterson, 2005). The conclusion to be drawn, however, point to importance of knowing your strengths and to use them in everyday life both to lower stress and increase well-being. In order to examine the effects of strengths use and well-being and
complementary analysis were made. This finding further supports previous findings that using
ones strengths are related with well-being, even if satisfaction with life were not significantly
related to strengths use in this study.

**Specific strengths and perceived stress**

Specific strengths in this study did not correlate with the levels of perceived stress as
hypothesized, however, this may be due to a small sample. Further analyses were made when
no correlations were seen between perceived stress and the specific strengths. These analyses
did not show any further support to previous finding either, as the specific strengths did not
correlate with well-being. Previous finding has found different strengths correlate strong with
well-being (Gander, Proyer, & Wyss, 2012; Harzer & Ruch, 2015). Further, it may be that
these are big individual differences between samples and this may give the different
correlations. The VIA classifications consists of 24 strengths and it is thus not likely to get an
identical sample across studies.

**Perceived stress and well-being**

As previous research has shown that stress and subjective well-being are related to each other
the results seen in this study were expected. However, the positive affect did not reach
significance. This may be due to lack of participants, or it may be that the participants were
erating themselves as different in both stress and positive feeling in comparison to previous
studies. As noted did psychological well-being correlate with perceived stress which positive
feeling did not. One explanation for this may be that psychological well-being are related
more too long-term feelings to belong and have a meaning in life, whereas positive feelings
are fluctuating across the day and do not change rating in perceived stress as much
(Lyubomirsky , 2007; Ryan & Deci, 2001). As few previous studies have examined the
impact of psychological well-being on perceived stress, these findings thus adds to the field of
positive psychology. However, as has been seen previously strengths use and self-esteem
predicts psychological well-being and subjective well-being (Govindji & Linley, 2007),
which suggests that psychological well-being does play an important part in health related
measures.

**Routes to stress, a model for prevention**

The regressions analysis found that negative affect and strengths use were significant
predictors of perceived stress. This suggests that negative affect increases stress, and that
strengths use decreases stress. This is even though strengths use and negative affect in this
sample is uncorrelated \( r = -0.161 \). This may indicate that they have different aspects in
which they co-vary perceived stress. The findings may also be due to a not included variable
such as attitude and fluctuations across the day and week. Suggested by this study is that there
may be two routes to perceived stress. The first one includes not using ones strengths, which
may suggest an incomplete knowledge of self, and thus somewhat more vulnerable than those
acting in line with their strengths. The second route to stress is negative affect. Negative affect
is necessary for human survival, however, there need to be a balance between positive and
negative emotions (Norlander, Bood, & Archer, 2002). Results in this study indicate that
positive affect did not correlate with perceived stress which does not support previous
findings. Well-being overall on the other hand may be a buffer against stress as it creates a
balance between positive and negative feelings. Some suggests that we need to have at least
three positive emotions per negative (Fredrickson, 2001), which is further supporting coping
during stress.

Some of these interventions seem strongly related to stress, and other aversive feelings.
However, more research is needed to fully examine the extent to which interventions targeting
well-being can decrease pathology, and negative health outcomes in the general public. More
research is needed on strengths use and how we can guide people through hard time in life with knowledge about their strengths and how to use them.

**Limitations and further research**

There are several limitations to this study. The small sample size limits the generalize ability of the findings and reduce the power of the study. Second, 21 participants is too few when performing a multiple regressions analysis with seven predictors. There are also other problems with a small sample size as significances may not be powerful and that there is a limiting spread among variables. In this study there were equally many men as women but no analyses were done with gender as a confounder, which also may affect the results. Further, this study only looked at prevalence of stress and well-being in the participant, which does not give any indications of if an intervention for strengths use would lower stress and increase well-being. This would be preferable in order to draw any conclusions from the data. Further limitations is that it only is one time point in which the data are collected, as such the results may display fluctuations in well-being and stress rather than the actual levels of stress and well-being. One could also argue that this is preferable as it is the perceived feelings that are what matters as the person feel stress in situations from time to time. It would be interesting for further research to do an intervention based study with pretest and post test to see the actual outcome of strengths use on stress. It would also be beneficial to study the different strength groups, as some strengths are more related to well-being than others (Park, Peterson, & Seligman, 2004).

**References**


Using your strengths


