Linguistic Analysis of Well-Being

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Introduction
- Use of more positive terms correlated with living 10.7 years longer. (Danner, Snowdon, & Friesen, 2001).
- Negative affect correlated with poorer overall health and negative emotions suppressed the immune system and increased the risk of disease (Cohen & Pressman, 2006).
- Words are powerful indicators of emotional, physical, and mental state (Junghaenel, Smyth, & Santer, 2008).
- Use of positive emotion words serve as an indicator of relationship satisfaction and stability (Stlatcher, Vazire, & Pennebaker, 2008).
- Simmons, Chambless, and Gordon (2008) found that relatives' hostility and criticism positively correlated with use of first person singular pronouns and negatively correlated with first person plural use.
- Individuals who scored mildly depressed or higher used more negative words and the word "I" more than people who had never been depressed (Rude, Gortner, & Pennebaker, 2004).
- My purpose was to understand how well-being plays a role in word choice.

Method
- Recruited from Facebook, introductory psychology and English. N = 76 (58 women, 18 men).
- Study took five days and was an online survey using Qualtrics.
- Completed PWBS then were instructed to write for at least ten minutes about their daily lives for four consecutive days.
- Essays were spellchecked in Microsoft Word and then loaded into the LIWC program.

Results
- 4 x 2 mixed-design analysis of variance (ANOVA) was used to determine significance.
- Partial eta squared was used to compute effect size.
- Significant main effect for psychological well-being so more and less positive personalities differed in all four variables in the table.

Psychological Well-Being Scale
- By Ryff, 1989
- 84 questions asking level of agreement (6 point Likert scale)
- PWBS has six subscales: Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life, Self-Acceptance.

Psychological Inquiry and Word Count
- Pennebaker, Chung, Ireland, Gonzales, & Booth, 2007
- LIWC analyzes word files to determine the frequency of commonly used words.
- The program categorizes the words into four major divisions: linguistic processes, psychological processes, personal concerns, and spoken categories.
- The current study focuses on first person singular pronouns (I, me, mine), first person plural pronouns (we, us, our), and positive and negative emotion words.

Hypotheses
- Participants with high well-being scores will use more social words like "we," "us," and "our" than those with a low well-being score who will use more self-referential words including "I" and "me."
- Participants with a high well-being score will use more positive emotion words than those with a low well-being score who will use more negative emotion words.

Discussion
- Those with a high level of psychological well-being used significantly more "we," "us," and "our" pronouns than those with a negative well-being level indicating more social interest.
- Individuals with low well-being used significantly more "I," "me," and "mine" pronouns than the high well-being group suggesting they are more self-interested. This aligns with Rude, Gortner, and Pennebaker's (2004) study where individuals with depression used the word "I" more than happier people.
- Participants with a high level of psychological well-being used more positive emotion words signifying more positive thoughts while those with a low level used more negative emotion words showing more negative thoughts.
- Findings coincide with Adlerian theory that societal concern shows psychological health (Hillman, 1988).
- This study demonstrates a therapeutic need for thought-changing techniques because well-being is correlated with our word usage.

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