

## Relating Wellness to Clinical Variables in Middle and Later Life

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Abstract

As the U.S. population of midlifers and older adults grows, so too will their need for effective mental health services. To fill this need, counselors must understand how midlifers and older adults perceive wellness and how these perceptions relate to other clinical and demographic variables. For this study, we investigated how midlifers' and older adults' perceptions of wellness relate to depression, anxiety, income, and age. Results from a canonical correlation analysis reveal one canonical root, namely that the wellness subscale Existential Despair best predicts depression and accounts for 79% of the variance within these age groups. We discuss counseling implications and further research recommendations.

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### Relating Wellness to Clinical Variables in Middle and Later Life

How do midlifers and older adults' perceptions of wellness relate to how they experience depression and anxiety? And how can understanding these relationships be helpful in the counseling process? These inquiries are important for the counseling profession to examine as the population of midlifers and older adults continues to escalate (U.S. Census Bureau, 2004), and prevalence rates of depressive and anxiety disorders will increase in these populations as they age (National Institute of Mental Health [NIMH], 2005). Thus, the need for counseling services for these age groups will grow and professional counselors must be prepared.

Wellness and wellness counseling are important concepts to Professional Counseling, as wellness is one of the fundamental paradigms of the profession (Myers, 1992). This strength-based concept supplements medical model interventions when treating psychological disorders and normal developmental issues (Myers & Sweeney, 2005). Myers, Sweeney, and Witmer (2000) defined wellness as “a way of life oriented toward optimal health and well-being, in which mind, body, and spirit are integrated by the individual to live life more fully within the human and natural community” (p. 252). This definition describes wellness as multidimensional and encompasses the physical, psychological, social, and spiritual dimensions within individuals.

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Counselors who infuse wellness counseling into their practice would not only treat their client's presenting problem, but also help them pursue an optimal state of physical, mental, social, and spiritual health. Clients would develop and maintain resources they could use to deal with current and future life demands, serving as a preventative measure. In theory, counselors can use wellness counseling with any client regardless of their demographic make-up.

But can counselors competently practice wellness counseling with midlifers and older adults using existing wellness models? And do these wellness models accurately capture how midlifers and older adults perceive wellness? Like most concepts that define elements of the human experience, wellness is an evolutionary concept. In other words, how individuals perceive wellness changes over time. Using wellness models that fail to represent how midlifers and older adults perceive wellness creates a standard of care concern. Typically, wellness models are empirically validated using younger participants (Adams, Bezner, & Steinhardt, 1997) or participants from a wide range of ages (Hattie, Myers, & Sweeney, 2004). Using participants from various age groups to validate a wellness model cannot account for the individual differences these groups present in terms of how they perceive wellness. This produces a standard of care issue for counselors who use a one-size-fits-all wellness model.

Understanding how midlifers and older adults perceive wellness and how these perceptions relate to other clinical variables present as the vital first steps before applying it within a counseling setting. Several researchers attempted to discover how wellness during midlife and older adulthood relate to other variables, such as perceived stress and mattering (Myers & Degges-White, 2007), social support (Granello, 2001), subjective age and life satisfaction (Degges-White & Myers, 2006), life purpose, and depression (Dixon, 2007). These studies lack validity, however, in determining if the wellness instruments these authors used truly

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measure wellness in a way that midlifers and older adults perceive it. For example, Dixon (2007) developed the Older Adult Wellness Evaluation (OAWE) that included five subscales (i.e. Physical, Emotional, Social, Spiritual, and Personal), and justified the subscales' validity on past research and wellness literature. However, no factor analytic research exists with the OAWE to substantiate if midlifers and older adults perceive wellness based upon these subscales. In addition, although the Five Factor Wellness Inventory (5F-Wel) used in the above studies (Degges-White & Myers, 2006; Myers & Degges-White, 2007) underwent an extensive exploratory and confirmatory factor analysis to substantiate its subscales (Hattie, Myers, & Sweeney, 2004), no study exists that examines if its subscales validly measure wellness from a midlife/older adulthood perspective.

Currently, only one study examined specifically how midlifers and older adults perceive wellness. Foster and Levitov (2012) surveyed a group of midlifers and older adults using the Perceived Wellness Survey (PWS) and performed an exploratory and confirmatory factor analysis. They found a four-factor solution within the data, suggesting that within the PWS four dimensions of wellness exist: Optimism, Existential Despair, Physical, and Family/Friends. Our intention for this study is to expand upon these results by determining how these four wellness dimensions relate to the variables of depression, anxiety, income level, and age within midlifers and older adults; in addition, we will determine if any differences exist between men and women and midlifers and older adults on these variables. With the prevalence rates of depression and anxiety expected to increase in the near future (NIMH, 2005), it is important to understand how these variables relate to wellness in order to effectively work with midlifers and older adults using wellness counseling. Our research questions are as follows:

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- What differences exist between men and women on the four wellness subscales, depression, and anxiety?
- What differences exist between midlifers and older adults on the four wellness subscales, depression, and anxiety?
- What relationships exist between the four wellness subscales, depression, anxiety, income level, and age?
- How do the four wellness subscales, income level, and age predict anxiety and depression in midlifers and older adults?

### Method

#### Participants

Participants ( $N = 170$ ) were recruited from the Northeast Ohio region through a convenience sample. The mean age for all participants was 60 years ( $SD = 5.13$ ) and ranged from 50 to 78 years. Participants consisted of midlifers ( $n = 79$ ) and older adults ( $n = 88$ ); three participants did not provide their age. Sixty-three percent of participants ( $n = 108$ ) were male and 37% ( $n = 62$ ) were female. Ninety-five percent ( $n = 161$ ) of participants identified themselves as European American, 3% ( $n = 5$ ) identified as African American, and 2% ( $n = 4$ ) identified as Asian American.

In terms of education, 18% ( $n = 30$ ) finished high school, 27% ( $n = 46$ ) completed some college, 25% ( $n = 43$ ) possessed a bachelors degree, 19% ( $n = 32$ ) completed a masters degree, and 11% ( $n = 19$ ) had a doctoral degree (i.e. Ph.D., M.D.). The majority of participants were married ( $n = 143$ ) and the remainder reported being single ( $n = 7$ ), engaged in a relationship ( $n = 7$ ), separated ( $n = 2$ ), divorced ( $n = 9$ ), or widowed ( $n = 2$ ). All participants reported they were employed full-time, and most ( $n = 162$ ) identified themselves as working in a white-collar career,

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such as management ( $n = 37$ ), professional ( $n = 65$ ), service industry ( $n = 30$ ), sales ( $n = 7$ ), and administration ( $n = 23$ ). Eight participants listed their jobs as blue collar: farming ( $n = 1$ ), construction ( $n = 1$ ), installation ( $n = 1$ ), and production ( $n = 5$ ). Regarding income, 10% ( $n = 17$ ) of participants reported earning \$0-\$39,999, 34% ( $n = 58$ ) reported earning \$40,000-\$79,999, 32% ( $n = 53$ ) reported making \$80,000-\$119,999, and 24% ( $n = 42$ ) reported making more than \$120,000.

### Instruments

#### **Perceived Wellness Survey.**

The Perceived Wellness Survey (PWS) is a 36-item instrument designed to measure wellness. Items score on a Likert type scale, ranging from 1, *very strongly disagree*, to 6, *very strongly agree*. The creators of the PWS scored overall wellness using a composite score and created six subscales measuring physical, psychological, emotional, intellectual, social, and spiritual wellness (Adams et al., 1997). The items comprising these subscales are randomly ordered in the PWS. Scores for overall wellness range from 3-29, with higher scores suggesting a higher level of wellness.

The research demonstrates the PWS's validity and reliability of the overall wellness score, suggesting it measures wellness unidimensionally (Harari, Waehler, & Rogers, 2005). For instance, the PWS possesses significant temporal stability ( $r = .73$  [university students];  $r = .81$  [business employees]), construct validity, and discriminant validity (Adams, Bezner, Garner, & Woodruff, 1998). Adams, Bezner, and Steinhardt (1997) found sufficient internal consistency in the overall wellness score of the PWS ( $\alpha = .91$ ) and within each subscale (physical [ $\alpha = .81$ ], psychological [ $\alpha = .71$ ], social [ $\alpha = .64$ ], intellectual [ $\alpha = .64$ ], spiritual [ $\alpha = .77$ ], emotional [ $\alpha =$

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.74]). Harari, Waehler, and Rogers (2005) also found high internal consistency and criterion validity when comparing the PWS with other psychological measures, such as the Hopkins Symptom Checklist-21, the Beck Depression Inventory-II, and the Beck Anxiety Inventory. However, multiple factor analyses on the PWS failed to find a six factor loading that resembled the proposed six subscales (Adams et al., 1997; Harari et al., 2005). Internal consistency for this current study was high ( $\alpha = .93$ ).

Foster and Levitov (2012) conducted an exploratory and confirmatory factor analysis on the PWS using participants aged 50 years and older. They discovered a four-factor solution within the data and named them Optimism, Existential Despair, Physical, and Family/Friends. Higher scores on the subscales of Optimism, Physical, and Family/Friends suggest higher levels of optimism, physical health, and social supports. Existential Despair is an inverted scale, with lower scores on this scale suggesting lower levels of despair. Of the four factors extracted, only two resembled the subscales originally proposed (i.e. physical and social) by Adams, et al. (1997). For this current study, we used these four subscales and not the scales suggested by Adams et al. See Foster and Levitov (2012) for a detailed description of their four subscales.

### **Beck Depression Inventory-Second Edition.**

The Beck Depression Inventory-Second Edition (BDI-II) is a 21-item instrument designed to measure depressive symptomology experienced by adolescents and adults during the last two weeks (Beck, Steer, & Brown, 1996). When completing the BDI-II, individuals use a four point Likert scale (0 = *no symptoms*, 1 = *mild symptoms*, 2 = *moderate symptoms*, 3 = *severe symptoms*) to rate 21 depressive symptoms (e.g. worthlessness, insomnia, suicidal). The BDI-II is scored by adding the responses of the 21 items together, with higher scores representing higher depression levels. Scores can range from 0-63 and takes 5-10 minutes to complete (Beck et al.,

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1996).

Validity and reliability of the BDI-II are well established. Beck, Steer, and Garbin (1988) reported in their meta-analysis that internal consistency ranged between .73 and .92, with an average of .86. Researchers also demonstrated the BDI-II to possess adequate convergent validity with other measures of depression, such as the Minnesota Multiphasic Personality Inventory Depression Scale ( $r = .76$ ; Beck, Steer, & Garbin, 1988), the Hamilton Psychiatric Rating Scale for Depression ( $r = .73$ ; Brown, Schulberg, & Madonia, 1995), and the first edition of the Beck Depression Inventory ( $r = .93$ ; Beck & Steer, 1987). For the present study, Cronbach's Alpha demonstrated high internal consistency ( $\alpha = .88$ ); participants' scores on the BDI-II ranged between no symptoms and severe depressive symptoms (0-39). In general, most participant scores fell within the categories of "no symptoms" and "mild depressive symptoms" ( $M = 6.15$ ,  $SD = 6.07$ ).

### **Beck Anxiety Inventory.**

The Beck Anxiety Inventory (BAI) measures the anxious symptomology adolescents and adults experience within the last week (Beck & Steer, 1993). It consists of 21-items measuring anxious symptoms (e.g. nervous, scared, unable to relax) on a four point Likert scale (0 = *Not at all*, 1 = *Mildly: It did not bother me much*, 2 = *Moderately: It was very unpleasant*, 3 = *Severe: I could barely stand it*). Total scores range from 0-63, with higher scores indicating higher anxiety; the BAI takes 5-10 minutes to complete (Beck & Steer, 1993).

Researchers found the BAI to possess adequate convergent validity with other anxiety measures, such as the Hamilton Anxiety Rating Scale ( $r = .51$ ; Beck, Epstein, Brown, & Steer, 1988), the Cognition Checklist-Anxiety Subscale ( $r = .51$ ; Beck et al., 1988), and the Brief Symptom Inventory-Anxiety Subscale ( $r = .73$ ; Morin, Landreville, Colecchi, McDonald, Stone,

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& Ling, 1999). Beck et al. (1988) reported a high internal consistency for the BAI ( $\alpha = .92$ ) and demonstrated sufficient discriminate validity by finding a modest correlation with the BDI-II ( $r = .44$ ). For this present study, internal consistency using Cronbach's Alpha ( $\alpha = .81$ ) and discriminate validity with the BDI-II ( $r = .51, p = .01$ ) replicated findings within the literature; participants' scores on the BAI ranged from 0-23, indicating a range of normal to severe anxiety. Overall, most participants' scored within the normal range of anxiety ( $M = 5.26, SD = 4.60$ ).

### **Procedure**

We used a convenience sample for this study, distributing survey packets to local businesses, social clubs, schools, universities, mailing lists, and churches that agreed to participate. The survey packets contained an informed consent letter, the PWS, the BDI-II, the BAI, a demographic form, and a self-addressed, stamped return envelope. The instruments and demographic form were randomized within each survey packet to minimize any influence one instrument may have upon another (Fowler, 2002). Participants who completed their survey packets mailed them to us and had the opportunity to enter into a drawing to receive one of six \$25 gift cards. To qualify for this study, participants must be aged 50 years or older, which would place them in the latter half of midlife or older adulthood categories.

We distributed the survey packets to representatives (e.g. clergy people, human resources) of the noted institutions. These representatives presented the packets to individuals meeting the criteria for the study within their respective institution. Individuals willing to participate completed the instruments and demographic form and returned them using the provided self-addressed stamped envelope. The directions asked participants not to put a return name or address on the envelope unless they wanted to take part in the monetary incentive

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drawing. All names and addresses remained confidential and were destroyed after six participants were randomly chosen to receive the monetary incentive.

### Results

Descriptive statistics were calculated for the four wellness subscales, anxiety, and depression. The means, standard deviations, and ranges for each variable are presented in Table 1. We calculated wellness factor scores for each subscale. Because they are in z-score format, we expanded the factor scores into standardized scores with a mean of 100 and standard deviation of 10. Overall, participants reported moderate levels on the wellness subscales, while depression and anxiety scores were low to moderate.

Research questions one and two inquired about differences between sex and age groups regarding the wellness subscales, depression, and anxiety. We ran a series of t-tests to explore comparisons between men and women, and midlifers and older adults. In terms of men ( $n = 108$ ) and women ( $n = 62$ ), we found only one difference. Women reported higher levels of anxiety than men ( $t = 3.44$ ;  $p < .001$ ;  $d = .54$ ); no other differences were found between men and women concerning wellness and depression. For midlifers ( $n = 95$ ) and older adults ( $n = 73$ ), no differences were found on any of the variables.

The second research question addressed the bivariate relationships the four wellness subscales had with depression, anxiety, income level, and age. We used Pearson product-moment correlation analysis to determine these relationships. The Existential Despair subscale had medium effect size with depression ( $r = .56$ ,  $p = .01$ ) and anxiety ( $r = .44$ ,  $p = .01$ ), while the Physical subscale had small effect sizes (depression,  $r = -.23$ ,  $p = .01$ ; anxiety,  $r = -.21$ ,  $p = .01$ ). Age and income level had little/no relationships with the wellness subscales. Depression and anxiety had a medium effect size ( $r = .55$ ;  $p = .001$ ), while income level had a small effect size

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with anxiety ( $r = -.22$ ;  $p = .001$ ). These coefficients can be found in Table 1.

The last research question addressed the relationships between the variables anxiety and depression in relation to the four wellness subscales, income level, and age. We used a canonical correlation analysis, using Optimism, Existential Despair, Physical, Family/Friends, income level, and age as predictor variables, and depression and anxiety as criterion variables to evaluate their multivariate relationships. The analysis yielded two functions with squared canonical correlations ( $r_c^2$ ) of .48 and .01 for each function. Collectively, the model was statistically significant using the Wilks's Lambda = .51 criterion,  $F(8, 326) = .51$ ,  $p < .05$ . The dimension reduction analysis produced one statistically significant function  $F(8, 326) = 16.19$ ,  $p < .05$ . This function was the only noteworthy one in the analysis. Thus, Existential Despair and depression are positively correlated; the more despair an individual feels, the more likely they are to report symptoms of depression (see Table 2).

## Discussion

We asked how midlifers' and older adults' perceptions of wellness relate to depression, anxiety, and income, and how understanding these relationships could be helpful in the counseling process. Here we discuss our findings and explain how they can begin to answer these questions.

The results of this study found relationships between the wellness subscales and depression, anxiety, and income in midlifers and older adults. Specifically, the strongest predictor of depression was Existential Despair. Participants who scored higher on Existential Despair also scored higher on depression, suggesting that an individual's attitude during these times of life greatly relate to how they feel emotionally. In addition, we were surprised to find only a modest relationship between physical wellness and depression and anxiety, and no

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relationship between Friends/Family and depression and anxiety. These findings contribute a new perspective to the traditional research that focuses on what concerns aging adults, particularly fears of declining health (Fins, 2006; Morrissey, 2011) and lack of relationships/loneliness (Greenfield & Russell, 2011; Victor, Scambler, Bond, & Bowling, 2000; Yeh & Lo, 2004). In addition, these findings propose new ways to think about aging and what might be important for the current generation of midlifers and older adults. While physical health and relationships might be a concern for some midlifers and older adults, our findings suggest that an aging individual's outlook and evaluation of life might also be influential to experiencing depression and anxiety.

The results also found small effect sizes between income level and Existential Despair and anxiety. These results should be kept in the context of the sample used for this study, as all participants were employed full-time and most reported earning a middle class income or more. Thus, while midlifers and older adults who currently work full-time and earn a middle class income report less associations with Existential Despair and anxiety, the existing literature does note that income is a vital concern during middle and later life for people living below the poverty line (Federal Interagency Forum on Aging Related Statistics, 2000; Hardy & Hazelrigg, 1993).

### **Implications for Counselors**

Counselors must assess many life dimensions to pinpoint a client's strengths and limits regardless of a client's age. We suggest from our findings that counselors who work with midlifers and older adults who are depressed should assess for wellness themes related to Existential Despair. The items that make up the Existential Despair subscale are self-evaluative of one's past, present, and future (e.g. "I sometimes think I am a worthless individual"; "I have

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felt in the past that my life was meaningless”; “Sometimes I don’t understand what life is all about”; “Life does not hold much future promise for me”). Clients who score high on this subscale may struggle to find fulfillment and meaning in life (Foster & Levitov, 2012), and may have problems meeting the goals of the last two stages of psychosocial development (Erikson, Erikson, & Kivnick, 1986).

Counselors who work with older clients who score high on Existential Despair should infuse wellness counseling strategies geared toward finding purpose and hope, reducing self-degradation, and adjusting life expectations. As mentioned earlier, wellness counseling helps clients pursue optimal health in many areas of life. Counselors who use wellness counseling strategies based on these current findings can help clients integrate their therapeutic gains into their lifestyle and provide an empirically based standard of care.

### **Future Research and Limitations**

This study extended Foster and Levitov’s (2012) previous research concerning the perceptions of wellness during midlife and older adulthood. For this current study, we examined how these wellness perceptions specific to midlifers and older adults related to a limited number of variables relevant to the counseling process. While we found how depression, anxiety, income, and age related to wellness, more variables need examination to determine how they relate to wellness during midlife and older adulthood.

Three limitations exist within this study. First, our sample of participants consisted mainly of European American, middle-class males. This limits the generalizability of our results, but also makes our results more precise within this group. As stated earlier, wellness models typically are validated using an age diverse sample that cannot account for any individual differences between age groups. This might also be said regarding cultural groups, that using a

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culturally diverse sample would not find the subtle differences between cultural groups regarding how wellness perceptions relate to clinical variables. We recommend the replication of this study using participants from other cultural groups. Further research could focus on how midlife and aging minority groups perceive wellness and how these perceptions relate to other clinical variables based on cultural dimensions that could include race, ethnicity, sex, sexual orientation, socioeconomic status, and religious/spiritual beliefs. Understanding how these wellness perceptions relate to other clinical variables could create meaningful multicultural counseling strategies and provide counselors with more culturally accurate wellness models to use instead of models primarily based upon Eurocentric perspectives.

Second, we used a correlational design to understand how wellness relates to depression and anxiety. Whereas correlational designs serve to describe relationships between variables, they cannot determine causation between variables. Therefore, it is still unknown how wellness affects anxiety and depression and vice versa.

Last, Foster and Levitov's (2012) wellness subscales were created using a sample consisting of both midlife and older participants. It is possible that midlifers and older adults perceive wellness differently, suggesting further research must take place to determine specifically how these two groups perceive wellness. Uncovering these perceptual differences would make a clearer distinction between the age groups and help counselors provide a higher standard of care.

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Table 1

## Descriptive and Correlational Statistics

	M	SD	Range	Anxiety	Depression	Income	Age
Optimism***	100	10	42-129	-.09	-.20**	.12	.00
Existential Despair***	100	10	55-133	.44**	.56**	.18*	-.09
Physical***	100	10	70-118	-.21**	-.23**	.00	.15
Family/ Friends***	100	10	60-123	-.15	-.20	-.02	.16*
Anxiety	5.26	4.60	0-23	-	.51**	-.22**	.06
Depression	6.15	6.07	0-39	.51**	-	-.15	-.06

Note. \* = Significant at .05; \*\* = Significant at .01; \*\*\*Wellness subscores means and standard deviations were calculated from z-scores and set at  $M=100$  and  $SD=10$ .

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Table 2

Canonical Solution for Wellness Subscales Related to Anxiety and Depression

Variable	Coef	$r_s$	$r_s^2$ (%)
Optimism	-.27	-.27	.07
Despair	-.84	-.84	.71
Physical	-.37	-.37	.14
Family	-.30	-.30	.09
$r_c^2$			.48
Anxiety	.08	.34	.12
Depression	.13	.79	.62

Note: Coef = standardized canonical function coefficient;  $r_s$  = structure coefficient;  $r_s^2$  = squared structure coefficient.