

## Wellness, Perceived Stress, Mattering, and Marital Satisfaction Among Medical Residents and Their Spouses: Implications for Education and Counseling

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Powers, A., Myers, J. E., Tingle, L., & Powers, J. (2004). Wellness, perceived stress, mattering, and marital satisfaction among first year medical residents and their spouses: Implications for education and counseling. *The Family Journal*, 12(1), 26-36. doi: [10.1177/1066480703258802](https://doi.org/10.1177/1066480703258802)

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### **Abstract:**

Numerous studies document that medical education is demanding and stressful, yet few studies have examined the effects of medical training on spouses and medical marriages. Eighty-three individuals (42 couples) living in medical marriages completed questionnaires measuring marital satisfaction, perceived stress, general mattering, and wellness. Comparisons of responses with existing norm-group scores revealed that residents scored higher than counselor education doctoral students on work satisfaction and satisfaction with shared marriage values and scored lower than counseling doctoral students on realistic beliefs. Resident spouses scored higher than the general married population on wellness, mattering, and satisfaction with shared marriage values and scored lower on work satisfaction and realistic beliefs. There was no significant difference in wellness, perceived stress, and mattering between residents and their nonresident spouses. Implications for couples counseling and further research are provided.

Keywords: medical residents; marriage and family counseling; wellness; medical doctors

### **Article:**

Numerous studies document that medical education is demanding and stressful (Lee & Graham, 2001; Levey, 2001; Toews, Lockyer, Dobson, & Brownell, 1993). The major sources of stress include time demands, expectations of self and others, and financial indebtedness (Archer, Keever, Gordon, & Archer, 1991; Mangan, 2000, 2001; Wolf, Faucett, Randall, & Balston, 1988) in addition to conflict in interpersonal relationships (Tyssen, Vaglum, Gronvold, & Ekeberg, 2001). Residency education not only interferes with residents' abilities to cope effectively with stress but also contributes to the risk of inadequate self-care and reduced physical well-being (Alexander, Monk, & Jonas, 1985; Ferguson, 1994). The consequences for the medical resident include not only somatic distress but also burnout, depression, and other mental health concerns (Hillhouse, Adler, & Walters, 2000; Mosley et al., 1994).

Wolf (1994) suggested that healthy medical students are more likely to become healthy doctors who can then model and promote healthy lifestyles with their patients. As a consequence, strategies to foster medical students' self-awareness, personal growth, and well-being are needed (Novack, Epstein, & Paulsen, 1999). Barton (1995) described an elective course designed to help medical students develop effective coping skills to maintain their well-being during medical training and throughout their career, whereas Coombs, Perell, and Ruckh (1990) presented a seminar to premedical students to raise awareness of the need for emotional coping repertoires to deal with the stress of medical school regimes. Similar programs in various universities reflect limited success through elective course offerings related to disease prevention and health promotion (e.g., Wolf et al., 1988; Wolf, Randall, & Faucett, 1990) and the establishment of wellness committees to affect the socioemotional climate of medical education (e.g., Coombs & Virshup, 1994; Weinstein, 1983).

Existing medical education programs reflect models of work stress and burnout focused on residents (e.g., Hillhouse et al., 2000); at the same time, they fail to incorporate aspects of the residents' social support systems

as well as the multiple components of holistic wellness models. In part, the components of programs reflect medical students' preferences for activities involving the body rather than the mind (Scurria, Webster, & Wolf, 1994). Given that multiple studies during a 10-year period reveal that residents are tired and overwhelmed, are afraid of making mistakes, and have little or no time for anything or anyone other than their training (Mangan, 2000, 2001; Sheridan, 1995), attention to holistic and interpersonal factors affecting their well-being is needed and timely, if not overdue.

In this article, we report the results of a study of medical residents and their spouses. Our goal was to examine factors that affect holistic well-being for both partners. A brief review of research related to the key variables and specific to medical residents is presented as a foundation for development of our research questions.

## WELLNESS, STRESS, MATTERING, AND MARITAL SATISFACTION IN MEDICAL RESIDENTS

Holistic wellness models reflect a view of personal wellbeing as multidimensional in nature and incorporate a concern for optimal performance. For example, Archer, Probert, and Gage (1987) defined wellness as "the process and state of a quest for maximum human functioning that involves the body, mind, and spirit" (p. 311). Myers, Sweeney, and Witmer (2000) defined wellness as

a way of life oriented toward optimal health and well-being, in which body, mind, and spirit are integrated by the individual to live life more fully within the human and natural community. Ideally, it is the optimum state of health and wellbeing that each individual is capable of achieving. (p. 251)

Hettler (1984), a public health physician and medical educator, proposed a hexagon model that specifies six dimensions of healthy functioning, including physical, emotional, social, intellectual, occupational, and spiritual. Myers et al. (2000) developed the wheel of wellness model based on Adler's individual psychology. This model incorporates six major life tasks—spirituality, self-direction (which includes 12 additional subtasks), work, leisure, friendship, and love—through which the individual interacts with his or her environment to promote optimum development. Both models share a view of wellness dimensions as overlapping and interacting such that change in any one area contributes to or causes changes in other areas.

Studies of wellness based on the wheel of wellness model (Myers et al., 2000) reveal support for the six separate components of the model (Hattie, Myers, & Sweeney, in press). Hermon and Hazler (1999) found significant relationships between the six components of the model and the trait of happiness. Myers, Mobley, and Booth (2003) found differences in wellness between master's and doctoral students in counseling, with doctoral students reporting greater wellness than other counseling students as well as greater wellness than a norm group of adults. Other studies find differences in wellness based on factors such as gender and culture (Chang, Myers, & Hattie, 2001) and sexual orientation (Dew, Myers, & Wightman, 2003). Recent studies with limited samples suggest that wellness may be negatively related to perceived stress and positively related to perceptions of belonging or mattering (Connolly, 2000; Degges-White, Myers, Adelman, & Pastoor, in press). A literature review of several electronic databases revealed no studies of wellness among medical residents or their spouses, though as noted above, a lack of wellness has been associated with high levels of perceived stress among residents.

Social support is positively correlated with both physical and emotional health (Ulione, 1996) and provides a buffer against stress (Dalgard, Bjork, & Tambs, 1995). One measure of social support is a sense of belonging, which has been operationalized in terms of the concept of mattering (Rosenberg & McCullough, 1981). Mattering was defined by Schlossberg, Lynch, and Chickering (1989) as the beliefs that people have (right or wrong) that they matter to someone else, that they are the objects of someone else's attention, and that others care about them and appreciate them. Such beliefs have a direct and positive effect on depression (Hagerty & Williams, 1999), which as noted earlier, is negatively affected by perceived stress among medical residents (Hillhouse et al., 2000). The importance of mattering was emphasized by Marcus and Kitayama (1991) who argued that sense of belonging is such a strong factor that relationships, as opposed to individual functioning, may be the more important variable in understanding human behavior. Thus, an examination of marital

relationships can provide important information for understanding the consequences and correlates of perceived stress in the medical training environment.

Although many medical residents are single, a significant number are married, have partners, and/or cohabit, and many have children as well. Tyssen et al. (2001) studied mental health problems of 4th-year medical students and noted that not being married or cohabiting was a significant predictor of mental health problems. Moreover, stress during medical residency can stem from as well as exacerbate interpersonal problems with family members (Levey, 2001). It seems that lower perceived well-being and higher interpersonal conflict are associated with family dysfunction among medical students (Rutledge, Davies, & Davies, 1993), whereas greater social support is associated with more positive reports of social well-being (Strayhorn, 1989). Social support is not the same as marriage satisfaction, as reflected in research by Gabbard and Menninger (1989), which reveals that physicians' marriages are less happy than many others, in spite of a lower divorce rate.

A preponderance of physicians younger than age 45 report their most toxic stressor to be the struggle with work/family imbalance and the effects this creates for their home life (Graham et al., 1996). In fact, multiple studies suggest that compared to the general population, "physicians and their spouses suffer significantly increased incidences of drug abuse, alcoholism, depression, thoughts of suicide, acts of suicide, and psychiatric hospitalizations" (Sotile & Sotile, 2000, p. 3). Gabbard and Menninger (1989) questioned the etiology of these problems, suggesting that the long work hours maintained by most physicians are the result of a desire to escape marital tensions rather than the result of these tensions.

Although the studies cited here provide support for a view of residents as high in perceived stress, low in perceptions of mattering, low in wellness, and conflicted in marital relationships, no studies to date have examined all of these factors simultaneously. Furthermore, no studies have examined these variables for medical couples—that is, for medical residents as well as their spouses or partners. The present study was undertaken to address this gap in the literature and to answer the following research questions:

Research Question 1: What are the levels of holistic wellness, perceived stress, mattering, and characteristics of marriage among medical residents and their spouses, and are there differences between the spouses on any of these variables?

Research Question 2: How do these results compare to data for known and relevant norm groups (e.g., counseling doctoral students, married adults)?

Research Question 3: Is there a relationship between selected demographic factors (e.g., presence of children, hours worked outside the household, spousal employment, and length of marriage)?

Research Question 4: What are the implications of this information for medical education and counseling medical residents and their spouses?

## METHOD

Volunteers were recruited from the residency program at a large medical college in the Southeast. Announcements were made in resident-spouse organizations and through medical college administrators explaining the purpose of the study. Questionnaires were distributed through the spouse organization and mailed to residency groups in internal medicine, radiology, obstetrics and gynecology, and family medicine along with a cover letter requesting participation and informed consent. E-mail reminders were sent to the resident-spouse organization listserv, follow-up phone calls were made to all resident groups, and several residents verbally encouraged their peers to complete the questionnaires. A total of 324 surveys were distributed to married residents and their spouses, 84 of which were returned. One single resident completed the survey; however, because the study was designed to further understanding of married residents, this survey was discarded. The final response rate for the surveys was 26%.

### *Instrumentation*

The participants each received a packet that requested demographic data (e.g., gender, age, cultural background, education level, length of marriage, number of children, hours worked outside the home, and financial stability)

as well as responses to the following four measures: the Wellness Evaluation of Lifestyle (WEL) (Myers & Sweeney, 2002), the Perceived Stress Scale (PSS) (Cohen, Kamarck, & Mermelstein, 1983), the General Mattering Scale (GMS) (Marcus & Kitayama, 1991), and the Characteristics of Marriage Inventory (CHARISMA) (Rosen-Grandon, 1998; Rosen-Grandon, Myers, & Hattie, in press).

**WEL.** The WEL (Myers & Sweeney, 2002) is composed of 73 Likert-type scale items that measure six key dimensions of healthy functioning: spirituality, self-direction (which is subdivided into 12 specific additional tasks), work, leisure, friendship, and love. The items (e.g., "I look forward to the work I do each day.") are statements that are rated on a 4-point scale ranging from 1= strongly agree to 4 = strongly disagree. Test-retest reliability coefficients for all scales of the WEL for a 2-week interval exceeded .75, with most exceeding .85. Alpha coefficients ranged from .66 to .89 (Hattie et al., in press).

Analysis of results for approximately 6,000 respondents reveals that the instrument discriminates among and within various subgroups on each of the scales and factors (Hattie et al., in press). For the purposes of this study, only the married general adult sample in the WEL norm group was used. This group included 486 individuals, 40% of whom were female, who ranged in age from 18 to 101 (mean = 44, standard deviation = 19). In addition, a group of 41 doctoral students in counseling (Myers et al., 2003) was used to compare the medical residents to students in training at a comparable level of education.

**PSS.** The PSS (Cohen et al., 1983) was designed to measure the degree to which situations in one's life are appraised as stressful. Cohen et al. (1983) provided three versions of the PSS, including 14, 10, or 4 items, with comparable reliability for the various versions. The abbreviated 10-item inventory (PSS 10) was used in this study.

The PSS 10 items (e.g., "In the last month, how often did you feel unable to control important things?") are questions that are answered using a 5-point scale ranging from 0 = never to 4 = very often. The PSS 10 was normed on two samples of college students totaling 446 individuals. Cohen et al. (1983) reported alpha and 2-week test-retest coefficients of .85.

**GMS.** Rosenberg and McCullough (1981) defined mattering as the degree to which individuals perceive themselves to be important to others. Their research indicates an individual's sense of mattering is not tied to others displaying only a positive opinion of the individual but to the belief that others care enough about the individual to have an opinion of him or her at all. Perceptions of mattering to others have been shown to be indicative of lessened physiological illness and distress (Amundson, 1993; Rosenberg & McCullough, 1981).

The GMS (Marcus & Kitayama, 1991) was developed to assess individuals' feelings that they mattered to other people. The instrument consists of five Likert-type items (e.g., "How much do you feel others would miss you if you went away?") rated on a 4-point scale ranging from 1= not at all to 4 = very much. A higher score indicates a stronger sense of significance to others. DeForge and Barclay (1997) reported an alpha coefficient for this scale of .85 in a study of 199 homeless men. Connolly (2000) reported an alpha of .85 for a group of 82 adults of whom 59% were female.

**CHARISMA.** CHARISMA (Rosen-Grandon, 1998) was developed as a brief measure of characteristics related to marital satisfaction. Eighteen characteristics of marriage are provided in a list and respondents are asked to indicate the importance to them of each characteristic and then their satisfaction with each characteristic. Responses are provided using a 7- point Likert-type scale ranging from extremely unimportant to extremely important. A final item at the end assesses overall marital satisfaction. Scores for the Importance and Satisfaction subscales are simple sums of the responses to each item in the scale.

Alpha coefficients for a sample of 201 American adults are reported as .83 and .94 for the Importance and Satisfaction subscales, respectively (Rosen-Grandon et al., in press). Concurrent validity studies using the Dyadic Adjustment Scale (Spanier, 1976) and ENRICH (Olson, Fournier, & Druckman, 1987) resulted in

statistically significant correlations between the CHARISMA scales and related scales of other instruments. Factor analyses revealed three factors underlying each of the two CHARISMA scales: love, loyalty, and shared values (Rosen-Grandon et al., in press).

## Data Analyses

Descriptive statistics were computed to describe the participants and for the purpose of comparisons. Six responding couples included spouses who were both residents. As a consequence, the data were analyzed according to resident/ nonresident status, rather than resident/spouse, and the results reflect unequal numbers of residents and nonresidents. A series of t tests were conducted to determine whether differences existed between those in residency and spouses who were not residents (i.e., nonresidents), those in residency versus doctoral students in counseling, and both residents and spouses of those in residency (i.e., nonresidents) versus a married general adult population. Bonferroni's correction was used to control for family-wise error rate with an alpha of .002 used to determine significance, and effect sizes were computed for statistically significant findings. Due to the low within-group sample sizes, it was not possible to examine differences based on selected demographic characteristics; therefore, Research Question 3 was dropped from further consideration. In addition, correlations between subgroups (i.e., couples) were not computed due to low numbers and the probability of results not being meaningful.

## RESULTS

### *Description of Participants*

Among the 83 persons who responded, 60% (n = 50) were residents and 40% (n = 33) were nonresidents. One resident (who was currently separated) completed the survey but his spouse did not, resulting in 83 rather than 84 surveys, the number that was expected based on recruitment of couples rather than individuals. The participants ranged in age from 23 to 38, with the modal age being 29 and the mean 30 (standard deviation = 3.03).

Overall, almost half were male and half female, with 14% (6 couples) composed of couples where both spouses were in residency. Among the nonresidents, 87% (n = 29) were female, whereas among the residents, 76% (n = 37) were male and 24% (n = 12) were female. Most (93%) were in first marriages, and 5% were in second marriages. More than half (57%) had no children, 25% had one child, 12% two children, and 4% had three or more children.

Almost all of the residents (96%) reported working full-time, with one resident reporting not working (on leave) and one working only part-time. The majority of the residents were internal medicine (20%), followed by anesthesia (7%). The mean years in residency was 2.9 (standard deviation = 1.6). Among the nonresidents, more than one third (39%) worked full-time, 33% did not work outside the home or earn income, and 5% were students. The average number of hours that both spouses worked outside the home varied considerably. No couples reported joint working hours less than 40 hours per week, 12% reported between 41 and 65 hours, 18% between 61 and 80 hours, 19% between 101 and 120 hours, 18% between 121 and 140 hours, and 10% reported working jointly more than 140 hours per week. When asked if their career path had been altered because of their spouse's work, and if their spouse's career path had been altered because of their work, 38% reported "to some degree" or "to a great degree" to both questions.

The average annual household income was reported as less than U.S.\$40,000 by 36% of respondents, from U.S.\$40,000 to \$60,000 by 12%, from U.S.\$60,000 to \$75,000 by 29%, from U.S.\$75,000 to \$100,000 by 18%, and as more than U.S.\$100,000 by 14%. Almost two thirds (60%) reported that their finances were adequate to support their lifestyle and 58% reported having sufficient savings to cover emergencies.

### *Comparisons of Participants to Norm Groups (Between-Group Comparisons)*

Table 1 provides the means and standard deviations for residents and nonresidents and the results of a series of t tests (df = 81) comparing these two groups. Residents scored highest on love, followed by self-care and friendship, whereas nonresidents scored highest on self-care followed by love and friendship. Both residents

and nonresidents scored lowest on realistic beliefs. Both residents and nonresidents scored lowest on the CHARISMA importance of shared values factor and highest on the satisfaction with shared values factor. There were no significant differences on any of the scales examined between the residents and nonresidents.

The means and standard deviations for the residents and counseling doctoral students for all of the WEL scales and for the CHARISMA factors are shown in Table 2, along with the results of a series of t tests ( $df = 89, 249$ ) to examine differences between the two groups. Counseling doctoral students scored significantly higher on realistic beliefs ( $t = -7.46, p < .002$ ); the effect size for this difference was quite large ( $d = 1.57$ ). For the CHARISMA Satisfaction with Shared Values scale, residents scored significantly higher than doctoral students ( $t = 12.32, p < .002$ ). Again, the effect of this difference was quite large ( $d = 2.05$ ). The  $d$  index is considered to be a standardized difference between the groups. It provides evidence of the magnitude of the differences and can be thought of as standard deviation units. In general, an effect size of .2 is considered small, .5 is considered medium, and .8 is considered large (Cohen, 1988).

As shown in Table 3, scores of the nonresidents were compared to available norms for married adults on the WEL and to adult samples for the GMS, PSS, and the CHARISMA scales. Nonresidents scored significantly higher than the married adults on total wellness ( $t = 8.2, p < .002$ ) and mattering ( $t = 9.07, p < .0001$ ); again there was a large effect for the wellness difference and a moderate effect for the mattering difference. In contrast, married adults scored higher than nonresidents on realistic beliefs ( $t = 5.4, p < .002$ ) and work wellness ( $t = 6.1, p < .002$ ). Both effects were large. Nonresidents scored higher than married adults on the Satisfaction with Shared Values scale of CHARISMA ( $t = 9.56, p < .002$ ). There was a very large effect for this difference.

## DISCUSSION

This study of medical residents and their spouses was designed to examine factors affecting holistic well-being, including perceived stress, mattering, and marital satisfaction in addition to multidimensional factors composing the wellness construct. No differences on any variables were found between the residents and their spouses; however, medical residents scored lower than doctoral students in counseling on realistic beliefs and higher on satisfaction with shared values. Nonresident spouses scored higher than a comparable norm group of married adults on total wellness, general mattering, and satisfaction with shared values, and lower than this norm group on realistic beliefs and work wellness.

There was no significant difference between residents and nonresident spouses on the WEL, PSS, GMS, or CHARISMA (see Table 1). This indicates that for these medical couples, each spouse has similar levels of wellness, stress, mattering, and views on importance of and satisfaction with characteristics of his or her marriage. Because residents typically have a heavier number of hours of paid work than their spouses (Sotile & Sotile, 2000), one might expect the residents' scores to be lower on wellness and stress. Moreover, the nonresident spouse is often expected to be the stress absorber for the sake of the resident (Sotile & Sotile, 2000). Because of the status of physicians, one might also expect the nonresident spouses to have lower mattering scores. Thus, contrary to expectations, the results of this study indicate that neither party is more or less stressed and that the partners share similar values relative to marriage characteristics.

Residents' WEL scores were similar to those of the doctoral students in counselor education; however, medical residents scored significantly lower than counseling doctoral students in realistic beliefs (see Table 2). The WEL Realistic Beliefs scale is based on Albert Ellis's (1973) explanation of irrational beliefs such as, "I must be liked or loved by everyone to feel worthwhile," "I am often disappointed because my expectations are not met," and "I am responsible for keeping other people happy" (Myers et al., 2000). Because many of the decisions residents make are life and death in nature, residents are often trained that perfection is the only acceptable standard (Mangan, 2000; Sheridan, 1995). In addition, most residents, throughout their lives, have received positive reinforcement for exceeding expectations in school and other responsibilities that could lead to a personal identity strongly tied to external results (Sotile & Sotile, 2000).

Also of interest is residents' satisfaction with shared values, which was significantly higher than that of the general married adult sample. Shared values are a key to marital happiness for all individuals (Rosen-Grandon, 1998) and help to mitigate the stresses of life and marriage. The time requirements of residency are rigorous (Archer et al., 1991; Mangan, 2000, 2002; Sotile & Sotile, 2000; Wolf et al., 1988); there is little leisure time in medical marriages and shared values are

**TABLE 1**  
**Descriptive Statistics and *t* Tests for WEL Scales, PSS, GMS, and CHARISMA for Residents and Nonresidents**

	<i>Residents (n = 50)</i>		<i>Nonresidents (n = 33)</i>		<i>t (df = 81)</i>	<i>p</i>	<i>Effect</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
<b>WEL scales</b>							
Spirituality	75.6	13.4	82.9	13.1	-2.42	.016	
Total self-direction	78.9	5.1	78.5	4.5	0.36	.715	
Sense of worth	86.4	9.2	83.8	7.9	1.31	.187	
Sense of control	86.2	7.5	85.3	6.8	0.55	.580	
Realistic beliefs	47.2	7.7	46.3	8.9	0.48	.626	
Emotional awareness	82.6	9.3	83.8	8.4	-.059	.552	
Problem solving	85.2	6.7	82.9	7.6	1.43	.151	
Sense of humor	84.0	9.3	83.1	9.2	0.39	.676	
Nutrition	73.4	14.4	74.6	11.5	-0.38	.702	
Exercise	78.2	12.2	79.8	13.2	-0.56	.573	
Self-care	92.3	7.6	94.4	6.6	1.30	.198	
Stress management	80.6	5.2	79.9	4.9	-0.56	.541	
Gender identity	83.6	9.3	85.8	8.6	-1.07	.281	
Cultural identity	76.1	11.4	77.2	14.4	-0.38	.699	
Work	77.3	7.8	79.4	10.2	-1.05	.292	
Leisure	81.6	11.9	76.2	10.8	2.07	.039	
Friendship	87.3	9.8	91.8	8.9	-2.09	.037	
Love	97.5	5.7	96.4	6.4	-0.84	.415	
Total wellness	80.2	5.1	80.4	4.8	0.12	.858	
PSS	10.8	2.9	11.2	3.2	.57	.557	
GMS	17.3	2.3	17.6	2.5	.57	.565	
<b>CHARISMA scales</b>							
<b>Importance</b>							
Love	5.4	.58	5.7	.45	2.3	.014	
Loyalty	5.8	.33	5.8	.43	-.51	.610	
Shared values	4.8	1.1	5.2	1.0	1.4	.097	
<b>Satisfaction</b>							
Love	5.4	.66	5.3	.77	-.61	.529	
Loyalty	5.8	.38	5.9	.31	.22	.212	
Shared values	7.1	.87	7.0	1.03	-.61	.635	

NOTE: WEL = Wellness Evaluation of Lifestyle; PSS = Perceived Stress Scale; GMS = General Mattering Scale; CHARISMA = Characteristics of Marriage Inventory.

*p* < .0018 (.05/27 comparisons).

crucial because less time is available to negotiate compromises and more time may be spent doing things the couple value (i.e., quality time together is a priority). Another possibility is that many of the couples in the current study have not been married long enough to notice significant differences in values. Although there were no statistics on length of marriage, the young average age (i.e., 30) indicates the likelihood of a relatively short marriage.

Nonresidents scored higher than the general married adults on total wellness. This is contrary to the original research hypothesis, which was that residents and resident spouses would be less well than comparable norm groups. National residency review boards are implementing standards that require such things as 1 day off per week and a limit to the total amount of hours per week a resident can work (Mangan, 2000, 2002). Perhaps, these standards are helping the resident family have a chance at a more balanced life and spouses are feeling more wellness as a consequence. It is also possible that nonresident spouses in this particular group are more

educated and thus, more conscious of the importance of holistic wellness issues. Sotile and Sotile (2000) emphasized the need for nonresident spouses to absorb family stress. As a consequence, the nonresident spouses may require a greater degree of wellness than other married adults.

Nonresidents scored higher on the general mattering scale than the general married population. The original research hypothesis was that nonresidents would score significantly lower on this scale because of the prestige afforded to the doctor in the family. Nonresident spouses spend a great deal of time absorbing family stress and in some cases, increasing family income. The vital role of such a partner could explain the difference. The combination of the higher general matter-

**TABLE 2**  
**Descriptive Statistics and *t* Tests for WEL Scales Between Residents and Doctoral Students in Counseling and for CHARISMA Factors for Residents and Married Adults**

	<i>Residents (n = 50)</i>		<i>Doctoral Students (n = 41)</i>		<i>t (df = 89)</i>	<i>p</i>	<i>Effect</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
<b>WEL scales</b>							
Spirituality	75.6	13.4	81.8	18.9	-1.82	.073	
Total self-direction	78.9	5.1	80.5	7.6	-1.17	.243	
Sense of worth	86.4	9.2	84.8	12.0	0.74	.463	
Sense of control	86.2	7.5	86.3	10.0	-0.08	.939	
Realistic beliefs	47.2	7.7	64.1	13.8	-7.46	.000*	1.57
Emotional awareness	82.6	9.3	83.8	12.2	-.059	.596	
Problem solving	85.2	6.7	86.8	9.3	0.97	.334	
Sense of humor	84.0	9.3	86.2	11.1	-1.03	.306	
Nutrition	73.4	14.4	72.3	15.7	0.35	.729	
Exercise	78.2	12.2	77.1	17.1	0.37	.714	
Self-care	93.1	7.6	87.8	13.9	2.31	.024	
Stress management	80.6	5.2	77.6	11.9	1.63	.107	
Gender identity	83.6	9.3	85.2	11.9	-0.72	.473	
Cultural identity	76.1	11.4	80.2	14.1	-1.53	.129	
Work	77.3	7.8	81.7	10.0	-2.36	.020	
Leisure	81.6	11.9	82.0	10.6	-0.15	.884	
Friendship	87.3	9.8	90.2	9.4	-1.45	.151	
Love	97.5	5.7	92.8	12.3	2.41	.018	
Total wellness	80.2	5.1	82.0	7.6	-1.31	.194	
<b>CHARISMA factors<sup>a</sup></b>							
<b>Importance</b>							
Love	5.4	.58	5.5	.56	1.57	.117	
Loyalty	5.8	.33	5.8	.55	.49	.623	
Shared values	4.8	1.1	5.3	1.02	2.74	.006	
<b>Satisfaction</b>							
Love	5.4	.66	5.18	.98	1.56	.119	
Loyalty	5.8	.38	5.62	.67	1.83	.069	
Shared values	7.1	.87	5.12	1.05	12.32	.000*	2.05

NOTE: WEL = Wellness Evaluation of Lifestyle; CHARISMA = Characteristics of Marriage Inventory.

a. Married adults (*n* = 201, *df* = 249).

\**p* < .002 (.05/19 comparisons).

ing score and the higher wellness score further supports the relationship of general-mattering to overall wellness (Connelly, 2000).

Finally, nonresidents scored higher on satisfaction with shared values than the general public. As mentioned above, this could indicate the importance of shared values in a time- starved relationship, or it could indicate that many of the couples have not been married long enough to notice differences in values.

Nonresidents scored significantly lower in realistic beliefs than the general married population. This would further support the perfectionistic need and unrealistic expectations of the residency family population compared to the general public. This is perpetuated by the old model of “doctor’s spouse” as a comforter, stress absorber, and community leader (Sotile & Sotile, 2000). Also important to note is that physicians of the past

looked for a caretaker. Physicians of today tend to marry similar high-achieving individuals that also perpetuate strivings for perfection (Sotile & Sotile, 2000).

Nonresidents scored lower on work wellness than did the general population of adults. Work wellness (as measured by the WEL) predominantly reflects one's satisfaction with work. In a medical marriage, the residency selection process often leaves the nonresident spouses little room for personal control of their career paths (Mangan, 2002). In this study, a large number of this sample did report their career path had been altered because of their spouse's work. Another factor affecting the current results may be the high degree of stress the nonresident has to absorb. If a person has a high degree of stress to absorb at home, work may become less satisfying (Sweeney, 1998).

Overall, the low realistic beliefs combined with high shared values and high spousal WEL and mattering scores paint a picture of a residency couple striving to be high achieving but not necessarily recognizing their successes compared to the rest of the population. There are a number of articles that espouse how unwell the resident and resident family population actually is (e.g., Gabbard & Menninger,

**TABLE 3**  
**Descriptive Statistics and *t* Tests for WEL Scales and**  
**CHARISMA Factors for Nonresidents (*n* = 33) and Married Adults**

	Nonresidents		General Adults		<i>t</i> ( <i>df</i> = 469)	<i>p</i>	Effect
	M	SD	M	SD			
<b>WEL scales<sup>a</sup></b>							
Spirituality	82.9	13.1	74.4	20.1	2.4	.017	
Total self-direction	78.5	4.5	76.3	9.8	1.3	.201	
Sense of worth	83.8	7.9	80.8	15.3	1.1	.259	
Sense of control	85.3	6.8	81.3	13.4	1.7	.089	
Realistic beliefs	46.3	8.9	59.1	13.5	5.4	.000*	.96
Emotional awareness	83.8	8.4	79.7	13.6	1.7	.091	
Problem solving	82.9	7.6	79.4	13.7	1.2	.149	
Sense of humor	83.0	9.2	80.2	14.2	1.2	.242	
Nutrition	74.6	11.5	70.5	19.8	1.5	.245	
Exercise	79.8	13.2	75.1	17.5	2.9	.129	
Self-care	94.4	6.6	86.2	16.1	2.3	.004	
Stress management	79.9	4.9	73.0	17.0	1.9	.019	
Gender identity	85.8	8.6	81.2	13.5	0.8	.055	
Cultural identity	77.2	14.4	74.9	17.0	6.2	.441	
Work	79.4	10.2	95.9	15.0	6.1	.000*	1.12
Leisure	76.2	10.8	76.0	15.3	2.4	.941	
Friendship	91.8	8.9	85.9	14.2	1.7	.019	
Love	96.4	6.4	92.0	14.6	11.2	.083	
Total wellness	80.4	4.8	77.4	7.5	8.2	.000*	2.02
PSS <sup>b</sup>	11.2	3.2	13.02	6.35	1.61	.109	
GMS <sup>c</sup>	17.6	2.5	12.90	2.50	9.07	.000*	-0.68
<b>CHARISMA scales<sup>d</sup></b>							
Importance							
Love	5.7	.45	5.5	.56	1.58	.114	
Loyalty	5.8	.43	5.8	.55	.398	.691	
Shared values	5.2	1.00	5.3	1.02	.262	.794	
Satisfaction							
Love	5.3	.77	5.2	.94	.696	.487	
Loyalty	5.9	.31	5.6	.67	2.36	.019	
Shared values	7.0	1.03	5.1	1.05	9.56	.000*	1.8

NOTE: WEL = Wellness Evaluation of Lifestyle; PSS = Perceived Stress Scale; GMS = General Mattering Scale; CHARISMA = Characteristics of Marriage Inventory.

a. Married adults *n* = 486, *df* = 81.

b. Married adults *n* = 486, *df* = 81.

c. Norm group *n* = 82 adults, *p* < .0001, *df* = 113.

d. Norm group *n* = 201 married adults, *df* = 232.

\**p* < .002 (.05/27 comparisons).

1989; Graham et al., 1996; Levey, 2001; Rutledge et al., 1993; Sotile & Sotile, 2000). The current scores indicate one of two things: (a) There are many well residents' families and they do not realize it, or (b) all the scores are positively skewed because of pervasive pressures to achieve in the medical environment. In other words, this population feels they are "supposed" to score high and their responses reflect a response bias that may not be totally accurate (Sheridan, 1995; Sotile & Sotile, 2000).

Household incomes of the participants ranged from U.S.\$30,000 to more than \$100,000, indicating that these couples' incomes were near to or well above the median U.S. household income (U.S. Bureau of the Census, 2001). A resident's income is typically from U.S.\$30,000 to \$40,000 (Bhushan & Amin, 2001; Greene, 2000). Thus, many spouses earn in excess of U.S.\$30,000 (more than the current resident). Surprisingly, this population does not feel it has overwhelming issues with finances. The demographics indicate that the household work hours are significant and consistently reflect that residency households are significantly involved in work (Graham et al., 1996; Lee & Graham, 2001; Levey, 2001; Mangan, 2000, 2002; Toews et al., 1993).

Although the response rate for this study was small and thus functions to limit the generalizability of the results, the findings provide preliminary information about medical marriages on which to base further study. An examination of demographic factors reveals that the participants clearly do not represent the historically traditional resident family with one working spouse, a stay-at-home spouse, and children (Sotile & Sotile, 2000). Although that family model exists in this population, it is not the only one represented. The sample showed a diverse population of residents with and without children and with and without spouses who are employed. The couples are both dual and single career. These demographics reflect the diversity of the current resident and resident spouse population (Sotile & Sotile, 2000).

Additional research with larger and more diverse samples and respondents is needed both to verify and extend the current findings. Larger samples would also minimize non-response biases and allow comparisons of within-group differences for residents as well as nonresident spouses (e.g., internal medicine vs. family medicine residency programs). Also, further research comparing other dual career couples with and without children to resident couples with and without children would be advantageous in furthering understanding of the unique needs of medical couples. Because medical residents and their spouses scored very low in realistic beliefs, there is a distinct possibility that these "perfectionistic" participants could have "faked well," thus further research with more sensitive measures is needed to verify the current findings.

## IMPLICATIONS FOR COUNSELING

Given the results of this survey and the stress placed on the residency couple, the results provide several important implications for counseling couples associated with a medical residency.

When counseling medical residency couples, counselors should assess the need for career counseling. Particular attention should be paid to the nonresident spouse as indicated by the lower work scores on the WEL. This population is a relatively young age and may not understand their options or choices for a happy work life.

The discrepancy between realistic beliefs scores for both the resident and nonresident spouses compared to the respective norm groups is extremely high; thus, counselors should assess realistic beliefs of both the resident and nonresident spouse. Placing the respective client(s) in counseling groups with others who are not associated with residency may aid this population in realizing that their standards may be unrealistic. In addition, using Rational Emotive Behavior Therapy or Cognitive Behavioral Therapy (Corey, 1996) with this population potentially would present significant results.

Finally, if a couple is having trouble, one area the counselor may wish to explore is the values the couples do share. Because there is such a high difference in satisfaction of shared values from the normal population, an indication of dissatisfaction of shared values could be a red flag indicating a need for preventive interventions prior to overt problems in the medical marriage.

## CONCLUSION

The findings for this study have implications for counselors and counselor educators working with residents and their spouses as well as implications for further research. It is important for counselors, especially those located near large medical centers with large resident populations, to be aware of potential characteristics of residency couples, both as individuals and as couples, to develop appropriate interventions. The results reveal needs for counseling for medical couples particularly in regard to perceived need for perfection. Further research with larger and more diverse samples is needed to examine the relationships among wellness, stress, mattering, and marital satisfaction of residents and their spouses. The current results provide a baseline for comparisons with new samples of residents as well as nonresident spouses. In addition, research on traits of residents and spouses who are satisfied in their marriage and lead holistically well lives would be welcome so that a model could be provided to this population. Finally, future studies could extend the current findings by including medical students and physicians in practice, providing information in support of the developmental needs of this unique and important population.

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