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Effects of Physical Therapist Burnout on Spousal Emotional Exhaustion and Marital Satisfaction

by

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Undergraduate honors thesis under the direction of

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Abstract

The goal of this study was to better understand the work-family dynamics of Physical Therapists. Specifically, I measured the relationship between a Physical Therapist's job burnout and its effect on their spouse's emotional exhaustion and marital satisfaction. One hundred and thirteen couples participated and at least one partner in each couple was a Physical Therapist or Physical Therapy Assistant. Each Physical Therapist or Physical Therapy Assistant independently completed an online survey that consisted of demographics and a measure of burnout. Their spouses completed a separate online survey made of demographics, general emotional exhaustion and marital satisfaction. Using multiple regression analysis, I tested the relationships between the three dimensions of Physical Therapists' burnout predicting spousal emotional exhaustion. None of these relationships were statistically significant. Using simple regression analysis, my results supported a significant relationship between spousal emotional exhaustion predicting spousal marital satisfaction. I tested a partial mediation analysis proposing that spousal emotional exhaustion would mediate the relationship between Physical Therapist's burnout and spousal marital satisfaction. The tests of mediation were not statistically significant. Strengths, limitations, and future directions are discussed.

Effects of Physical Therapist Burnout on Spousal Emotional Exhaustion and Marital Satisfaction

As of 2016, there are approximately 240,000 Physical Therapists working in the United States (Bureau of Labor Statistics, 2019). The Bureau of Labor Statistics projects that the total will increase by 67,000 by the year of 2026. Working beside Physical Therapists are an estimated 90,000 Physical Therapy Assistants (Bureau of Labor Statistics, 2019). With the field of physical therapy becoming more popular, it is important to understand how the job duties and responsibilities affect this growing population, and ultimately their nonwork lives and family members. The goal of the present research is to examine the work-family dynamics between Physical Therapists or Physical Therapy Assistants and their spouses.

Both Physical Therapists and Physical Therapy Assistants must receive a graduate school education, specifically: a doctorate degree and an associate's degree, respectively (Bureau of Labor Statistics, 2019)¹. In addition to their knowledge of the human anatomy, they are expected to apply their physical strength and social skills in order to help patients recover from an injury or manage their pain. A Physical Therapist must be able to perform physical activities such as lifting and supporting patients for a significant portion of the workday (National Center for O*NET Development, 2019). Not only are Physical Therapists tasked with the job of improving a patient's physical well-being and restoring full function of an injured body part or problem area, they are also responsible for the mental well-being of their patients. A Physical Therapist's work activities also include providing personal assistance, medical care, and emotional support to their customers and patients (National Center for O*NET Development, 2019). It is reasonable that a patient dealing with chronic pain would have a pessimistic outlook on therapy

¹ Since I do not expect any difference in the outcome between Physical Therapists and Physical Therapy Assistants, the term "Physical Therapists" will be used throughout the rest of the paper and will represent both portions of the population.

but it is the Physical Therapist's job to keep the patient hopeful and focused on recovery.

According to O*NET (2019), 98% of Physical Therapists reported constant contact with others every day and 100% reported very close physical proximity to others described as near touching.

A Physical Therapist's job is both physically and emotionally demanding and the combination of these may affect the person's stress and job burnout levels.

Job burnout, as defined by Maslach, Schaufeli, and Leiter (2001), is comprised of three components: emotional exhaustion, depersonalization and reduced feelings of personal accomplishment. Emotional exhaustion is the most reported feature of burnout and it is a precursor to both depersonalization and inefficacy (Maslach et al., 2001). Emotional exhaustion includes feelings of fatigue and depression. Depersonalization results as the person attempts to distance themselves from their work and clients. Reduced personal accomplishment is characterized by feelings of self-doubt and dissatisfaction with one's ability to perform the duties of the job. While burnout is comprised of three dimensions, each dimension must be explored separately. Specifically, Maslach states that the scale to measure personal accomplishment contrasts with the other two subscales in that lower mean scores for this scale illustrates a higher level of burnout and thus, should be tested independently (Maslach & Jackson, 1981). Burnout is common in professions that require a high volume of "people-work" (Maslach & Jackson, 1981) and especially in highly emotional professions (Zapf, Seifert, Schmutte, Mertini, & Holz, 2001). Previous research has shown that professionals across many health care occupations report high levels of burnout such as mental health nurses (Looft, Didden, Embregts, & Nijman, 2018), pediatric nurses (Pradas-Hernández et al., 2018), clinical and counseling psychologists (Simpson et al., 2018), and physicians (West, Dyrbye, Erwin, & Shanafelt, 2016). One study found that physiotherapists' level of burnout depends on their work satisfaction and positive associations

with their family and friends (Śliwiński et al., 2014). Because limited research has focused on Physical Therapists and burnout, I hope to provide a novel contribution to the literature and provide more data for the phenomena of burnout.

Previous research has found that an employee's burnout, specifically their emotional exhaustion, has a serious negative impact on the marital satisfaction of the employee and the employee's spouse through the mechanism of crossover (Liang, 2014). Westman defines the phenomenon of crossover as "stress experienced in the workplace by the individual leads to stress being experienced by the individual's spouse at home" (2002). Crossover is thought to occur through one of three mechanisms: direct empathetic crossover, indirect crossover of strain, or common stressors (Westman & Vinokur, 1998). Indirect crossover is defined as strain transmitted between partners due to their interactions and personal attributes (Westman, 2002). For example, Green, Bull Schaefer, MacDermid and Weiss (2011) found significant evidence of indirect crossover when one partner's negative emotion displays were positively related to the second partner's turnover ideations. Westman also recognizes that couples can feel troubled by common stressors such as a death or economic instability (2002). For example, Westman, Etzion and Danon (2001) found that organizational downsizing resulted in significantly correlated levels of job insecurity if both partners were employed by the same company. However, for this paper, I will focus only on direct empathetic crossover, which suggests that strain felt by one partner will be felt by the other due to feelings of closeness and empathy (Westman, 2002). This form of crossover has been observed in past research, such as the direct crossover of depression (Westman & Vinokur, 1998), the direct crossover of relationship satisfaction (Bakker, Demerouti & Burke, 2009) and the direct crossover of stress (Young, Schieman, & Milkie, 2013) from one spouse to another. Bakker, Demerouti, and Schaufeli (2005) found that both burnout and work

engagement crossover from spouse to spouse, bidirectionally. While their study measured both partner's work-related burnout, for this study, the focus will be on only the Physical Therapists' burnout. I am theorizing that the previous research on crossover will extend to the current study in that I will observe direct empathetic crossover between a Physical Therapists' burnout and their spouse's emotional exhaustion.

Hypothesis 1: Physical Therapist's level of depersonalization (1a) and emotional exhaustion (1b) will be positively related to their spouse's emotional exhaustion. Physical Therapist's level of personal accomplishment (1c) will be negatively related to their spouse's emotional exhaustion.

While I am measuring job burnout of the Physical Therapist, I am measuring general emotional exhaustion of the spouse because I am theorizing that the Physical Therapist's job specific burnout will impact their spouse's overall emotional exhaustion (rather than job specific emotional exhaustion), ultimately resulting in their spouse experiencing decreased marital satisfaction. Roach, Frazier and Bowden (1981) define marital satisfaction as "the perception of one's marriage along a continuum of greater or lesser favorability at a given point in time." With the expectation that there will be high levels of emotional exhaustion resulting from the Physical Therapists' burnout, I expect that the spouse will feel dissatisfied with the marriage since the marriage is keeping the spouse connected to the source of emotional exhaustion.

Hypothesis 2: Spouse's emotional exhaustion will be negatively related to their own marital satisfaction.

Previous research has shown a negative relationship between marital satisfaction and job burnout in individuals (Wolpin, Burke & Greenglass, 1991). A study by Laing (2014) observed a crossover relationship between one partner's emotional exhaustion and the other partner's

marital satisfaction. Little research has been conducted to measure the effect that one partner's burnout has on the second partner's marital satisfaction. With that, this study aims to explore the relationship between burnout of the Physical Therapist and the marital satisfaction of their spouse, mediated by the spouse's feelings of emotional exhaustion.

Hypothesis 3: Spouses' emotional exhaustion mediates the relationship between physical therapist's depersonalization (3a), emotional exhaustion (3b) and personal accomplishment (3c) and their spouse's marital satisfaction.

Methods

Participants and Procedures

I recruited participants for this study through two primary mechanisms. First, I recruited during the Louisiana Physical Therapy Association meeting in August 2019. I visited the meeting to present the research question, explain eligibility requirements and collect the email addresses of those interested. This method resulted in 23 participants signing up. Of the 23 interested, 8 Physical Therapists didn't complete the survey, 2 spouses didn't complete the survey, and 1 participant didn't meet the work requirements. Therefore, this method of recruitment resulted in 12 couples being eligible and fully participating. In an effort to recruit more participants, I emailed the Program Heads of Physical Therapy departments across the United States. I asked for assistance in increasing the study's exposure by forwarding the information to their alumni. The Program Heads then posted the study flyer on their program's social media page or shared it with their listserv. With this method, 134 people followed up indicating interest in participating. Of the 134 interested, 14 Physical Therapists didn't complete the survey, 6 spouses didn't complete the survey, and 11 didn't meet the marriage requirement.

Therefore, this method of recruitment resulted in 101 couples being eligible and fully participating. In total, 113 couples completed this study.

In order to be eligible for the study, the main participant must have been a Physical Therapist or Physical Therapist Assistant that was currently employed and they must have been married at the time of data collection. During their survey, I asked the Physical Therapists to provide their spouse's e-mail address. With this information, I contacted the spouse and administered their survey. There was no employment requirement for the spouses. Upon completion of both surveys, the couple was paid \$40 through the Louisiana State University Bursar Office.

On average, the Physical Therapists were 33.92 years old ($SD = 8.12$) and had been working as a Physical Therapist for 7.99 years ($SD = 7.73$). Physical Therapists reported that they expected to work an average of 38.30 hours per week ($SD = 3.70$) but reported that they actually worked 42.32 hours per week ($SD = 6.46$). They had been working for their current employer for an average of 4.94 years ($SD = 5.57$) and 27.4% of participants held a managerial position. They reported being married for an average of 7.18 years ($SD = 7.32$) and 1.8% had been divorced previously. 69% of Physical Therapists were female, 93.8% identified as Caucasian and 77% indicated that they had one or more specialties. Some specialties reported include orthopedics (37.2%), geriatrics (11.5%), pediatrics (10.6%), and sports (12.4%). 61.9% of Physical Therapists had children and had an average of 1.79 children living with them ($SD = 0.77$). 80.5% of Physical Therapists had earned a doctorate degree.

On average, spouses were 34.33 years old ($SD = 8.18$) and 88.5% reported being employed. Of those employed, the spouses reported that they expected to work 38.84 hours per week ($SD = 8.77$) but reported that they actually worked 42.62 hours per week ($SD = 10.42$). The

employed spouses had been working for their current employer for an average of 5.70 years ($SD = 5.89$) and 35% of participants currently held a managerial position. 8% of spouses reported being a Physical Therapist or Physical Therapy Assistant. Spouses held other occupations such as Attorney, Pediatric Psychologist, Nurse Practitioner, Software Engineer, Elementary Teacher, Business Owner, etc. The spouses were 32.7% female and 91.2% identified as Caucasian. 7.1% of spouses reported having been divorced previously, 63.7% reported having children and had an average of 1.77 children living with them ($SD = .73$)². 47.8% of spouses had earned a 4-year college degree and 25.7% had earned a master's degree.

Measures

Burnout. Burnout of the Physical Therapist was measured using the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981). The MBI is a 22-item measure that is broken into three sub-categories including emotional exhaustion, personal accomplishment, and depersonalization. The MBI is used to measure burnout that results from someone's job. An example item is "I feel fatigued when I get up in the morning and have to face another day on the job" (emotional exhaustion dimension). Items were measured on a 1-6 frequency scale (1 = a few times a year, 6 = every day). Maslach and Jackson (1981) found that both the total scale and the individual dimensions presented acceptable reliability (depersonalization ($\alpha = .77$); emotional exhaustion ($\alpha = .89$); personal accomplishment ($\alpha = .74$); combined ($\alpha = .83$)). They also provided evidence of convergent validity by correlating the burnout dimensions with various job characteristics found in the Job Diagnostic Survey (JDS, Hackman & Oldham, 1975). For example, they found that emotional exhaustion and depersonalization were negatively correlated

² There is a slight discrepancy between the Physical Therapists' and the spouses' number of children reported. This was likely due to a typo on the participant's part (e.g., some participants left this question blank).

with the job feedback dimension of the JDS. In the present study, the dimensions of depersonalization, emotional exhaustion and personal accomplishment showed evidence of reliability ($\alpha = .76$; $\alpha = .94$, $\alpha = .82$, respectively). Combining the dimensions, the burnout measure presented acceptable evidence of reliability ($\alpha = .84$). This scale can be found in Appendix C.

Emotional exhaustion. Emotional exhaustion of the spouse was measured using the Emotional Exhaustion subscale of the Tedium Measure (Pines, Aronson, & Kafry, 1981). This subscale is a 7-item measure used to assess a general form of burnout, rather than a work-related burnout, since the aim was to capture general emotional exhaustion of spouses. Participants rated items on a 1-7 Likert scale (1 = never, 7 = always). An example item is “being emotionally exhausted”. The reliability as assessed by Cronbach’s alpha ranged from .91 to .93 and the validity of the tedium measure was shown by significant correlations between tedium and constructs such as job satisfaction and turnover (Stout and Williams, 1983; Pines, Aronson, & Kafry, 1981). In the present study, the tedium measure presented acceptable evidence of reliability ($\alpha = .91$). This scale can be found in Appendix D.

Marital satisfaction. Marital Satisfaction of the spouse was measured using the Quality of Marriage Inventory (QMI; Norton, 1983) and the Satisfaction with Married Life Scale (SWML; Johnson, Zabriskie, & Hill, 2006). Both the QMI and the SWML are 5-item measures using a 1-7 Likert scale (1 = strongly disagree, 7 = strongly agree). An example item is “The conditions of my married life are excellent.” He, Zhong, Tong, Lan, Li, Ju and Fang (2018) found that the Cronbach’s alpha of the QMI ranged from .91 to .93 and .90 to .95 in their study, showing acceptable reliability. Heyman, Sayer, and Bellack (1994) found evidence of the QMI’s concurrent validity in that, scores from this scale are positively related to time the couple spent

together and are negatively related to discussions about ending the relationship. The SWML was shown to have acceptable reliability ($\alpha = .92$) (Johnson, Zabriskie, & Hill, 2006). Ward, Lundberg, Zabriskie, and Berrett (2009) found that the SWML scale was highly correlated with another measure of marital satisfaction, the RDAS scale, establishing construct validity. In the present study, the QMI and SWML both presented acceptable evidence of reliability ($\alpha = .94$; $\alpha = .93$, respectively; combined $\alpha = .96$). Given the strong correlation between the measures ($r = .84$), I collapsed the items into a single measure of marital satisfaction. These scales can be found in Appendix E.

Results

Analyses

Since all surveys were anonymous, I instructed each couple to choose a code word for each participant to enter during their survey which were used to match their data. Before running any statistical tests, I screened the data for any clear outliers or set responses. I added attention check items (e.g., “please select strongly agree”) throughout the survey and all participants responded appropriately. Using the SPSS software system and the cleaned dataset, I computed the mean score of responses for both the Physical Therapists and the spouses for each scale. I also computed the descriptive statistics and correlations for each dependent variable which can be found in Table 1, and calculated the reliability of each measure.

In addition to the descriptive items and specified measures, I asked both the Physical Therapist and the spouse to rate their average stress, both general and job related. I also asked both participants to rate their perception of their spouses’ stress, both general and job related. They answered on a 1-5 Likert scale (1 = Not at all, 5 = Extremely). Using the mean score of the spouses’ answer to the item asking “How stressed do you believe your spouse feels on average

because of their job?” and the mean score of the Physical Therapists’ answer to the item asking “How stressed do you feel on average because of your job?”, I found a significant correlation of .531 ($p < .01$). This correlation suggests that the spouses were able to accurately perceive how stressed their Physical Therapist was feeling due to their job. The descriptive statistics for these items can be found in Table 2.

Hypothesis Testing

To test Hypothesis 1, I ran a multiple regression on the data predicting the spouses’ emotional exhaustion from the three dimensions of Physical Therapists’ burnout. None of the dimensions significantly predicted spousal emotional exhaustion (depersonalization: ($\beta = .15, p = .149$); emotional exhaustion: ($\beta = .03, p = .817$); personal accomplishment: ($\beta = -.02, p = .813$)). Thus, Hypothesis 1 was not supported ($R^2 = .03$). To test Hypothesis 2, I ran a regression analysis predicting spousal marital satisfaction from spousal emotional exhaustion ($\beta = -.41, p < .001$). Thus, Hypothesis 2 was supported ($R^2 = .17$).

Lastly, I ran a partial mediation analysis in order to test Hypothesis 3 (spousal emotional exhaustion mediating the relationship between Physical Therapist’s burnout and spousal marital satisfaction) using the PROCESS Macro (Hayes, 2018) for SPSS. Specifically, I used Model 4 in the PROCESS Macro (see Figure 1 for an illustration). I hypothesized partial mediation (as opposed to full mediation) as burnout may affect spousal marital satisfaction both directly and indirectly through the spouse’s emotional exhaustion. There was no significant relationship found in the partial mediation for any of the dimensions of Physical Therapist’s burnout (depersonalization: (indirect effect = $-.09$, CI $[-.21, .02]$); emotional exhaustion: (indirect effect = $-.04$, CI $[-.13, .04]$); personal accomplishment: (indirect effect = $.03$, CI $[-.07, .15]$)). Thus, Hypothesis 3 was not supported (see Figure 2 for a visual depiction of the findings).

Discussion

Previous research by Maslach (1981) found that careers involving high levels of interaction with others result in higher levels of burnout. Specifically, many different occupations in healthcare are especially at risk since these are hands-on jobs. The current study focused on Physical Therapists, a population that has not been studied previously, as this occupation is becoming more popular and was recently classified as a primary care provider. This study sought to extend previous research by examining the relationship of burnout in Physical Therapists and its influence on their spouses through direct empathetic crossover.

Keeping in mind that emotional exhaustion is a dimension of burnout, previous research by Laing (2014) observed a crossover relationship between one partner's emotional exhaustion and the other partner's marital satisfaction. In addition, Bakker et al (2005) found evidence of bi-directional crossover in couples where both positive and negative constructs, including burnout (and therefore, work related emotional exhaustion), were measured. One goal of this research was to extend previous crossover findings to this specific population, specifically to determine if a Physical Therapist's burnout was associated with a decrease in their spouse's marital satisfaction, mediated by their spouse's general emotional exhaustion. The Physical Therapist's burnout was measured according to three separate dimensions: depersonalization, emotional exhaustion and personal accomplishment. Although there were no statistically significant relationships predicting spousal emotional exhaustion from any of the burnout dimensions, it is worth noting that the relationship between depersonalization reported by the Physical Therapist and the spouse's emotional exhaustion was approaching significance. The results from this study do not replicate the crossover findings of Bakker et al (2005) in which they measured both partner's burnout. However, this lack of replication may be due to this study's focus on the

spouses' general emotional exhaustion and its interaction with the Physical Therapists work-related emotional exhaustion rather than both partner's work-related emotional exhaustion.

Bakker and colleagues (2005) also controlled for factors such as home and job demands and resources whereas the current study had no controls for these potentially influential variables.

Although this study did not observe significant results regarding the relationship between the Physical Therapist's burnout and their spouse's marital satisfaction mediated by emotional exhaustion, there was a significant relationship predicting levels of spousal marital satisfaction from their own emotional exhaustion. These results are in line with Liang's previous findings that emotional exhaustion is negatively related to marital satisfaction. Specifically, Laing (2014) found that the main partner's emotional exhaustion impacted marital satisfaction in both themselves and their partner. Both Laing's study and the current study found that an individual's level of emotional exhaustion is significantly related to that person's marital satisfaction.

An important distinction between the current study and Laing's is that the model in the current study included the spouse's emotional exhaustion as the mediator, whereas Laing conceptualized the main partner's psychological strain as a mediator. Laing's study observed a moderate correlation between emotional exhaustion and psychological strain, concluding there is a distinct difference in these constructs. According to Laing (2014), emotional exhaustion for the work domain will lead to strain and lower satisfaction in the family domain. Although the two constructs are related, the variation in the mediators may have contributed to the present study's insignificant results.

Limitations and Future Research

As with all research, the present study is not without limitations. A notable limitation is that this was a cross-sectional study providing only a momentary glimpse into the participant's

state whereas a longitudinal study would have provided more data and given a more comprehensive view of the participant's experiences. In addition, a significant portion of our sample were Caucasian and female which limits generalizability of the results to other groups. The study's focus on such a specific population may also be a limitation since these results may not generalize outside of Physical Therapists. Lastly, since the sample was restricted to the United States, the results may not generalize to other countries.

In addition to these limitations, this study's sample was unable to represent the higher levels of burnout and the lower levels of marital satisfaction. This restriction of range may be due to the dyadic nature of the study as participants who are in a fulfilling marriage are more likely to complete a study together. In addition, since this study was voluntary, it is likely that those who participated were pleased with their job and had the extra energy and time to spend on a research survey.

I attribute the lack of significant results to the constraints of the research questions. The hypotheses did not account for the spouse's job burnout or the Physical Therapist's marital satisfaction, both of which could influence the results. Future research may examine the relationship of burnout and marital satisfaction between two partners in a bidirectional model. Research may also consider this relationship while controlling for other variables such as both work and home demands, consistent with the work of Bakker and colleagues (2005). Lastly, future research may explore other variables as mediators between burnout and marital satisfaction.

Despite these insignificant findings and limitations, there were some notable strengths of the study that should be mentioned. For this research, dyadic data was collected which presents twice the challenges that collecting data from a single person would have. As a result of these

challenges, dyadic data is a rarity and this study provides an example of effective recruiting techniques. Although previously mentioned as a limitation to generalizability, the highly specific population that this research focuses on also proves to be a strength since the narrow focus strengthens the conclusions that may be drawn.

Conclusion

In sum, this study supported previous research showing that an individual's emotional exhaustion is related to their marital satisfaction. With its insignificant results, this study provides a more precise focus for other researchers interested in burnout and its related constructs. Lastly, since the relationship between Physical Therapist's depersonalization and spouse's emotional exhaustion was approaching significance, this finding provides another potential topic of research for others.

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APPENDIX A: DEMOGRAPHICS FOR PHYSICAL THERAPISTS

1. What is your gender?
 - a. Male
 - b. Female
2. Please indicated your race; choose all that apply:
 - a. Caucasian
 - b. African American
 - c. Hispanic/Latino
 - d. Asian/Pacific Islander
 - e. Native American or American Indian
 - f. Other (fill in the blank)
3. What is your current age in years?
 - a. (drop down list of responses between 1-100)
4. How many years have you been married or in a domestic partnership?
 - a. (drop down list of responses between 1-100)
5. Have you been divorced previously?
 - a. Yes
 - b. No
6. Do you have children?
 - a. Yes
 - b. No
7. If yes, how many children currently live with you?
 - a. (drop down list of responses between 1-100)

8. Are you a Physical Therapist or Physical Therapy Assistant?
 - a. Physical Therapist
 - b. Physical Therapy Assistant
9. If a Physical Therapist, what is your specialization?
 - a. Cardiovascular & Pulmonary
 - b. Clinical Electrophysiology
 - c. Geriatrics
 - d. Neurology
 - e. Oncology
 - f. Orthopedics
 - g. Pediatrics
 - h. Sports
 - i. Women's Health
 - j. No Specialty
 - k. Other (fill in the blank)
10. How many years have you been working as a Physical Therapist or Physical Therapy Assistant?
 - a. (drop down list of responses between 1-100)
11. What is the highest level of education you received?
 - a. Associate's Degree
 - b. Bachelor's Degree
 - c. Master's Degree
 - d. Doctorate Degree

12. What is your employment status?
 - a. Employed full time
 - b. Employed part time
 - c. Other (fill in the blank)
13. How many hours are you expected to work each week?
 - a. (drop down list of responses between 1-100)
14. How many hours, on average, do you actually work per week?
 - a. (drop down list of responses between 1-100)
15. Do you hold a managerial position in your current job?
 - a. Yes
 - b. No
16. How long have you been working for your current employer?
 - a. (drop down list of responses between 0-6 months-100 years)
17. Is your spouse employed?
 - a. Yes
 - b. No
18. How stressed do you feel on average?
 - a. Not at all
 - b. Slightly
 - c. Moderately
 - d. Very
 - e. Extremely
19. How stressed do you feel on average because of your job?

- a. Not at all
- b. Slightly
- c. Moderately
- d. Very
- e. Extremely

20. How stressed do you believe your spouse feels on average?

- a. Not at all
- b. Slightly
- c. Moderately
- d. Very
- e. Extremely

21. How stressed do you believe your spouse feels on average because of their job?

- a. Not at all
- b. Slightly
- c. Moderately
- d. Very
- e. Extremely

APPENDIX B: DEMOGRAPHICS FOR SPOUSES

1. What is your gender?
 - a. Male
 - b. Female
2. Please indicated your race; choose all that apply:
 - a. Caucasian
 - b. African American
 - c. Hispanic/Latino
 - d. Asian/Pacific Islander
 - e. Native American or American Indian
 - f. Other (fill in the blank)
3. What is your current age in years?
 - a. (drop down list of responses between 1-100)
4. Have you been divorced previously?
 - a. Yes
 - b. No
5. Do you have children?
 - a. Yes
 - b. No
6. If yes, how many children currently live with you?
 - a. (drop down list of responses between 1-100)
7. How many years have you been married or in a domestic partnership?
 - a. (drop down list of responses between 1-100)

8. What is the highest level of education you received?
 - a. Less than high school
 - b. High school/GED
 - c. Some college
 - d. 2-year college degree (Associate's)
 - e. 4-year college degree (B.A., B.S.)
 - f. Master's degree
 - g. Doctorate degree
 - h. Professional degree (M.D., J.D.)
9. What is your employment status?
 - a. Employed full time
 - b. Employed part time
 - c. Not Employed
 - d. Other (fill in the blank)
10. How many hours are you expected to work each week?
 - a. (drop down list of responses between 1-100)
11. How many hours, on average, do you actually work per week?
 - a. (drop down list of responses between 1-100)
12. Are you a Physical Therapist or Physical Therapy Assistant?
 - a. Physical Therapist
 - b. Physical Therapy Assistant
 - c. I am not a Physical Therapist or Physical Therapy Assistant
13. If a Physical Therapist, what is your specialization? Select all that apply.

- a. Cardiovascular & Pulmonary
 - b. Clinical Electrophysiology
 - c. Geriatrics
 - d. Neurology
 - e. Oncology
 - f. Orthopedics
 - g. Pediatrics
 - h. Sports
 - i. Women's Health
 - j. No Specialty
 - k. Other (fill in the blank)
14. How many years have you been working as a Physical Therapist?
- a. (drop down list of responses between 1-100)
15. What is your current job title?
- a. (Fill in the blank)
16. Do you hold a managerial position in your current job?
- a. Yes
 - b. No
17. How long have you been working for your current employer?
- a. (drop down list of responses between less than a year-100 years)
18. How stressed do you feel on average?
- a. Not at all
 - b. Slightly

- c. Moderately
 - d. Very
 - e. Extremely
19. How stressed do you feel on average because of your job?
- a. Not at all
 - b. Slightly
 - c. Moderately
 - d. Very
 - e. Extremely
20. How stressed do you believe your spouse feels on average?
- a. Not at all
 - b. Slightly
 - c. Moderately
 - d. Very
 - e. Extremely
21. How stressed do you believe your spouse feels on average because of their job?
- a. Not at all
 - b. Slightly
 - c. Moderately
 - d. Very
 - e. Extremely

APPENDIX C: MASLACH BURNOUT INVENTORY

The following statements are about how you feel about work. Please read each statement carefully and answer how often you feel this way (1 = A few times a year, 2 = Monthly, 3 = A few times a month, 4 = Every week, 5 = A few times a week, 6 = Every day).

Emotional Exhaustion:

1. I feel emotionally drained from my work.
2. I feel used up at the end of the work day.
3. I feel fatigued when I get up in the morning and have to face another day on the job.
4. Working with people all day is really a strain for me.
5. I feel burned out from my work.
6. I feel frustrated by my job.
7. I feel I'm working too hard on my job.
8. Working with people directly puts too much stress on me.
9. I feel like I'm at the end of my rope.

Personal Accomplishment:

1. I can easily understand how my recipients feel about things.
2. I deal very effectively with the problems of my recipients.
3. I feel I'm positively influencing other people's lives through my work.
4. I feel very energetic.
5. I can easily create a relaxed atmosphere with my recipients.
6. I feel exhilarated after working closely with my recipients.
7. I have accomplished many worthwhile things in this job.

8. In my work, I deal with emotional problems very calmly.

Depersonalization:

1. I feel I treat some recipients as if they were impersonal “objects”.
2. I’ve become more callous toward people since I took this job.
3. I worry that this job is hardening me emotionally.
4. I don’t really care what happens to some recipients.
5. I feel recipients blame me for some of their problems.

APPENDIX D: THE TEDIUM MEASURE

The following statements are about how you feel. Please read each statement carefully and answer how often you feel this way (1 = Never, 2 = Once, 3 = Rarely, 4 = Sometimes, 5 = Often, 6 = Usually, 7 = Always)

Emotional Exhaustion:

1. Feeling depressed
2. Feeling trapped
3. Feeling hopeless
4. Being emotionally exhausted
5. Feeling “burned out”
6. Being troubled
7. Feeling anxious

APPENDIX E: MARITAL SATISFACTION

The following statements are about your satisfaction with your present marriage. Please read each statement carefully and answer how often you feel this way (1 = Strongly disagree, 2 = Disagree, 3 = Slightly disagree, 4 = Neither agree nor disagree, 5 = Slightly agree, 6 = Agree, 7 = Strongly agree)

Quality of Marriage Index (Norton, 1983)

1. We have a good marriage
2. My relationship with my partner is very stable
3. Our marriage is strong
4. My relationship with my partner makes me happy
5. I really feel like *part of the team* with my partner

Satisfaction with Married Life Scale (Johnson, Zabriskie, & Hill, 2006)

1. In most ways my married life is close to ideal
2. The conditions of my married life are excellent
3. I am satisfied with my married life
4. So far, I have gotten the important things I want in my married life
5. If I could live my married life over, I would change almost nothing

Table 1. *Correlations and descriptive statistics for all variables.*

	M	SD	1	2	3	4	5	6	7
1. Burnout	3.33	.62							
2. Burnout (EE)	2.75	1.19	.86**						
3. Burnout (PA)	4.89	.76	.30**	-.14					
4. Burnout (D)	1.86	.85	.61**	.45**	-.13				
5. Tedium (EE)	2.95	1.04	.11	.10	-.05	.17			
6. Marital Satisfaction	6.12	1.06	.00	.05	-.11	.04	-.41**		
7. Marital Satisfaction (Norton)	6.32	1.01	.03	.10	-.12	.03	-.37**	.95**	
8. Marital Satisfaction (Johnson)	5.92	1.20	-.03	.00	-.10	.04	-.41**	.97**	.84**

Variables 1-4 are measures of the Physical Therapist. Variables 5-8 are measures of the spouse.

Note. ** $p < .01$ * $p < .05$. $N = 113$ couples.

Table 2. *Descriptive statistics for average stress items.*

Items	Physical Therapist		Spouse	
	M	SD	M	SD
How stressed do you feel on average?	2.95	.69	2.76	.79
How stressed do you feel on average because of your job?	2.87	.82	2.77	.89
How stressed do you believe your spouse feels on average?	2.98	.92	3.11	.94
How stressed do you believe your spouse feels on average because of their job?	3.14	.93	3.00	.95

Note. $N = 113$ couples.

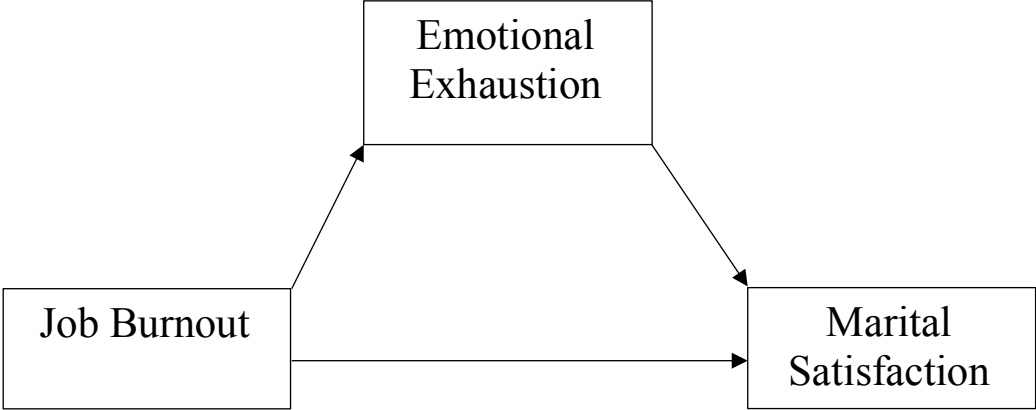
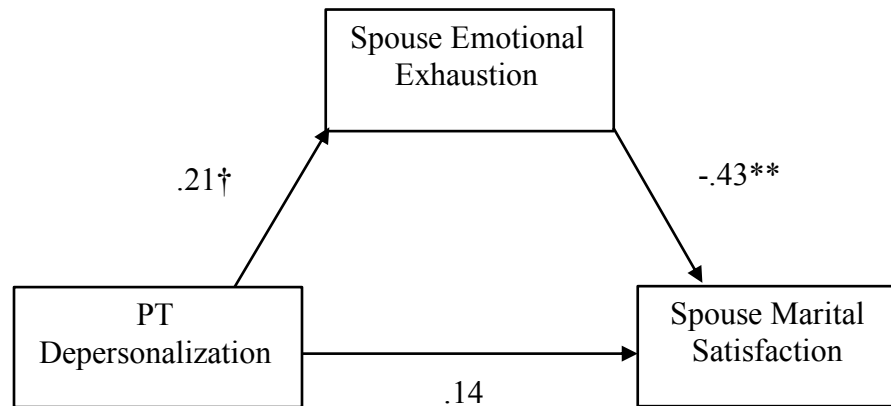
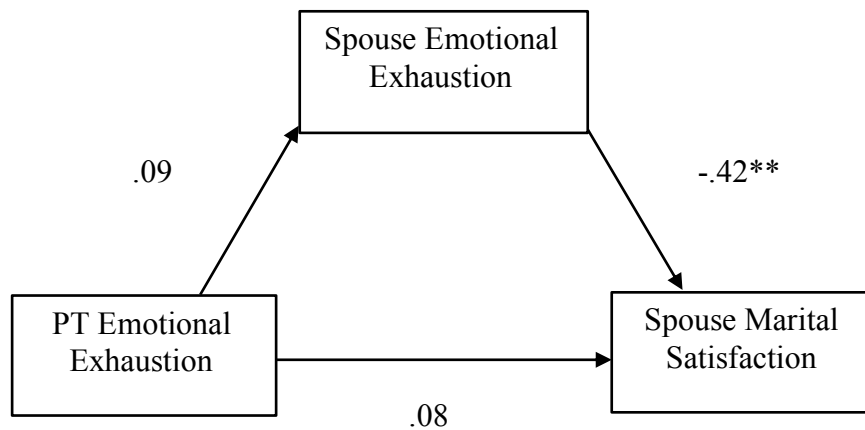


Figure 1. Conceptual model

A.



B.



C.

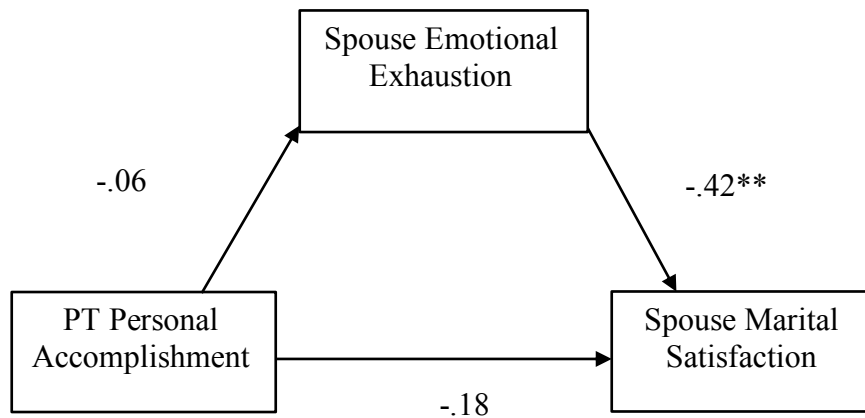


Figure 2. Partial mediation model of spousal emotional exhaustion's effect on the relationship between Physical Therapists' depersonalization (Panel A), emotional exhaustion (Panel B) and personal accomplishment (Panel C) and their spouse's marital satisfaction.

Note. ** $p < .01$; † approaching significance