



Relationship Quality, Physical Activity, and Psychiatric Diagnoses



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GOALS AND AIMS

Goal:

The overall goal was to better understand the different elements of spousal relationship quality in producing positive health outcomes.

Specific aims:

- To determine whether spousal support and strain are associated with engaging in vigorous physical activity.
- To identify whether the associations of spousal support and strain with vigorous physical activity differs by being diagnosed as depressed or not.
- To determine to what extent mood mediates the above relationships.

PREVIOUS RESEARCH

Previous research shows:

- Both support and strain in the marital relationship have the potential for shaping physical activity.
- Vigorous physical activity in older and aging adults leads to health benefits, while not engaging leads to negative health consequences.
- Spousal support and strain have been shown to be related to mood. Mood has been found to be related to whether a person will engage in physical activity.
- Depression, a common psychiatric disorder, may impede engagement in physical activity due to the nature of the disorder and is also related to mood.
- Emotional support from spouses may lessen the impact of the emotions felt due to mental illness.

METHODS

Sample

- 2011-2014 Refresher Wave of the Midlife Development in the U.S. (MIDUS) Survey. N= 1,649; Male= 53.8%; Ages 25 to 74; Mean age=51.46.

Measures

- Spousal Support* was assessed using 6 items e.g.: “How much does your spouse or partner really care about you?”, “How much does he or she appreciate you?” Cronbach’s alpha=.91
- Spousal Strain* was similarly assessed with 6 items, e.g.: “How often does he or she argue with you?”, “How often does he or she criticize you?” Cronbach’s alpha=.88
- Vigorous Physical Activity Group* was assessed by the responses to type of exercise (e.g.: running, vigorous swimming, etc.) for both summer and winter and how often at “Several times a week”, “Once a week”, “Several times a month”, “Once a month”, “Less than once a month”, and “Never.” The participant were split into three groups: regularly engages, somewhat engages, and does not engage. Cronbach’s alpha=.91.
- Depression* was assessed using 6 items and then run as whether they have depression (yes/no).
- Mood* was assessed using of participants scores on positive and negative affect. Cronbach’s alpha=.92 and .88 respectively

Table 1. Descriptive statistics of sample

Variable	N	%	M	SD
Age (Range 25-76)	1,649		51.45	14.00
Sex				
Male	887	53.8		
Female	762	46.2		
Physical Activity Group				
Regularly Engages	646	39.2%		
Somewhat Engages	585	35.5%		
Does not Engage	418	25.3%		
Depression				
Yes	168	10.2%		
No	1,481	89.8%		

Figure 1. Estimated Percentage of Individuals with Depression

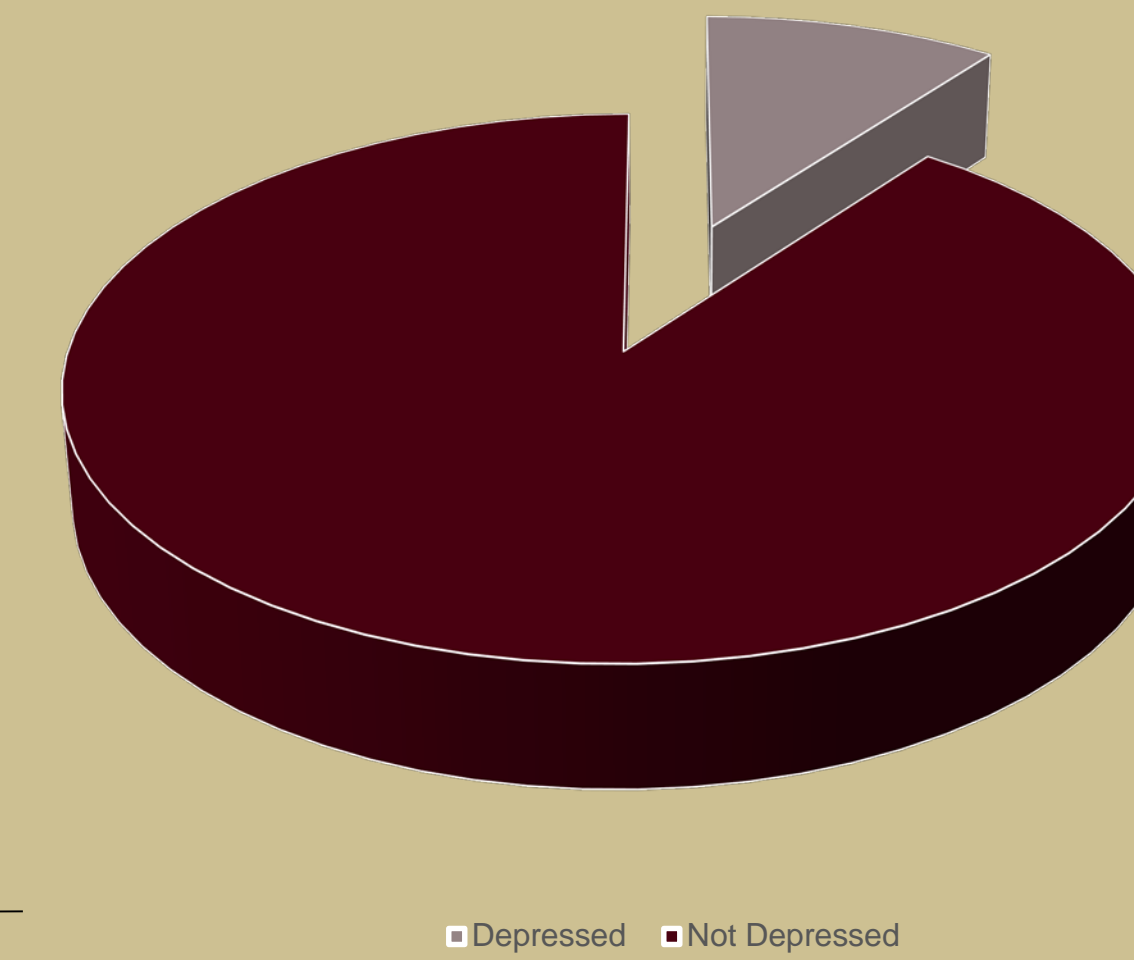
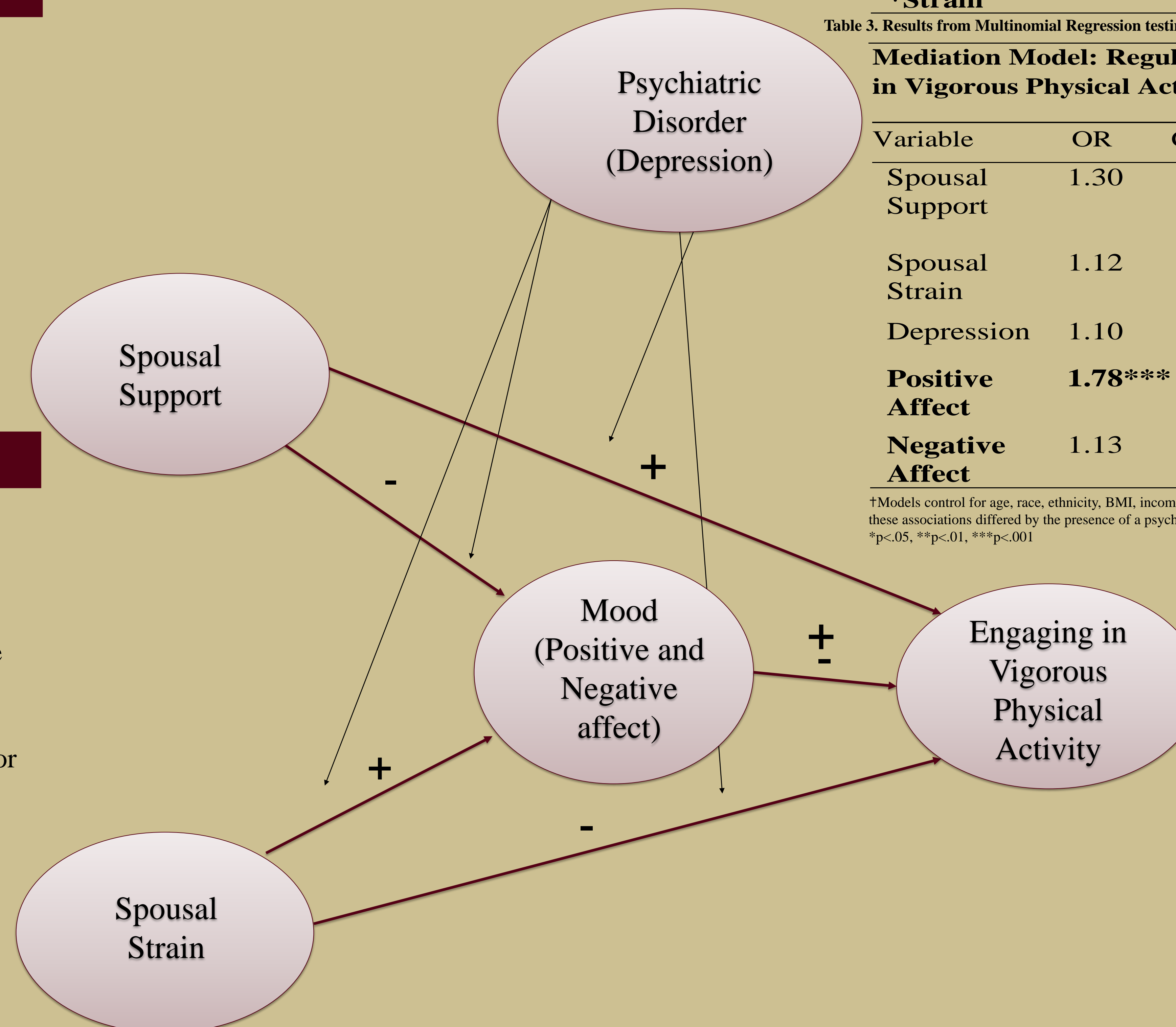


Figure 2. Conceptual Model of the Linkages of the Variables



The overall findings suggest that one’s relationship with their spouse has an important impact on their engagement in positive physical health activities.

RESULTS

Table 2. Results from Multinomial Regression Predicting Classification in Vigorous Physical Activity Group

Variable	Regularly Engages in Vigorous Physical Activity (As compared to Does Not Engage Group)†			Somewhat Engages in Vigorous Physical Activity (As compared to Does Not Engage Group)†		
	OR	CI(95%) Lower Bound	CI (95%) Upper Bound	OR	CI (95%) Lower Bound	CI (95%) Upper Bound
Spousal Support	1.37*	1.01	1.89	1.62***	1.21	2.20
Spousal Strain	1.01	.77	1.32	1.28	.98	1.67
Depression	.77	.50	1.19	.86	.56	1.31
Depression *Support	1.56	.87	2.80	.87	.48	1.60
Depression *Strain	.70	.38	1.30	1.14	.63	2.04

Table 3. Results from Multinomial Regression testing Mediation Model with Mood

Variable	Mediation Model: Regularly Engages in Vigorous Physical Activity†			Mediation Model: Somewhat Engages in Vigorous Physical Activity†		
	OR	CI (95%) LB	CI (95%) UB	OR	CI (95%) LB	CI (95%) UB
Spousal Support	1.30	.95	1.78	1.61**	1.19	2.18
Spousal Strain	1.12	.85	1.47	1.30	.99	1.71
Depression	1.10	.67	1.81	.94	.59	1.50
Positive Affect	1.78***	1.40	2.23	1.22	.97	1.53
Negative Affect	1.13	.85	1.50	1.10	.84	1.45

†Models control for age, race, ethnicity, BMI, income level, and sex. There was no evidence that these associations differed by the presence of a psychiatric disorder.
*p<.05, **p<.01, ***p<.001

CONCLUSIONS

- Spousal support not strain, is associated with engaging in vigorous physical activity, particularly for regular engagement.
- Even if a person is depressed, greater spousal support will still be associated with higher odds of engaging in vigorous physical activity for both groups. This extends previous research on understanding the benefit of spousal support even in the midst of a psychiatric disorder.
- The apparent benefit of spousal support appears to be operating through positive affect for the regularly engages in physical activity group. This is consistent with previous research that has related spousal support to mood and extends that research to our understanding of what process influence engagement in healthy activity.
- For the somewhat engages in physical activity group, the relationship with one’s spouse was important aside from mood.