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Gender Differences in Exercise Habits and Quality of Life Reports: Assessing the Moderating Effects of Reasons for Exercise

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Abstract

Men and women report different exercise habits and reasons for exercise. Given that quality of life is affected by exercise habits and reasons for exercise, the present study explored gender differences among these variables. Participants reported quality of life, exercise habits, and motives. Results revealed that women (n = 108) reported significantly higher exercise and quality of life levels than men (n = 72). Women reported exercising for weight loss and toning more than men, whereas men reported exercising for enjoyment more than women. Reasons for exercise predicted quality of life for women over exercise. For men, exercise was the best predictor of quality of life. Ultimately, exercise is not beneficial for a woman's quality of life under all conditions.

Keywords

Human Sex Differences; Exercise Habits; Exercise Motives; Quality of Life

Previous research demonstrates that men and women differ in exercise habits (Lustyk et al., 2004; Tiggemann & Williamson, 2000) and exercise motives (Crawford & Eklund, 1994; Davis & Colwes, 1991; Hsiao & Thayer, 1998; Markland & Hardy, 1994). However, there is a dearth of research examining whether these gender differences in exercise motives and habits differentially affect quality of life. In the present study we sought to address this gap in the literature by assessing gender differences in the predictability of quality of life from reasons for exercise, exercise habits, and the possible interaction of these predictors.

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Research demonstrates gender differences in exercise habits whereby habits differentially predict quality of life in men and women. For example, Lustyk et al. (2004) found that women engaging in regular, low-intensity activity report higher self-esteem and quality of life when compared to women engaging in regular, high-intensity activity. Similarly, men show higher self esteem and psychological wellbeing with higher levels of exercise, while women, especially young women (mean age was 18 years), report lower levels of self esteem the more they report exercising (Tiggemann & Williamson, 2000). While exercise habits may be associated with quality of life and psychological well-being, one exercise prescription in particular that has been called into question is exercise for weight loss.

Recently, the popular news media has painted a cloud of suspicion over the benefits of exercise when the reason one exercises is for weight loss (Cloud, 2009). This suspicion is supported by empirical evidence. In one study investigating exercise programs and weight loss outcome in women, Church et al. (2009) found that women who exercised did not lose significantly more weight than women who did not exercise. In light of these findings, it is reasonable to suspect that if one exercises for weight loss and this motive is not fulfilled, the effects of exercise on quality of life may be different than if one were exercising for an alternative motive such as health reasons and improved health is attained. In other words, a significant question remains when considering the benefits of exercise on quality of life; that is, does exercise in any fashion (e.g. varying amounts, different motives) benefit everyone equally?

Research investigating gender differences in reasons for exercise points to fairly consistent findings. Specifically, male exercisers are more likely to report that they exercise for social and competitive reasons (Markland & Hardy, 1993; Silberstein, et al., 1988), whereas female exercisers are more likely to report exercising for appearance reasons such as to lose weight or to maintain weight loss (Crawford & Eklund, 1994; Furman, Badmin & Sneade, 2002; Hsiao & Thayer, 1998; McDonald & Thompson, 1992; Prichard & Tiggemann, 2005; Strelan, Mehaffey & Tiggemann, 2003; Tiggemann & Williamson, 2000). Given these gender differences in reasons for exercise, it is plausible that men and women may experience different benefits from exercise resultant from their exercise attributions.

Theories of attribution, such as the Attribution Theory of Achievement, Motivation, and Emotion (Weiner, 1986), provide a basis for the many studies that have assessed the relationships between attributions and activity-based, health-related variables (Lustyk et al., 2004; Maltby & Day, 2001; Corneya et al., 2004; Netz, et al., 2008; Top, 1991). In such studies, attributions predicted changes in the amount of exercise behaviors. For example, attributions are a primary barrier to starting and maintaining an exercise program (May et al., 2008; McAuley et al., 1990). Still, whether attributions for exercise affect quality of life remains largely unknown.

Measures of quality of life typically take on two forms: health related and non-health related measures. Disease specific symptom checklists serve as the basis for measuring health-related quality of life whereby a reduction in or an absence of symptoms reflects better quality of life. However, non-health related measures have been used to understand the subjective overall wellbeing of individuals (Frisch et al., 1992). Non-health related measures

of quality of life are informative in that an absence of symptoms is not assumed to represent psychological wellbeing. Instead, these measures of quality of life consider a variety of factors that contribute to overall wellbeing (for review see Preddy & Watson, 2010).

In studies where non-health related quality of life is assessed, results reveal positive relationships with exercise (Lustyk et al., 2004; Maltby & Day, 2001). More specifically, exercise is beneficial in both physical and psychological domains of quality of life (Plante & Rodin, 1990; U.S. Department of Health and Human Services, 1996; Center for Disease Control and Prevention, 2005). Still, quality of life may be differentially dependent upon specific aspects of exercise such as motives and/or habits. In other words, exercise may not be beneficial under all circumstances for both men and women, and in order to maximize the benefits of exercise on quality of life one may need to exercise under specific conditions. Awareness of such changes in quality of life due to gender differences in exercise habits and reasons for exercise could be advantageous for health providers that prescribe exercise programs.

In order to better understand the effects of exercise on quality of life, the following study was performed. Our purposes were to: 1) further detail gender differences in exercise habits and reasons for exercise and 2) assess gender differences in the predictability of quality of life from exercise habits, reasons for exercise, and the possible interaction of these predictors.

Method

Participants

Following institutional review board approval, participants were recruited from several graduate and undergraduate courses at a northwest university. In an effort to include non-student participants, email advertisements were utilized to solicit participants from all members of the university community. Additionally, flyers were posted in locations for social gathering in the adjacent community (e.g., coffee houses) providing instructions for contacting a member of the research team. Participation was completely voluntary; no incentives for participation were provided. Individuals who agreed to participate (women, n = 108; men, n = 72) provided consent and were informed of their right to refrain from completing any portion of the survey.

Measures

Demographic Questionnaire—All participants were asked to provide their age, gender, and ethnicity as well as body weight and height for determination of body mass index (BMI).

Godin Leisure Time Activity Questionnaire—We used the Godin Leisure Time Activity Scale (Godin & Shepard, 1997) to assess participant's typical exercise habits. In completing this brief 4-item questionnaire, participants provide information on exercise frequency by indicating the typical amount of exercise they achieve in a 7-day period as "often", "sometimes" or "never/rarely". Participants also indicate duration and intensity of exercise by providing the number of times in a week that they achieve at least 15-minutes of

strenuous exercise in which their heart beats rapidly exemplified by activities such as running, vigorous swimming or bicycling, moderate exercise that is not exhausting such as fast walking, tennis or easy swimming or bicycling, and/or mild exercise that requires minimal effort like yoga or easy walking.

To score the items, reports of exercise intensity and duration were converted to metabolic equivalents (METs) by multiplying the amount of exercise in 7-day ratings of strenuous, moderate, and light activity by a factor of nine, five, or three respectively. Given that one MET is approximately equal to a person's resting energy expenditure, METs estimate the metabolic cost of activity reported by participants. Therefore, activities multiplied by a MET rating of 9 represent activities which expend energy nine times greater than that required at rest, five METs means the activity requires energy expenditure five times greater than that required at rest and three METs, three times greater than resting energy requirement.

Using the MET calculations as an intensity estimate along with the frequency estimate previously stated, an exercise summary score was generated to provide a general measure of weekly activity. Frequency ratings of "often" were assigned a 3, "sometimes" a 2, and "rarely/never" a 1. Frequency ratings were then multiplied by the MET intensity calculations, thus generating the exercise summary score. This calculation is similar to the F.I.T. formula reported throughout the fitness literature in which frequency, intensity, and time are used to provide a measure of activity. The calculated internal consistency estimate of reliability of the measures reported here were high ($\alpha = .82$) and similar to reliability published elsewhere (Godin & Shepard, 1997).

Reasons for Exercise Inventory (REI)—We used the original 24-item Reasons for Exercise Inventory (Silberstein et al., 1988) to assess participants' reasons for exercise. To complete this measure, participants indicated reasons for engaging in exercise using a 7-point scale, ranging from 1 = "being not at all important," to 7 = "being extremely important," and with 4 = "being moderately important." Scoring of the 24-items provides seven subscales including exercising for the following reasons: (1) to lose or manage weight, (2) to improve or maintain fitness, (3) to enhance mood, (4) to improve attractiveness, (5) to improve or maintain health, (6) for enjoyment, and (7) to tone the body. Internal consistency for the REI was .86.

Quality of Life—The Frisch Quality of Life Inventory (QOLI) assesses importance and satisfaction with 16 domains of life including health, self-esteem, relationships, leisure, and work (Frisch, 1994). Each item of this scale is rated on its importance from 0 being not important to 2 being extremely important and how satisfied the participant is with that item, ranging from 1 being very dissatisfied to 6 being very satisfied. To score the QOLI each item importance rating is multiplied by the satisfaction rating. Means are generated for the subscales and a total weighted satisfaction score is used as a summary score. *T*-scores can also be generated for use in clinical assessments. Frisch reports reliability and validity of the QOLI are high with a test-retest coefficient range of .80 to .91, and an internal consistency coefficient range of .77 to .89 (Frisch, 1994). Results

Demographics—Participants (men n = 72; women n = 108) were predominately White (79% men, 83% women) and 18-25 years old (99% of men and women). Gender differences in the demographic variables were not observed other than BMI, which was expected. BMI was assessed only to determine normality of the range for participants so undue influence on responses was not a factor. As indices fell within the normal range according to the new World Health Organization (2006) standards (men Mdn = 24, SD = 4.6; women Mdn = 21, SD = 3.3), BMI was not considered as a covariate. None of the remaining demographic variables were considered as covariates in analyses.

Gender Differences in Exercise—Gender differences existed for the exercise summary score (i.e., METs*frequency). Given unequal sample sizes, the non-parametric Mann-Whitney U test was used to assess gender differences in mean METs reported from strenuous, moderate and light activity, and the exercise summary score. To correct for Type I error inflation with repeated tests, the Bonferroni correction was applied to the following four analyses requiring a *p* less than .0125 for statistical significance.

As represented by the exercise summary score, total levels of energy expenditure over a week span were significantly higher in women (M= 143.8, SD= 123.1) than in men (M= 111.5, SD= 120.2), U= 2906.5, z= -2.87, p< .0125, r= -.21. This difference was accounted for by the reported energy expenditure from moderate and light activity. Women (M= 17.4, SD= 17.5) reported more METs from moderate activity than men (M= 11.4, SD= 12.4) U= 2855.5, p< .0125, z= -3.05, r= -0.23. Women (M= 13.3, SD= 10.9) also reported more light activity than men (M= 8.3, SD= 8.0) U= 2772.5, p< .0125, z= -3.29, r= -.25. No gender differences in reported energy expenditure from strenuous activity were observed.

Chi-square analyses were performed on exercise frequency reports to assess differences in the breakdown of exercise intensity for men and women. Results were statistically insignificant indicating that the reported frequency patterns for men and women are similar with 38-49% reporting exercising "often", 39-43% "sometimes", and 19% "never/rarely". Interestingly, the within gender analyses were significant with women reporting predominantly exercising "often", X^2 (2, N= 106) = 22.89, p< .05, η^2 = .11. Men on the other hand reported predominantly exercising "sometimes" X^2 (2, X= 68) = 6.38, X= .05, X= .05.

Gender Differences in Reasons for Exercise—Gender differences in REI reports are shown in Table 1. Mann-Whitney Uanalyses with Bonferroni correction (p < .006) revealed significant gender differences in the weight, enjoyment and tone motives only. Women placed more importance on exercising for weight related reasons (M = 5.05, SD = 1.2) than men (M = 3.82, SD = 1.4), U = 1737.5, p < .006, z = -5.67 r = -.42. Women also gave higher importance for exercising to tone their bodies (M = 4.61, SD = 1.4) than men (M = 3.89, SD = 1.6), U = 2550.5, p < .006, z = -3.05, r = -.23. Men placed more importance on exercising for enjoyment (M = 4.9, SD = 1.4) than women (M = 4, SD = 1.7) U = 2358.5, p < .001, z = -3.65, r = -.27.

Within Gender Differences in Reasons for Exercise—The top endorsements for women were exercising for health (M= 5.0, SD= 1.2), fitness (M= 5.0, SD= 1.1) and weight loss reasons (M= 5.0, SD= 1.2); the mean ratings for these reasons did not differ statistically. The top endorsements formen were exercising for health (M= 5.1, SD= 1.3), fitness (menM= 5.1, SD= 1.1), and enjoyment (M= 4.9, SD= 1.4) reasons; and again these reasons did not differ statistically.

Gender Differences in Quality of Life—Women reported significantly higher overall quality of life (M= 39.2, SD= 19.) than men (M= 28.8, SD= 19.1) as indicated by the total weighted satisfaction score on the Frisch scale U= 2606, p< .05, z= -3.75, r= -.36. Results of Man-Whitney U test comparing total and subscale scores for men and women can be found in Table 2.

Regression Analyses

Exercise, REI and Quality of Life Reports—Multiple regression analyses were performed to predict quality of life reports from exercise habits (i.e., exercise summary score) and exercise motives (i.e., REI reports). Analyses were run separately for men and women and predictors were ordered to determine if REI reports significantly predicted quality of life over and above the exercise summary score. Bivariate correlations are reported in Table 3. For men, exercise summary score accounted for a significant amount of the quality of life variance, $R^2 = .11$, F(1, 65) = 8.28, p < .05. However, REI reports accounted for an insignificant amount of the variance in quality of life (R^2 change = .08, p > .05) when exercise summary score was controlled for. Assessment of the relative importance of each predictor in the regression equation revealed only exercise summary score significantly contributed to the prediction equation, t(66) = 2.67, p < .05. For women, exercise summary score accounted for a significant amount of the quality of life variance, $R^2 = .05$, F(1, 103)= 5.57, p < .05. REI reports accounted for a significant proportion of the quality of life variance after controlling for exercise summary score, R^2 change = .22, R7, 96) = 4.12, p < .05. Assessment of the relative importance of each predictor in the regression equation revealed several variables as significant contributors including exercise summary score, t(104) = 2.60, p< .05, exercising to lose weight, t(104) = 2.28, p< .05, to improve mood, t(104) = -2.15, p< .05, for health reasons, t(104) = 2.46, p< .05, and to tone or change body shape, t(104) = -2.45, p < .05. Unlike the insignificant individual variable contributions of men, these latter findings for women argue for potential interactions among predictors in affecting criterion values.

To investigate potential interaction effects, a series of multiple regressions with interaction probing were performed in accordance with the methods of Aiken and West (1991). Interactions were non-significant indicating that exercise habits and motives serve as independent predictors of QOL in women.

Discussion

In the current study we sought to further detail gender differences in exercise habits and reasons for exercise. In addition, we sought to assess gender differences in the predictability of quality of life from exercise habits, reasons for exercise, and the possible interaction of

these predictors. Gender differences were observed in exercise habits, reasons for exercise and quality of life. In general, women exercised more than men. Women also indicated exercising for weight related and toning reasons more than men while men endorsed enjoyment reasons more than women. Finally, women reported higher quality of life than men.

The higher exercise summary score observed in women was due to more frequent (i.e., "often") moderate and light activity than men. While previous research demonstrates greater exercise quantity among male participants compared to female participants (Azevedo, et al., 2007; Jones, et al., 1998; Tiggemann & Williamson, 2000; Vilhjalmsson & Kristjansdottir, 2003), a paucity of published studies measured specific aspects of exercise such as frequency and intensity. For example, Pratt, Macera, and Curtis (1998) derived estimates of physical activity from three large-scale surveys and found that adult women were more sedentary than adult men, yet discernable gender differences in exercise intensity were not detected. Thus, findings reported here contribute to our understanding of gender differences in specific aspects of exercise habits including exercise frequency and exercise intensity.

In the present study, women reported exercising for weight related and toning reasons thus replicating previous findings (Furman, Badmin & Sneade, 2002; Markland & Hardy, 1993; McDonald & Thompson, 1992; Prichard & Tiggemann, 2005; Silberstein, et al., 1988; Strelan, Mehaffey & Tiggemann, 2003; Tiggemann & Williamson, 2000). For example, Prichard and Tiggemann found that women participating in aerobic classes reported exercising for appearance-related reasons. Yet, unlike Tiggemann & Williamson, we found a gender difference in exercise for enjoyment reasons with men endorsing that reason more than women.

In past research, exercise has been used to explain gender differences in quality of life scores (Lustyk et al., 2004; Maltby & Day, 2001; Tiggemann & Williamson, 2000). For example, Lustyk et al. (2004) found that women engaging in regular, low-intensity activity reported higher overall quality of life than women engaging in regular, high-intensity activity. Conversely, Tiggemann & Williamson (2000) found a significant negative relationship between hours of exercise and psychological well-being in young women (mean age 18 years) but a significant positive relationship between these variables in mature men (mean age 37 years). A major contribution of the present study was the inclusion of specific aspects of exercise habits (e.g., frequency and intensity) and reasons for exercise in the predictive model for quality of life.

We found that exercise summary score predicted quality of life for men and women. For men, exercise itself was the best predictor of quality of life. In other words, higher levels of exercise in men were associated with higher quality of life reports irrespective of reasons for exercise. This suggests that men may be able to improve their quality of life with increased exercise, no matter what reasons for exercise men give. However, this potential application for men's health requires further study.

In regards to women, analyses revealed that reasons for exercising served as a better predictor for quality of life than exercise summary score. Several studies have examined the

relationship between reasons for exercise and psychological variables such as body-esteem, self-esteem and body satisfaction (e.g. Furman, Badmin & Sneade, 2002; McDonald & Thompson, 1992; Prichard & Tiggemann, 2005; Strelan, Mehaffey & Tiggemann, 2003; Tiggemann & Williamson, 2000). By including both exercise summary score and reasons for exercise in the predictive model for quality of life in the present study, we are able to conclude that reasons for exercise predict quality of life in women over and above exercise per se. Moreover, the reasons that yielded significant predictions were exercising to lose weight, to improve mood, for health reasons, and to tone or change body shape.

Of particular importance is the direction of these relationships: exercising to lose weight or for fitness was associated with lower quality of life while exercising to improve mood or health was associated with higher quality of life. The first of these findings is consistent with previous research where exercising for appearance was associated with higher disordered eating, lower body-esteem, and higher body dissatisfaction (e.g. Furman, Badmin & Sneade, 2002; Strelan, Mehaffey & Tiggemann, 2003; Tiggemann & Williamson, 2000). When considered with the present finding that exercising for health and fitness reasons predicted higher quality of life, it is reasonable to suggest that further research should investigate the effects of exercise programs directed specifically towards exercising to improve health and fitness on wellbeing outcomes in women. Moreover, findings from the present study cast a shadow of doubt on the propagation of weight loss and toning motives for women as is seen in various coaching strategies in both individual and group exercise settings (e.g. aerobics classes). Research is needed to determine of these coaching strategies serve as a deterrent to improving quality of life in women.

Limitations of this study exist. First, it is possible that the aforementioned differences in predicting quality of life from exercise motives are due not to gender but idiosyncrasies of the sample. While the sample in the present experiment was partially a convenience sample of university students and staff, an attempt at diversity was made by recruiting willing volunteers from the surrounding urban community. Therefore, it is possible that the sample may be biased given this logistical limitation and application of complete random sampling. Provided that this sample is representative of women, reasons for exercise could account for changes in the psychological benefits of exercise (i.e., quality of life) and as such, exercise programs should be designed to address these differences.

Second, we did not assess the sexual orientation of the sample. It may be that exercise habits and motives interact to affect quality of life differently among homosexuals and heterosexuals. In a recent study, Grogan, Conner, and Smithson (2006) found that heterosexual men rated appearance motives as less important than gay men and heterosexual women and lesbians provided ratings similar to heterosexual men. Moreover, heterosexual men reported the highest exercise frequency among the entire sample. As these authors did not assess quality of life, additional research is needed to delineate specific roles for exercise habits and motives while considering sexual orientation.

Finally, we did not measure self-objectification. The underlying principal of Objectification Theory is that a person comes to see themselves as objects to be evaluated by others and that this repeated evaluation at the external level becomes internalized with time (Fredrickson &

Roberts, 1997). A burgeoning area of research argues for the role of Objectification Theory in explaining self-reported body satisfaction (Slater & Tiggemann, 2010) and reasons for exercise (Strelan, Mehaffey, & Tiggemann, 2003). The degree to which self-objectification factors into the effects of exercise habits and motives on quality of life is unknown.

In conclusion, results from the present study suggest that gender differences in exercise habits and motives persist. Moreover, exercise is positively associated with quality of life in both men and women. Our findings suggest that exercise alone may not be beneficial under all circumstances for women. In order to maximize the benefits of exercise on quality of life, women may need to be exercising under specific conditions and attributions. These findings are telling and are of particular relevance to healthcare providers that prescribe exercise programs. Results reported here demonstrate that considering exercise attributions when designing an exercise program for men may not be needed as adding this predictor to the model did not add to the variance accounted for in quality of life over and above exercise. However, the picture is not as clear for women as there was a trend towards significance in the model assessing the combined effect of exercise habits and motives on quality of life. Thus, there may be some additional benefit to encouraging women to exercise for reasons other than to change body shape through toning the body or to appear more attractive. To fully address these issues for women, further research should investigate differences in exercise programs to determine how to maximize benefits from exercise. For example, an exercise program that emphasized awareness of exercise intensity and reasons for exercise such as a mindfulness-based exercise program would be worthy of study given the findings reported here.

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Table I

Mean Reasons for Exercise Reported by Women and Men Participants.

	Women (<i>n</i> = 106)		Men (n = 67)		
	Mean	SD	Mean	SD	
Weight*	5.05	1.24	3.82	1.38	
Fitness	5.01	1.09	5.15	1.1	
Mood	4.41	1.25	4.83	1.46	
Attract	4.8	1.58	4.64	1.53	
Health	5.01	1.15	5.09	1.29	
Enjoy*	4	1.66	4.9	1.44	
Tone *	4.62	1.42	3.89	1.56	

Note: Weight = Exercising for weight related reasons, Fitness= Exercising to improve, Mood= Exercising to improve mood, Attract = Exercising to improve attractiveness, Health = Exercising for health benefits, Enjoy = Exercising for Enjoyment, Tone = Exercising to increase tone, SD = standard deviation

Significant at the .006 level adjusted for Bonferoni post-hoc analysis.

Table IIResults of Mann-Whitney U Test comparing Men and Women on the Quality of Life Inventory Total and Subscale Scores

Quality of Life Subscale							
	Women $(n = 108)$		Men $(n = 72)$				
	Mean	SD	Mean	SD	p		
Health ^a	2.66	2.52	2.07	2.66	.086		
Self Esteem b	2.13	3.22	2.73	2.28	.56		
Goals and Values $^{\mathcal{C}}$	3.42	2.69	2.18	2.3	<.001		
Money d	1.1	1.68	.64	2.42	.110		
Work ^e	1.63	2.31	1.4	2.46	.485		
Play^f	3.24	2.45	3.18	2.4	.874		
Learn ^g	2.64	2.32	2.19	2.51	.207		
Create ^h	2.27	2.36	1.58	2.46	.087		
$\mathrm{Help}^{\dot{I}}$	1.79	2.38	1.31	2.25	.106		
Love ^j	2	3.6	1.49	3.81	.438		
Friends k	3.89	2.53	3.17	2.28	.01		
Kids ¹	2.01	2.94	1.19	2.78	.036		
Home m	2	2.94	2.24	2.67	.598		
Neighbor ⁿ	1.96	2.33	1.1	1.63	.017		
Community o	2.13	2.4	1.4	2.21	.028		
Relatives ^p	3.88	2.11	2.394	2.59	.015		
Total Score ^q	39.11	19.78	28.78	19.14	<.001		

a physical fitness, free of illness, disability or pain

b self approval

c desired accomplishments and matters of importance

 $[\]boldsymbol{d}_{\text{adequate earnings}}$ and goods at present and future projections

 $[\]stackrel{\mbox{\scriptsize e}}{\mbox{\ activities}}$ in and out of home or school where one spends most of their time

f leisure time activity

gknowledge acquisition

 $[\]frac{h}{\text{using imagination to come up with solutions to problems or engaging in a hobby}$

i assisting those in need

intimate romantic relationship

k non-relative, close relationships

 ${\it I}_{\it importance}$ of having/not having a child to ones' happiness and relationship with children

 $m_{
m importance}$ and satisfaction with one's dwelling

 $n_{\rm importance}$ and satisfaction with area surrounding ones' dwelling

o importance and satisfaction with the city of ones' dwelling

 $p_{\mbox{relationships}}$ with those one is related to

 $q_{
m total}$ weighted satisfaction score

Table III

Bivariate Correlations between Quality of Life Reports and Calculated Exercise Summary Score and Reasons for Exercise Reports in Women and Men Participants

	QOL	Exercise	Weight	Fit	Mood	Attract	Health	Enjoy
Women (n =	108):							
Exercise	.23**							
Weight	.05	.16						
Fitness	.25**	.16	.15					
Mood	.01	.22*	.28**	.37**				
Attract	17*	.21*	.62**	.01	.29**			
Health	.29**	.17*	.19*	.55**	.47**	.14		
Enjoy	.04	.17*	.04	.16	.32**	.18*	.34**	
Tone	21*	.11	.49**	.05	.05	.57**	.10	.22*
Men $(n = 72)$):							
Exercise	.34**							
Weight	.03	03						
Fitness	.20	.37**	.06					
Mood	.07	003	.08	.26*				
Attract	.12	.04	.53***	.23*	.03			
Health	01	.22*	.30**	.44**	.41**	.13		
Enjoy	.16	.18	.19	.07	.25*	.21*	.20	
Tone	.16	06	.53**	.47**	.20*	.49**	.27*	.05

Note: Weight = Exercising for weight related reasons, Fitness= Exercising to improve, Mood= Exercising to improve mood, Attract = Exercising to improve attractiveness, Enjoy = Exercising for Enjoyment, Tone = Exercising to increase tone, QOL = Quality of Life, Exercise = Calculated Exercise Summary Score

p<.05

^{**} p< .01.