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**Gender-Specific Associations between Personality Traits,  
Physical Activity, and Body Size Dissatisfaction**

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**Abstract**

A recently validated trait personality framework is the HEXACO (honesty-humility, emotionality, extraversion, agreeableness, conscientiousness, and openness to experience). Little is yet known about how the HEXACO personality dimensions and its subsets – particularly the dimension of honesty-humility – relates to physical activity and body size dissatisfaction as a function of gender. This study tests these relations across men and women through a proposed path model wherein personality and physical activity relate indirectly through lower body size dissatisfaction and perceived fitness in 315 university students. Results pertaining to honesty-humility revealed that women were higher in honesty-humility, emotionality, and conscientiousness. Women with higher honesty-humility (notably sincerity) were prone to lower body size dissatisfaction whereas lower levels of modesty predicted physical activity levels in men. The proposed path model had an excellent fit in both men and women although significant pathways were more prevalent in women than in men. The role of body size dissatisfaction seems to be more salient in explaining the relationship between the HEXACO personality dimensions and perceived fitness and physical activity in women than men. We recommend that practitioners particularly note the vulnerability of women university students who are high in emotionality and low in honesty-humility (especially sincerity) and agreeableness.

**Keywords:** *honesty-humility, emotionality, fitness, body image, path analysis*

## **Gender-Specific Associations between Personality Traits, Physical Activity, and Body Size Dissatisfaction**

Trait personality is defined by Chamorro-Premuzic and Furnham (2005) as a conceptualization and assessment of personality on the basis of combinations or clusters of traits – lay words describing observable and “consistent preferences or patterns of behavior” (p. 7). These trait clusters tend to be fairly stable (consistent) over time and “provide a comprehensive frame of reference to establish a taxonomy or framework for the underlying personality dimensions of human beings” (p. 16). The consolidation and decreased repetition of extensive lists of personality traits eventually led to their being represented into five relatively distinct dimensions (neuroticism, extraversion, agreeableness, conscientiousness, and openness to experience) housed within the Five-Factor Model of trait personality and assessed using the Revised NEO (Neuroticism, Extraversion, Openness) Personality Inventory (Costa & McCrae, 1992). Combinations of these five personality dimensions have been associated with a host of availing health and quality of life outcomes such as motivation, coping strategies, relationship and job satisfaction, and burnout (Ackerman, 2013); along with increased participation and motivation for physical activity (Smith, Gallo, Shivpuri, & Brewer, 2012).

There is recent research evidence that a dimension of trait personality may be missing in the Five-Factor Model. Ashton and Lee (2007) report that data representing many cultures and languages from a validated trait personality framework called the HEXACO has extracted a sixth dimension interpreted as honesty-humility. HEXACO-based research has consistently extracted factors closely resembling the five dimensions of the Five-Factor Model in addition to honesty-humility. The extraversion, conscientiousness, and openness to experience dimensions are highly similar between the Five-Factor and HEXACO models of trait personality; whereas, the agreeableness and emotionality dimensions in the HEXACO reflect a slightly rotated variation of the agreeableness and neuroticism dimensions of the Five-Factor Model. More specifically, traits related to anger shift from neuroticism in the Five Factor Model to agreeableness in the HEXACO whereas those related to sensitivity/sentimentality rotate from agreeableness in the Five Factor Model to emotionality in the HEXACO. To summarize, individuals tend to consistently exhibit the following traits relative to each of the HEXACO personality dimensions: sincere, honest, loyal, modest, unassuming, and ethical (H:

honesty-humility); emotional, over-sensitive, anxious, and clingy (E: emotionality); outgoing, lively, sociable, cheerful, and confident (X: extraversion); patient, tolerant, peaceful, mild, and forgiving (A: agreeableness); organized, self-disciplined, hard-working, efficient, and precise (C: conscientiousness); and intellectual, creative, unconventional, innovative, and inquisitive (O: openness to experience). Relatively opposite characteristics would be evident in individuals low in these personality dimensions.

Little is yet known about how the HEXACO personality dimensions – particularly the dimension of honesty-humility – relates to physical activity and body image as a function of gender so it is the central aim of this study. The personality dimension most significantly and consistently linked to increased physical activity is extraversion which is followed by conscientiousness and low emotionality/neuroticism (Rhodes & Smith, 2006). It appears that highly-extraverted individuals tend to be more energetic and seek out physical activity for its potentially arousing incentive (Courneya & Hellsten, 1998). Individuals seem more likely to participate in physical activities that align well with their personality traits. For example, the role of personality can vary by the intensity of physical activity as extraversion has been more positively associated with participation in physical activities of moderate intensity whereas conscientiousness has been linked more with vigorous physical activity (De Bruijn, De Groot, VandenPutte, & Rhodes, 2009).

Body size dissatisfaction (BSD) is the difference between one's actual and ideal perception of one's body size (Furnham, Titman, & Sleeman, 1994). It has also been referred to actual-ideal weight discrepancy (Swami et al., 2013) and has been linked to lowered satisfaction with one's body (Evans, 2002; Gao, Newton, & Carson, 2008), less physical activity and fitness (Dishman et al., 2005), and elevated anxiety, smoking, depression, disordered eating, and preoccupation with weight (Grogan, 2008). Personality dimensions have also been linked to BSD. For example, Swami et al. (2013) reports that there are stronger and more consistent links between BSD and extraversion and emotionality/neuroticism compared to between BSD and openness to experience, agreeableness, and conscientiousness (Swami et al., 2013). They explain that the positive BSD-neuroticism link seems reasonable because those high in this personality dimension are more prone to experience negative emotionality and dissatisfaction.

Considerable research evidence is available about the interplay between the five-factor model of personality, BSD, and physical activity as a function of gender. Women tend to be significantly less active and fit (Dishman et al., 2005) and are less satisfied with their body (Evans, 2002). Depending on the context, women are also more prone than men to higher neuroticism in physical activity settings and

to being more neurotic, extraverted, agreeable, and conscientious in sport settings (Allen, Greenlees & Jones, 2013). Meanwhile, the influence of BSD on many health outcomes seems particularly potent among women who tend to compare their bodies with others more, experience elevated external and internal pressure to maintain an ideal body size and shape, and are more likely to perceive themselves as overweight even if they are not (Murnen, 2011). Males are also prone to being dissatisfied with their body size although relatively equal proportions desire a thinner body compared to those who want to increase their body size and musculature (Furnham, Badmin, & Sneade, 2002). It appears that the influence of BSD on physical activity may differ by gender since males tend to more highly value body size, shape, and appearance compared to females who prefer being thinner (Azzarito & Solmon, 2006). These and other scholars (e.g., McCreary, 2011) have called for more research contrasting BSD-health outcome links like physical activity by gender.

Researchers (e.g., Rhodes & Smith, 2006) have also reported a lack of studies examining the subsets of personality dimensions and possible moderators of this relationship such as gender. On this basis we posit the following four research questions for this study. First, which personality dimensions differ by gender? Second, how does honesty-humility correlate with self-reported BSD, fitness level, and PAL? Third, do the HEXACO personality dimensions (particularly honesty-humility) and their subsets predict BSD and physical activity level? Finally, based on the research reported earlier on interactions between personality, BSD, and fitness and physical activity levels, do the gender-specific data fit a proposed path model (Figure 1) wherein personality and level of physical activity relate indirectly through lower BSD and perceived fitness? This proposed pathway is framed in the fundamental assertion of social cognitive theory (Bandura, 1986) that behaviours like physical activity are the result of an interactive self-regulatory process comprised of individual beliefs, feelings, and choices along with features of the context such as instruction, learning tasks, and the motivational climate. As such, BSD is expected to function as a belief within one's general organizing schema that will "dictate the substance of thought, emotion, and behavior" (Cash, 2011, p. 43) in the form of perceptions of one's fitness level that are expected to relate significantly to levels of physical activity (McCreary, 2011).

## Method

### Procedure and Participants

Following ethical clearance and consent from all necessary levels of a large public university ( $n = 18,000$ ) in south-central Canada, the lead author administered three questionnaires to undergraduate university students during one required second-year and one elective third year semester-length course in the Kinesiology major. Collectively, the surveys took 15-20 minutes for students to complete and some of the items were for purposes beyond this study. The rate of participation among invited students was 95%. The few who chose not to participate waited quietly or completed an alternative learning activity from their seats. Following data screening using Mahalanobis distance values that eliminated 15 outlier cases, the final sample was 315 and consisted of mainly Caucasian ethnicity (86.8%), 153 men (48.5%) and 163 women (51.5%).

### Measures

*Perceptions of Fitness Level and Body Size Dissatisfaction (BSD)*. In addition to requesting demographic information from participants (e.g., gender, ethnicity) a brief survey also assessed self-reported fitness level and body size dissatisfaction (BSD). The item assessing fitness level – similar to one used previously in research (e.g., Haugen, Ommundsen, & Seiler, 2013) to assess this – was “Compared to others your age and gender, which of the following most closely describes your level of fitness” (rated from 0 = *very poor*, to, 4 = *very good*). BSD was assessed using nine gender-specific silhouettes (Furnham et al., 1994) that vary between very thin/slender (scored 1) and very large/overweight (scored 9) from which students responded to two questions: “The number of which person below (1) most resembles how you would like other people to see your body;” and, (2) “most resembles how you see your body.” BSD was the first (ideal) score subtracted from the second (current) score which ranged from +8 to -8 such that students desirous of a smaller body size had positive scores whereas those preferring a larger body size had negative scores. It is a frequently used measure in body image research demonstrating satisfactory indices of validity (e.g., Swami et al., 2013).

*Physical Activity Levels (PAL)*. On the same survey, students were asked three questions to assess their weekly level of moderate, vigorous and strength-training forms of physical activity on a scale that ranged from 0 (none) to 7 (every day). The questions asked students “how many days in the last week did you exercise/participate in (1) physical activity for at least 20 minutes to the extent that it made you sweat and/or breathe hard (such as basketball, running, swimming, or fast cycling);” (2) “physical activity for at least 30 minutes that did not make you sweat and/or breathe hard (such as fast walking or

slow bicycling or swimming);” and, (3) “strength training such as push-ups, sit-ups, or weight-lifting?” The physical activity level (PAL) scale was the sum of all three items following previous protocols with these items (e.g., Australian Institute of Health and Welfare, 2003; Haugen, Ommundsen, & Seiler, 2013).

*Personality.* The 100-item HEXACO Personality Inventory – Revised (HEXACO-PI-R) assessment of trait personality (Lee & Ashton, 2004) was also used. It has been validated previously in many languages and age-levels with satisfactory scale reliability coefficients (for a review, see Ashton & Lee, 2007). Using a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree), it assesses the six HEXACO dimensions each consisting of four subsets (sub-scales) of four items (totaling 24 subsets). These are listed in Table 1. Values for each dimension and subset were calculated by taking the mean response to items in it.

#### Data Analysis

Descriptive statistics, internal consistency, and Pearson bivariate correlation coefficients (overall and within each gender) were computed. A multivariate analysis of variance procedure (MANOVA) was performed to determine gender differences in personality with personality dimensions serving as dependent variables. Separate linear regression procedures by gender were used to assess the relative prediction of honesty-humility on BSD and of each personality dimension and sub-scale (entered simultaneously) on BSD and PAL. Assessing the proposed pathway from personality to physical activity levels indirectly through BSD was performed by path analyses and the maximum likelihood method was used for extraction. Models were tested independently for both men and women. The Statistical Program for the Social Sciences (SPSS; version 21.0) was used for all the statistical analyses in this study with the exception of the use of EQS 6.0 for the path analyses.

#### Results

There were no signs of abnormal distributions and the internal consistency reliability coefficients (Cronbach’s alpha) were sound ( $>.80$ ) for each personality dimension and satisfactory for 22 of the 24 personality sub-scales using the standard of  $>.60$  for scales with fewer than 10 items (Loewenthal, 1996). With four items in its sub-scale, sincerity (.59) was retained (Swami et al., 2013) whereas unconventionality (.38) was omitted from subsequent analyses. The correlations among the personality dimensions (Table 1) were low-to-moderate (0 - .27) in both men and women relieving concerns over multi-collinearity.

In response to our first research objective, the MANOVA performed to determine gender differences in personality entering personality dimensions as dependent variables, revealed a main gender effect in personality,  $F(6, 315) = 24.55, p < .001, \eta^2 = .32$ . Females had significantly higher honesty-humility,  $F(1, 320) = 19.69, p < .001, \eta^2 = .06$ ; emotionality,  $F(1, 320) = 123.81, p < .001, \eta^2 = .28$ ; and, conscientiousness  $F(1, 320) = 10.87, p < .001, \eta^2 = .03$ . Second, honesty-humility did not relate significantly to fitness or physical activity level in either men or women although it correlated negatively and significantly ( $r = -.22; p < .001$ ) to BSD only in women. Further analysis of this relationship through a linear regression procedure revealed that honesty-humility predicted BSD in women [ $R^2 = .05, F(1, 163) = 8.25; p = .005$ ] not in men.

Third, regression analyses (Table 2) were used to assess the prediction of BSD by personality subsets relative to each gender. The personality subsets collectively predicted BSD in women [ $R^2 = .28, F(23, 141) = 2.40; p = .001$ ], not in men [ $R^2 = .09, F(23, 130) = .54; p = .955$ ]. Subset predictors in women were lower sincerity ( $p = .017$ ) and social self-esteem ( $p = .002$ ) and higher perfectionism ( $p = .02$ ). Regression analysis was also utilized to determine if any personality dimensions or subsets predicted PAL by gender. Among men, PAL was not predicted by the personality dimensions [ $R^2 = .04, F(6, 149) = 1.07; p = .382$ ] although the subsets did predict PAL [ $R^2 = .28, F(23, 132) = 2.22; p = .003$ ]; specifically, higher social self-esteem ( $p = .030$ ) and diligence ( $p = .036$ ) along with lower social boldness ( $p = .021$ ), flexibility ( $p = .014$ ), and modesty ( $p = .006$ ). In women, PAL was predicted by the dimensions [ $R^2 = .09, F(6, 159) = 2.65; p = .018$ ] notably by agreeableness ( $t = 2.26; p = .05$ ). PAL was also predicted by the subsets in women [ $R^2 = .24, F(23, 142) = 1.97; p = .007$ ]; specifically, by higher diligence ( $p = .002$ ).

Finally, the path analyses assessing whether the gender-specific data fit the proposed path model, revealed an excellent fit of the model to the data for women (Figure 1) using goodness of fit indices ( $\chi^2_{(13)} = 22.04; CFI = .940; SRMR = .051; RMSEA = .065$ ). PAL was significantly predicted by fitness levels, which was significantly predicted by BSD in a negative relationship. Emotionality and openness to experience (in a negative relationship) were the sole significant predictors of BSD. Among males the goodness of fit indices ( $\chi^2_{(13)} = 16.93; CFI = .942; SRMR = .056; RMSEA = .044$ ) also indicated an excellent fit (Figure 2) although the only significant pathway was from fitness level to PAL. These interpretations are based on proposed values of .95 and greater on the CFI indicative of excellent fit of the model to the data (Hu & Bentler, 1999). It has, however, been argued that this is too restrictive and



values of .92 - .94 may be considered as evidence of excellent fit (Byrne, 2008). Accepted criteria for excellent fit are .08 or less for the SRMR (Hu & Bentler, 1999), and .10 or less for the RMSEA (Browne & Cudeck, 1993).

## **Discussion**

The results of this study add important insights into gender-specific associations among the HEXACO dimensions and subsets of personality, levels of fitness and physical activity, and BSD in university students. The gender differences in personality reported in this study was a noteworthy contribution to the literature. For example, the finding that emotionality (with a moderate effect size of .28) and conscientiousness (with a small effect size of .03) were statistically higher in women reinforces relatively consistent findings in the personality literature. For example, emotionality tends to be higher in women than men (Ackermann, 2013) and some research in sport settings (Allen et al., 2013) has reported higher levels of emotionality, extraversion, agreeableness, and conscientiousness in women. Although the effect size was only low-to-moderate (.06), the significantly higher values of honesty-humility in women has been reported in other research (Lee & Ashton, 2004); yet, it is new relative to a sample of Kinesiology undergraduate students.

Another particularly valuable contribution of this study was finding that that the HEXACO dimensions that deviate most from the Five Factor Model of personality (honesty-humility, agreeableness, and emotionality) were each associated with BSD in women. In other words, women with lower emotionality and higher honesty-humility (notably sincerity) and agreeableness were prone to lower BSD. The link between honesty-humility (especially sincerity) and lower BSD in women not men signals that women who are less authentic – acting falsely in the form of flattering others or pretending to like them in order to obtain favors – are more prone to BSD. As a symptom of a healthy self-concept (Brownfain, 1952), features of honesty-humility such as sincerity may be part of broad self-schema from which women judge their BSD. Among men, lower levels of the honesty-humility subset called modesty – desiring to be viewed, treated, and respected superior to others – predicted PAL. This desire may be partially fueling men's PAL and the motives for it; the latter being potentially problematic because research has reported associations between similar extrinsic aims (e.g., to be bigger, stronger, and faster) and problematic levels of anxiety, affect, and self-esteem in males (McCreary, 2011). More research is needed to explore specifically how honesty-humility and its dimensions interact with BSD and gender to influence physical activity.

The excellent fit of the data to the path model in both men and women suggests that personality interacts as a personal attribute to exert its influence on PAL through perceived fitness and BSD; however, the specific nature of this path varies somewhat by gender. The only significant pathway in men was from fitness level to physical activity whereas in women each pathway was significant except for between BSD and four of the six HEXACO personality dimensions. Diligence predicted PAL in both men and women, lower agreeableness was a strong predictor in women, and higher social self-esteem and lower modesty, social boldness, and flexibility was highlighted in men. The apparent role of diligence in PAL reflects previous research showing it to be predictive of performance in other pursuits such as academic achievement including among university physical education candidates (Morali & Tok, 2009). A viable inference to our finding that agreeableness predicted PAL in women not in men is that this sample of women may be more prone to participating in physical activity as an outlet rather than those who are more agreeable who may prefer engaging in sport (Courneya & Hellsten, 1998). Meanwhile, the prediction of PAL in men by positive self-regard and by being more confident and argumentative and less modest in social settings suggests that these traits may be important for PAL in men. The absence of a predictive relationship between extraversion and PAL in either men or women in this study was surprising particularly because extraversion has been linked to PAL (especially of a moderate-intensity) and to elite athletes whereas extraversion tends to be lower in recreational-level athletes and those participating in individual sports (Allen et al., 2011; Rhodes & Smith, 2006). Perhaps the extraversion-PAL relationship in this study was obscured by PAL consisting of three forms (moderate, vigorous, and strength-training) of physical activity.

Our findings revealed that the role of BSD was more salient in explaining the relationship between personality and perceived fitness and physical activity in women than men. This was particularly evident in the significant relations in women and not men between BSD and fitness level and between BSD and personality (higher emotionality and lower agreeableness). These results corroborate the findings of Swami et al. (2013) suggesting that women prone to experiencing emotionality are more prone to a higher BSD. Our results also provided fresh evidence that lower agreeableness, higher perfectionism, and lower sincerity and social self-esteem predict BSD among women. In other words, women with certain personality traits – particularly those who tend to experience fear of physical dangers, experience anxiety in response to life's stresses, feel a need for emotional support from others, feel empathy and sentimental attachments with others, hold grudges against those who have harmed them, are rather critical of others' shortcomings, are stubborn in

defending their point of view, feel anger readily in response to mistreatment, are prone to be thorough and concerned with details, flatter others or pretend to like them in order to obtain favors, and often sense personal worthlessness and see themselves as unpopular (Lee & Ashton, 2004) – tend to be more prone to BSD. The results align with previous research indicating that women who are perfectionistic, neurotic, and less agreeable, are inclined to experience stress in events where they may face social evaluations that may coincide with or lead to elevated feelings of BSD and serve as a barrier to fitness and physical activity levels (Courneya & Hellsten, 1998; Dishman et al., 2005; Swami et al., 2013) and potentially other health-related behaviours such as elevated anxiety, smoking, depression, and disordered eating (Grogan, 2008). The prediction of BSD by perfection is of particular interest because perfectionists tend to crave the admiration and approval of others so they don't feel rejected and are prone to "impression management" because they think that people are watching and have expectations for their behaviours like their health and fitness (Dimmock, Grove, & Longbottom, 2012). These unique associations by gender may also be related to a one's need for control. For example, Lochbaum, Bixby, and Wang (2007) who grouped exercising men and women by a profile of their motivation for exercise and also found that personality differences were greatest across women groups and influential in their conscious control over exercise behaviour.

In conclusion, the study supports use of the HEXACO personality framework to help explain links between physical activity and associated factors like BSD. Personality appears to interact as a personal attribute to exert its influence on PAL through perceived fitness and BSD in both men and women although the specific nature of this path varies by gender. Practitioners should consider the barriers to PAL that may exist due to university students' personality constructs and provide more personal attention and support to women in university who are high in emotionality and low in agreeableness and honesty-humility as they may be particularly at risk for BSD and subsequently lower levels of fitness and physical activity. We caution that the Kinesiology students may represent a more active sample than normative university students and highlight the inherent limitations of self-report data including the one-item measure for fitness level and the three-item measure for PAL in this study. Assessing more forms of PAL in future research would be useful since neuroticism and perfectionism in both men and women have been associated with a drive to improve body appearance that is often manifest in women through thinness and in men by muscularity (McCreary, 2011).

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Table 1

*Descriptive Statistics and Pearson Correlations by Gender*

Scales	H	E	X	A	C	O	BSD	FL	PAL
Females									
Mean	3.48	3.53	3.52	3.07	3.63	2.84	.88	2.54	9.36
SD	.56	.56	.50	.53	.48	.60	1.05	.67	4.41
Males									
Mean	3.22	2.89	3.54	3.12	3.46	2.95	-.34	2.99	10.94
SD	.49	.47	.53	.43	.47	.52	1.21	.66	4.51
Bivariate Correlations									
H	-	-.07	-.06	.22*	.15	.15*	.12	.02	-.04
E	.05	-	-.25**	-.08	.01	-.03	-.01	-.09	-.07
X	.03	-.01	-	-.08	.09	.04	-.04	.18*	.10
A	.23**	-.13	.05	-	.12	.23**	.02	.00	-.02
C	.24**	.16*	.12	.07	-	.10	.08	.11	.07
O	.14	-.06	.02	.05	.04	-	.07	-.20*	-.15
BSD	-.22**	.15	-.13	-.20*	-.10	-.01	-	-.10	.02
FL	-.04	-.06	.20*	.12	.16*	-.12	-.20*	-	.48**
PAL	-.06	-.05	.17*	.17*	.15	-.05	-.09	.59**	-

*Note.* N = 316; Females ( $n = 163$ , Lower Diagonal), Males ( $n = 153$ , Upper Diagonal). PAL (Physical Activity Level); FL (Fitness Level); BSD (Body Size Dissatisfaction); H (Honesty-Humility); E (Emotionality); X (Extraversion); A (Agreeableness); C (Conscientious); O (Openness to Experience).

\*  $p < .05$ ; \*\*  $p < .01$ .

Table 2

*Descriptive Statistics and Predictors by Gender for Subsets of Personality Dimensions*

Subset (Dimension)	$\alpha$	Males				Females				
		M	SD	Predicts BSD <i>t</i>	Predicts PAL <i>t</i>	M	SD	Predicts BSD <i>t</i>	Predicts PAL <i>T</i>	
<b>H</b>	Sincerity	.59	3.39	.62			3.36	.74	-2.43*	
	Fairness	.72	3.24	.84			3.59	.83		
	Greed-Avoidance	.80	2.75	.86			3.12	.89		
	Modesty	.65	3.51	.68		-2.81**	3.86	.55		
<b>E</b>	Fearfulness	.70	2.50	.63			3.21	.75		
	Anxiety	.72	3.23	.78			3.86	.76		
	Dependence	.77	2.72	.71			3.29	.86		
	Sentimentality	.71	3.10	.63			3.77	.74		
<b>X</b>	Social Self Esteem	.63	3.90	.56		2.19*	3.75	.59	-3.15**	
	Social Boldness	.79	3.15	.78		-2.33*	2.98	.87		
	Sociability	.70	3.51	.73			3.67	.66		
	Liveliness	.75	3.63	.67			2.98	.87		
<b>A</b>	Forgiveness	.67	2.87	.65			2.72	.68		
	Gentleness	.60	3.30	.56			3.32	.65		
	Flexibility	.62	2.98	.65		-2.49**	2.95	.74		
	Patience	.74	3.33	.73			3.28	.77		
<b>C</b>	Organization	.71	3.41	.80			3.68	.81		
	Diligence	.68	3.86	.64		2.12*	3.99	.52		3.22**
	Perfectionism	.62	3.32	.60			3.56	.69	2.28*	
	Prudence	.68	3.23	.66			3.28	.68		
<b>O</b>	Aesthetic Appreciation	.61	2.59	.83			2.75	.90		
	Inquisitiveness	.60	2.81	.71			2.41	.80		
	Creativity	.70	3.07	.79			3.08	.89		
	Unconventionality	.38	-	-	-	-	-	-		

Notes. Females ( $n = 163$ ), Males ( $n = 153$ ); PAL (Physical Activity Level); BSD (Body Size Dissatisfaction); H (Honesty-Humility); E (Emotionality); X (Extraversion); A (Agreeableness); C (Conscientious); O (Openness to Experience).

\*  $p < .05$ ; \*\*  $p < .01$ .



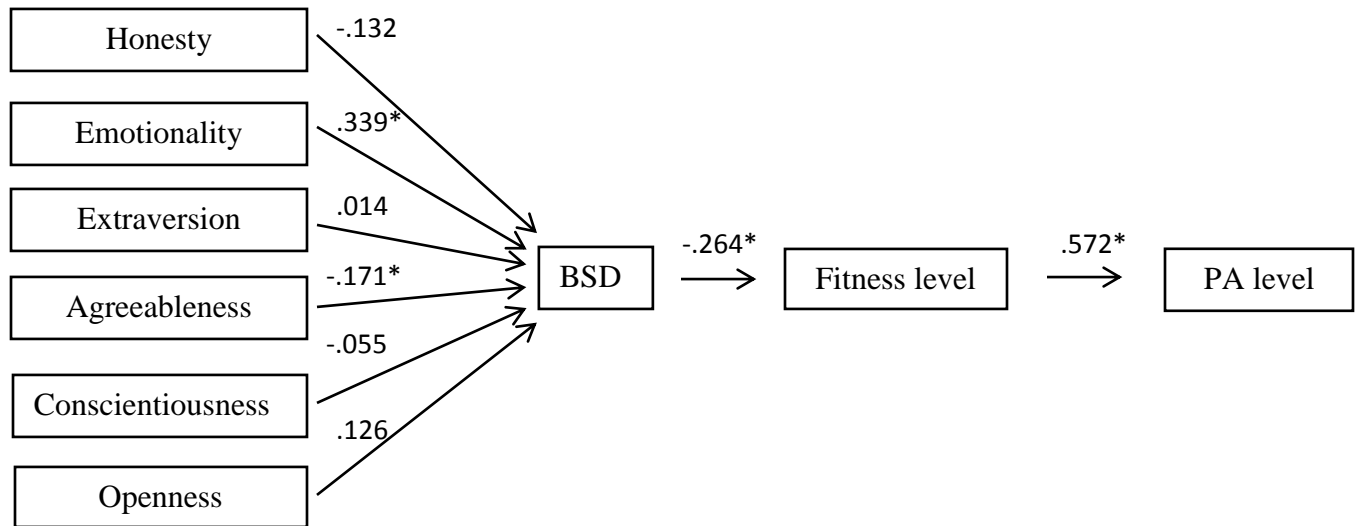


Figure 1. Path analysis for women.

Note. Standardized values are given. \*  $p < .05$ ; PA Level = Physical Activity Level; BSD (Body Size Dissatisfaction).

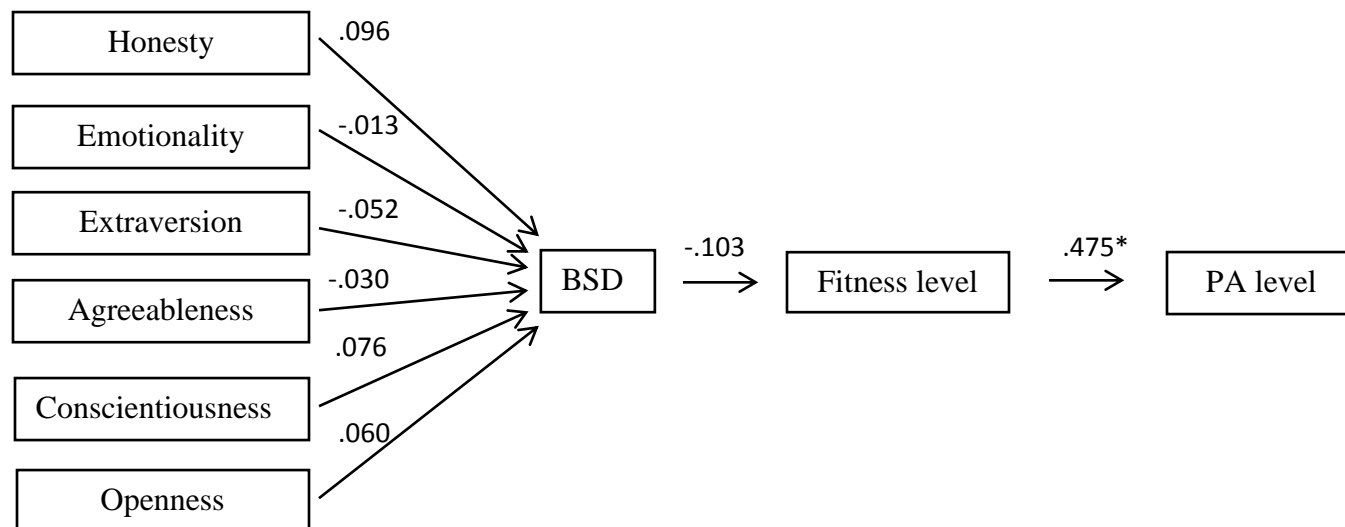


Figure 2. Path analysis for men.

Note. Standardized values are given. \*  $p < .05$ ; PA Level = Physical Activity Level; BSD (Body Size Dissatisfaction).