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## Keywords

conscientiousness, openness, intrinsic goals, extrinsic goals, well-being

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<https://doi.org/10.26443/msurj.v21i1.385>

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# Personality and Wellbeing: How Conscientiousness and Openness Influence Wellbeing Through Intrinsic and Extrinsic Goal Aspirations and Attainment

## Abstract

Well-being is a major focus of psychological research worldwide. Although environmental factors, personality traits, and goal achievement each predict well-being, they are often examined in isolation. However, it remains unclear how these factors are connected, for example, whether personality influences well-being in part through its impact on goal setting and goal attainment. The present study examines whether conscientiousness and openness relate to well-being through goal aspirations and goal attainment. Guided by Self-Determination Theory, intrinsic and extrinsic goals were tested as mediating pathways connecting conscientiousness and openness to well-being. Using data from 1,892 adults across 51 countries, multiple mediation analyses showed that both conscientiousness and openness were positively associated with well-being. Conscientiousness predicted greater intrinsic goal importance and intrinsic goal attainment, which partially mediated its relationship with well-being. Conscientiousness also negatively predicted extrinsic goal importance. Openness strongly predicted intrinsic goal importance and attainment, while negatively predicting extrinsic goals. The association between openness and well-being was fully mediated by intrinsic goal attainment. Extrinsic goal importance and attainment were not significantly related to well-being. Overall, these findings highlight intrinsic goal pursuit as a key psychological mechanism through which personality traits impact well-being.

## Introduction

Personality structures refer to stable patterns of behavior, thought, and emotion that vary across individuals and help explain consistent psychological functioning<sup>1</sup>. Among the most widely accepted models for understanding personality is the Big Five framework<sup>2</sup>, which categorizes traits into neuroticism, extraversion, agreeableness, openness to experience, and conscientiousness. These traits reflect broad tendencies in how people think, feel, and act across different situations.

Conscientiousness is marked by self-discipline, persistence, impulse control, and the ability to pursue long-term goals. Individuals high in conscientiousness tend to plan ahead, delay gratification, and regulate impulses effectively<sup>3</sup>. This trait has been consistently linked to enhanced well-being via greater life satisfaction and lower rates of anxiety and depression<sup>4,5</sup>. One explanation is that conscientious individuals engage in health-promoting behaviors, regulate negative emotions effectively, and use strategic planning to achieve goals<sup>6,7,8,9</sup>. By shaping behavior and goal-directed effort, conscientiousness helps create conditions that support well-being.

Openness to experience is a personality trait characterized by imagination, curiosity, intellectual curiosity, and a preference for novelty<sup>2</sup>. Individuals high in openness tend to seek out new experience and ideas, and are more receptive to unconventional perspectives. Although openness shows less consistent associations with well-being than conscientiousness, research suggests it may influence well-being through indirect pathways. Individuals high in openness are more likely to engage in creative activities, pursue meaningful experiences, and explore personal interests, which can support purpose and life satisfaction<sup>4</sup>.

The mechanisms linking personality traits, such as conscientiousness and

openness, to well-being remain only partially understood. One promising explanation involves the types of goals individuals set, and their success in achieving them<sup>10</sup>. Personality influences both goal selection and the likelihood of attainment<sup>9</sup>. According to Self-Determination Theory (SDT), individuals pursue two broad types of goals: intrinsic goals, which directly satisfy basic psychological needs (relatedness, competence, and autonomy), and extrinsic goals, which are oriented toward external rewards like wealth, fame, or status. Intrinsic goal aspirations are consistently associated with higher well-being<sup>11</sup>, whereas prioritizing extrinsic goals is often linked to lower well-being because they are less directly tied to psychological need fulfillment. However, attaining either type of goal can enhance well-being<sup>12,13</sup>. This distinction reflects differences between aspiration and attainment: pursuing extrinsic goals alone may not satisfy psychological needs, whereas achieving goals can provide benefits such as financial stability or opportunities that indirectly support well-being. In contrast, intrinsic goals contribute to well-being both through the pursuit itself and through attainment, as they fulfill core psychological needs and provide meaningful experiences. Thus, the impact of a goal on well-being depends not only on its type, but also on whether it is successfully achieved.

The present study examines how conscientiousness and openness contribute to well-being through their associations with intrinsic and extrinsic goal aspirations and attainment. These traits were selected because, compared to more emotion-focused traits such as neuroticism and extraversion, conscientiousness and openness are closely related to how individuals set priorities and work toward goals. Although agreeableness is often examined within the framework of Self-Determination Theory, it was not included in the present study because our focus was specifically on traits most directly linked to the striving, persistence, and the pursuit of both intrinsic and extrinsic goals. Conscientiousness, because it is characterized

by planning and persistence, is expected to predict goal aspirations, goal attainment, and well-being. Openness is expected to predict intrinsic aspirations and well-being, as individuals high in openness often value personal growth, self-exploration, and meaningful relationships, which align with intrinsic goals<sup>14</sup>. It is hypothesized that attainment of both intrinsic and extrinsic goals will be positively associated with well-being, with intrinsic attainment showing a stronger effect. Additionally, conscientiousness is expected to relate to attainment of both goal types. Overall, the relationship between conscientiousness, openness, and well-being is expected to be partially mediated by goal aspirations and attainment.

## Methods

### Participants and Procedure

A total of 1,892 participants from 51 countries, predominantly the United States (83%), completed an online survey for financial compensation. Participants provided demographic information, including age, gender, ethnicity, and personal income (48% male, 51% female, 1% preferred not to say). Demographic variables were not analyzed in the presented study. All participants provided informed consent prior to participation and were free to withdraw at any time without penalty. Participant confidentiality and data privacy were maintained throughout the study. The survey was administered online using a paid Qualtrics panel. Qualtrics panels consist of pre-recruited participants who have agreed to complete surveys. When a sample is purchased, Qualtrics recruits respondents through its global panel partners and distributes the survey to them.

### Measures

Conscientiousness and openness were each assessed using 20 items from the Big Five Aspect Scales<sup>15</sup>. This 100-item measure includes 10 subscales, representing two aspects for each of the Big Five personality traits, with 10 items per aspect. For conscientiousness, the two aspects measured were Industriousness (e.g., diligence, self-discipline, goal striving), and Orderliness (e.g., organization, tidiness, preference for structure), with items such as 'I carry out my plans'. For openness, the aspects assessed were Openness (e.g., imagination, aesthetic sensitivity, curiosity for art/nature), and Intellect (e.g., intellectual engagement, abstract thinking, cognitive reflection), with items such as 'I have a rich vocabulary'. Items were combined into total scores for each trait to provide reliable overall measures, as our primary focus was on the broader trait rather than differences between the aspects. Participants responded to each item on a 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Higher scores indicated greater levels of conscientiousness or openness. Half of the items for each trait (10 out of 20) were reverse-coded.

Intrinsic and extrinsic goal aspiration and attainment were each measured using 15 items each from the Aspiration Index<sup>16</sup>. Participants were presented with a series of life goals, one at a time, and asked two questions about each: (a) "How important is this goal to you?" and (b) "How much have you already attained this goal?" Responses were recorded on a 7-point Likert scale ranging from 1 (Not at all) to 7 (Very), with 4 indicating Moderately. Examples of goals included intrinsic goals such as "To help people in need," and extrinsic goals such as "To have an image that others find appealing." Higher scores indicated greater aspiration or attainment for a given type of goal.

Well-being was measured by a 12-item Scale of Positive and Negative Experiences<sup>17</sup>, and a 5-item Satisfaction with Life Scale<sup>18</sup>. The Scale of Positive and Negative Experiences includes 6 items of each valence, for example, happy, joyful, sad, and afraid. Participants indicated on a 5-point Likert

**Table 1.** Summary of Variable Means, Standard Deviations, Internal Consistency and Bivariate Correlations

Variable	M	SD	Cronbach's $\alpha$	1	2	3	4	5	6	7
1. Well-being	0	0.9	0.91*	—						
2. Conscientiousness	4.77	0.82	0.88*	.43**	—					
				[.40, .47]						
3. Openness	5.06	0.77	0.85*	.18**	.37**	—				
				[.13, .22]	[.33, .41]					
4. Intrinsic Goal Importance	5.48	1.01	0.90*	.24**	.28**	.48**	—			
				[.20, .28]	[.24, .32]	[.45, .52]				
5. Intrinsic Goal Attainment	4.26	1.05	0.92*	.57**	.31**	.24**	.46**	—		
				[.54, .60]	[.27, .35]	[.19, .28]	[.42, .49]			
6. Extrinsic Goal Importance	3.48	1.25	0.87*	0.04	-.06*	-.12**	.23**	.18**	—	
				[-.01, .08]	[-.10, -.01]	[-.16, -.07]	[.19, .27]	[.14, .22]		
7. Extrinsic Goal Attainment	2.92	1.2	0.91*	.29**	-.01	-.15**	.06**	.55**	.66**	—
				[.25, .33]	[-.05, .04]	[-.20, -.11]	[.02, .11]	[.51, .58]	[.63, .68]	

Note. M = mean; SD = standard deviation; Cronbach's  $\alpha$  = internal consistency of multi-item scales. Values in square brackets represent 95% confidence intervals. The confidence interval indicates a plausible range of population correlations that could have produced the observed sample correlation. \* $p < .05$ , \*\* $p < .01$ .

Scale the frequency of experiencing each feeling (1-Very Rarely or Never, 5-Very Often or Always). The Satisfaction with Life Scale lists statements for participants to indicate their degree of agreement with each statement via a 7-point Likert Scale (1-Strongly Disagree, 4-Neither Agree nor Disagree, 7-Strongly Agree). As an example, one item states "In most ways my life is close to my ideal." Higher scores indicated greater life satisfaction. No items were reverse-coded. To enable combination of the two measures into a single composite well-being index, scores were standardized (z-scored) prior to aggregation.

Several additional measures were also administered but not included in the data analyses, including demographic information, the Awareness of Narrative Identity Questionnaire<sup>19</sup>, Basic Psychological Need Satisfaction and Frustration Scale<sup>20</sup>, Perceived General Health<sup>21</sup>, the Pennebaker Inventory of Limbic Languidness<sup>22</sup>, and the 16-item International Cognitive Ability Resource<sup>23</sup>. This dataset was collected in collaboration with other researchers with the intention of testing multiple hypotheses; however, only the measures relevant to the present hypotheses were utilized in this study. Although basic psychological need satisfaction is considered highly related to well-being within the framework of Self-Determination Theory, it was not included in the present analyses because it was outside the scope of the specific research questions addressed in this study.

## Results

### Sample Characteristics

Conscientiousness and openness were the primary personality traits of interest in the present study. Overall, analysis conducted using R software indicated that participants reported moderately high levels of conscientiousness. Scores ranged from 1.05 to 7.00, with a mean of 4.77 (median = 4.90). Participants also reported relatively high levels of openness. Openness scores ranged from 2.05 to 7.00, with a mean of 5.06 (median = 5.20). Descriptive statistics, internal consistency estimates and bivariate correlations for all variables are summarized in Table 1.

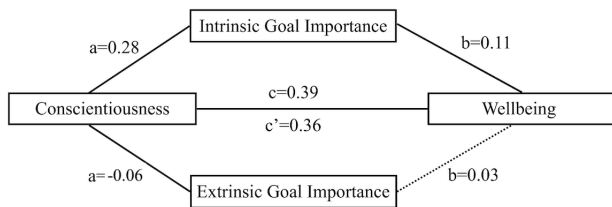
### Mediation Models

Multiple mediation analyses were conducted using ordinary least squares regression. Indirect effects were tested using nonparametric bootstrapping because indirect effects are often not normally distributed. Bootstrapping was therefore used to obtain more accurate confidence intervals. A total of 5,000 bootstrap resamples were used to estimate bias-corrected 95% confidence intervals for each indirect effect. Indirect effects were considered significant if the confidence interval did not include zero. All variables were standardized prior to analysis so that the resulting coefficients could be interpreted as standardized effects.

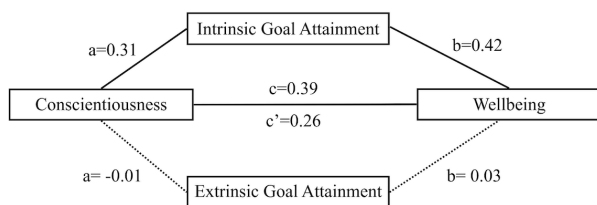
Variable	M	SD	$\alpha$	1	2	3	4	5	6	7
1. Wellbeing	0	0.9	0.91*	—						
2. Conscientiousness	4.77	0.82	0.88*	.43** [.40, .47]	—					
3. Openness	5.06	0.77	0.85*	.18** [.13, .22]	.37** [.33, .41]	—				
4. Intrinsic Goal Importance	5.48	1.01	0.90*	.24** [.20, .28]	.28** [.24, .32]	.48** [.45, .52]	—			
5. Intrinsic Goal Attainment	4.26	1.05	0.92*	.57** [.54, .60]	.31** [.27, .35]	.24** [.19, .28]	.46** [.42, .49]	—		
6. Extrinsic Goal Importance	3.48	1.25	0.87*	0.04 [-.01, .08]	-.06* [-.10, -.01]	-.12** [-.16, -.07]	.23** [.19, .27]	.18** [.14, .22]	—	
7. Extrinsic Goal Attainment	2.92	1.2	0.91*	.29** [.25, .33]	-.01 [-.05, .04]	-.15** [-.20, -.11]	.06** [.02, .11]	.55** [.51, .58]	.66** [.63, .68]	—

**Table 1.** Summary of Variable Means, Standard Deviations, Internal Consistency, and Bivariate Correlations. M = mean; SD = standard deviation; Cronbach's  $\alpha$  = internal consistency of multi-item scales. Values in square brackets represent 95% confidence intervals. The confidence interval indicates a plausible range of population correlations that could have produced the observed sample correlation. \* $p < .05$ , \*\* $p < .01$ .

**Figure 1.** Multiple Mediation Model of Conscientiousness on Wellbeing via Intrinsic and Extrinsic Goal Importance. Solid lines indicate significant paths; dotted lines indicate nonsignificant paths. Conscientiousness positively predicted intrinsic and negatively predicted extrinsic goal importance; only intrinsic goal importance significantly predicted wellbeing, partially mediating the association.



**Figure 2.** Multiple Mediation Model of Conscientiousness on Wellbeing via Intrinsic and Extrinsic Goal Attainment. Solid lines indicate significant paths; dotted lines indicate nonsignificant paths. Conscientiousness positively predicted intrinsic but not extrinsic goal attainment; only intrinsic attainment significantly predicted wellbeing, partially mediating the association.



Four multiple mediation models were conducted in total. For each personality variable (conscientiousness and openness), we ran two models predicting well-being: one testing intrinsic versus extrinsic goal importance as mediators, and the other testing intrinsic versus extrinsic goal achievement as mediators.

A multiple mediation analysis was conducted to examine whether intrinsic goal importance and extrinsic goal importance mediated the relationship between conscientiousness and well-being (Figure 1). All variables were standardized before analysis, so coefficients represent standardized effects. The total effect of conscientiousness on well-being was significant,  $B=0.39$ ,  $SE=0.02$ ,  $t(1890)=20.87$ ,  $p<.001$ , 95% CI [0.35,0.42].

When both mediators were entered simultaneously, conscientiousness significantly predicted intrinsic goal importance ( $B=0.28$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.24,0.32]) and negatively predicted extrinsic goal importance ( $B=-0.06$ ,  $SE=0.02$ ,  $p=.012$ , 95% CI [-0.11,-0.01]). In turn, intrinsic goal importance significantly predicted well-being ( $B=0.11$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.07,0.15]), whereas extrinsic goal importance was not a significant predictor ( $B=0.03$ ,  $SE=0.02$ ,  $p=.096$ , 95% CI [-0.01,0.07]).

The indirect effect of conscientiousness on well-being through intrinsic goal importance was significant,  $B=0.03$ , 95% bootstrap CI [0.02,0.04], whereas the indirect effect through extrinsic goal importance was not significant,  $B=0.00$ , 95% bootstrap CI [-0.01,0.00]. The total indirect effect was  $B=0.03$ , 95% bootstrap CI [0.01,0.04]. The direct effect of conscientiousness on well-being remained significant after accounting for both mediators ( $B=0.36$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.32,0.40]), indicating partial mediation.

We then tested the impact of conscientiousness on well-being via intrinsic versus extrinsic goal attainment using the same type of multiple mediation model (Figure 2). Again, the total effect of conscientiousness on well-being was significant,  $B=0.39$ ,  $SE=0.02$ ,  $t(1890)=20.87$ ,  $p<.001$ , 95% CI [0.35,0.43].

When both mediators were entered simultaneously, conscientiousness significantly predicted intrinsic goal attainment ( $B=0.31$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.27,0.35]) but did not significantly predict extrinsic goal attainment ( $B=-0.01$ ,  $SE=0.02$ ,  $p=.691$ , 95% CI [-0.05,0.03]). In turn, intrinsic goal attainment significantly predicted well-being ( $B=0.42$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.38,0.46]), whereas extrinsic goal attainment was not a significant predictor ( $B=0.03$ ,  $SE=0.02$ ,  $p=.096$ , 95% CI [-0.01,0.07]).

The indirect effect of conscientiousness on well-being through intrinsic goal attainment was significant,  $B=0.13$ , 95% bootstrap CI [0.11,0.15], whereas the indirect effect through extrinsic goal attainment was not sig-

nificant,  $B=0.00$ , 95% bootstrap CI [0.00,0.00]. The total indirect effect was  $B=0.13$ , 95% bootstrap CI [0.10,0.15]. The direct effect of conscientiousness on well-being remained significant after accounting for both mediators ( $B=0.26$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.22,0.30]), indicating partial mediation.

Using the same type of model, we tested the impact of openness on well-being via intrinsic versus extrinsic goal importance (Figure 3). The total effect of openness on well-being was significant,  $B=0.16$ ,  $SE=0.02$ ,  $t(1890)=7.79$ ,  $p<.001$ , 95% CI [0.12,0.20].

When both mediators were entered simultaneously, openness significantly predicted intrinsic goal importance ( $B=0.48$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.44,0.52]) and negatively predicted extrinsic goal importance ( $B=-0.12$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [-0.16,-0.07]). In turn, intrinsic goal importance significantly predicted well-being ( $B=0.18$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.13,0.23]), whereas extrinsic goal importance was not a significant predictor ( $B=0.00$ ,  $SE=0.02$ ,  $p=.893$ , 95% CI [-0.04,0.05]).

The indirect effect of openness on well-being through intrinsic goal importance was significant,  $B=0.09$ , 95% bootstrap CI [0.06,0.12], whereas the indirect effect through extrinsic goal importance was not significant,  $B=0.00$ , 95% bootstrap CI [-0.01,0.01]. The total indirect effect was  $B=0.09$ , 95% bootstrap CI [0.06,0.12]. The direct effect of openness on well-being remained significant after accounting for both mediators ( $B=0.07$ ,  $SE=0.02$ ,  $p=.002$ , 95% CI [0.02,0.12]), indicating partial mediation.

We then tested the impact of openness on well-being via intrinsic versus extrinsic goal attainment using the same type of multiple mediation model (Figure 4). Again, the total effect of openness on well-being was significant,  $B=0.16$ ,  $SE=0.02$ ,  $t(1890)=7.79$ ,  $p<.001$ , 95% CI [0.12,0.20].

When both mediators were entered simultaneously, openness significantly predicted intrinsic goal attainment ( $B=0.24$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.20,0.29]) and extrinsic goal attainment ( $B=-0.15$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [-0.19,-0.11]). In turn, intrinsic goal attainment significantly predicted well-being ( $B=0.52$ ,  $SE=0.02$ ,  $p<.001$ , 95% CI [0.48,0.56]), whereas extrinsic attainment was not a significant predictor ( $B=-0.02$ ,  $SE=0.02$ ,  $p=.336$ , 95% CI [-0.05,0.02]).

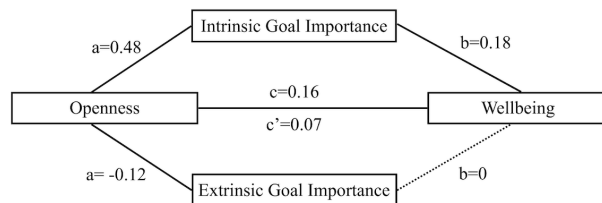
The indirect effect of openness on well-being through intrinsic goal attainment was significant,  $B=0.12$ , 95% bootstrap CI [0.10,0.15], whereas the indirect effect through extrinsic goal attainment was not significant,  $B=0.00$ , 95% bootstrap CI [0.00,0.01]. The total indirect effect was  $B=0.13$ , 95% bootstrap CI [0.10,0.16]. The direct effect of openness on well-being was nonsignificant after accounting for both mediators ( $B=0.03$ ,  $SE=0.02$ ,  $p=.088$ , 95% CI [-0.00,0.07]), indicating full mediation primarily through intrinsic attainment.

## Discussion

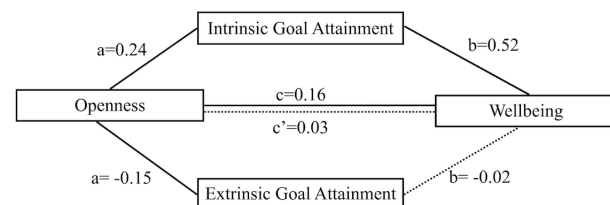
Both conscientiousness and openness are positively associated with well-being. These personality factors are also positively related to intrinsic goal importance and attainment, which partially mediate their effects on well-being, with the effect of openness on well-being being fully mediated by intrinsic goal attainment.

The direct effect of conscientiousness on well-being is consistent with the literature, which generally finds a positive association. Conscientiousness is linked to greater life satisfaction, more positive affect, and fewer negative emotions. This is largely because conscientious individuals engage in healthier behaviors, experience lower stress, and use more effective coping strategies<sup>24,25</sup>. They are also more likely to succeed academically, professionally, and financially, which in turn enhances well-being<sup>26,27</sup>. Longitu-

**Figure 3.** Multiple Mediation Model of Openness on Wellbeing via Intrinsic and Extrinsic Goal Importance. Solid lines indicate significant paths; dotted lines indicate nonsignificant paths. Openness positively predicted intrinsic and negatively predicted extrinsic goal importance; only intrinsic importance significantly predicted wellbeing, partially mediating the association.



**Figure 4.** Multiple Mediation Model of Openness on Wellbeing via Intrinsic and Extrinsic Goal Attainment. Solid lines indicate significant paths; dotted lines indicate nonsignificant paths. Openness positively predicted intrinsic and negatively predicted extrinsic goal attainment; only intrinsic attainment significantly predicted wellbeing, fully mediating the association.



dinal studies suggest that conscientiousness predicts later well-being, rather than the reverse<sup>25</sup>.

Conscientiousness was also a significant predictor of intrinsic goal importance. Conscientious individuals may be more likely to pursue goals for their inherent value because they tend to be organized, disciplined, and motivated by long-term personal growth rather than external rewards. These traits align with valuing intrinsic goals, such as self-development, which provide personal satisfaction. Unexpectedly, conscientiousness also weakly negatively predicted extrinsic goal importance ( $B=-0.06$ ). Though it was hypothesized conscientiousness would positively predict extrinsic goal aspiration due to increased drive and motivation, this result could potentially be explained because individuals who focus on intrinsic goals dedicate more time and energy to those pursuits, meaning less attention is dedicated to extrinsic goals.

Intrinsic goal aspiration significantly predicted well-being. This aligns with Self-Determination Theory (SDT), which emphasizes that intrinsic aspirations like personal growth, meaningful relationships, and contributing to one's community support the fulfillment of the three basic psychological needs: autonomy, competence, and relatedness<sup>28</sup>. Meeting these needs promotes subjective well-being. Extrinsic goal aspiration did not significantly predict well-being. While extrinsic goals such as financial stability can increase material comfort and indirectly support well-being<sup>29</sup>, pursuing them at the expense of intrinsic goals may actually reduce subjective well-being due to unmet psychological needs<sup>28</sup>.

The indirect effect of conscientiousness on well-being through intrinsic goal importance was significant, but small ( $B=0.03$ ), whereas the indirect effect through extrinsic goal importance was not significant. This suggests that intrinsic goal importance partially mediates the relationship between conscientiousness and well-being, though other factors are also involved, including those discussed earlier such as effective coping strategies, health behaviors, and social support.

Conscientiousness significantly predicts intrinsic goal attainment. This is consistent with research showing that people tend to achieve the types of goals to which they aspire<sup>30</sup>. Since conscientious individuals are more likely to aspire to intrinsic goals, they are also more likely to attain them. Additionally, people high in conscientiousness tend to be organized, disciplined, and capable of sticking to plans, which further explains their success in achieving these goals. In contrast, conscientiousness did not significantly predict extrinsic goal attainment, which was unexpected. A possible explanation for this finding is that conscientious individuals tend to prioritize intrinsic over extrinsic goals, making them less likely to pursue or attain extrinsic goals.

Intrinsic goal attainment significantly predicted well-being, even more strongly than intrinsic aspiration. This makes sense because achieving intrinsic goals directly satisfies basic psychological needs and provides tangible evidence of competence, autonomy, and relatedness, resulting in a stronger boost to well-being<sup>28,30</sup>. Extrinsic goal attainment, however, was not associated with well-being, supporting the idea that while certain aspects of extrinsic goal attainment may contribute to well-being, achieving extrinsic goals at the expense of intrinsic ones may undermine these benefits.

The indirect effect of conscientiousness on well-being through intrinsic attainment was significant, whereas the indirect effect through extrinsic attainment was not. This indirect effect was also larger than the effect of conscientiousness on well-being through intrinsic goal aspiration, indicating that intrinsic goal attainment partially explains the relationship between conscientiousness and well-being. Because conscientious individuals are more likely to attain intrinsic goals, they are more likely to experience greater well-being. However, this mediation is only partial, suggesting that other factors also contribute to the relationship between conscientiousness and well-being.

Openness significantly predicts well-being, though to a lesser extent than conscientiousness. Openness also significantly positively predicts intrinsic goal aspiration. Individuals high in openness are more likely to value personal growth, self-development, and meaningful experiences, which are all core aspects of intrinsic goals. Their curiosity and interest in new experiences make them more inclined to set goals that provide internal satisfaction rather than external rewards<sup>2,9</sup>. Openness also negatively predicted extrinsic goal aspiration. Because individuals high in openness tend to prioritize intrinsic goals that reflect their values, they may intentionally de-emphasize extrinsic goals in favor of pursuits that satisfy personal growth.

The indirect effect of openness on well-being through intrinsic goal importance was significant, whereas the indirect effect through extrinsic goal importance was not. One possible explanation for this is that people high in openness tend to experience greater well-being partly because they value intrinsic goals. This once again aligns with Self-Determination Theory, which emphasizes that pursuing intrinsic aspirations supports the fulfillment of three basic psychological needs<sup>28</sup>. However, the relationship between openness and well-being remains significant even when accounting for intrinsic and extrinsic goal aspirations, indicating that other factors likely play a role. For example, openness may also promote flexibility in thinking and problem-solving, which helps individuals cope with challenges and reduce stress<sup>31</sup>.

Openness significantly predicts intrinsic goal attainment, though less strongly than conscientiousness. This could be because, while people high in openness often strive for intrinsic goals, conscientious individuals are more likely to achieve their goals due to stronger follow-through and self-discipline. Although it was not initially expected that people higher in openness would be more likely to attain their goals, this makes sense when considering that they may pursue intrinsic goals more frequently, which would naturally increase their likelihood of success. Openness also nega-

tively predicts extrinsic goal attainment, which could be because individuals high in openness are less motivated by extrinsic goals.

As discussed earlier, intrinsic goal attainment significantly predicts well-being, and the indirect effect of openness on well-being through intrinsic attainment was significant ( $B=0.12$ ), whereas the indirect effect through extrinsic attainment was not. In fact, the relationship between openness and well-being was fully mediated by intrinsic goal attainment. This would support the notion that the main reason people high in openness experience greater well-being is because they are achieving intrinsic goals.

These findings have important implications for understanding how personality relates to well-being. They highlight one mechanism through which traits like conscientiousness and openness can promote well-being: conscientiousness fosters intrinsic goal aspirations and the discipline to achieve them, while openness encourages the pursuit of intrinsic goals that align with personal values.

A limitation of this study is the way well-being was operationalized. Here, well-being was measured using positive affect, negative affect, and subjective life satisfaction. Although this is well-validated, it may not capture other dimensions, such as physical health or broader functioning. Moreover, distinctions between hedonic and eudaemonic well-being were not assessed, which might have yielded different results. Depending on the definition of well-being, goal aspirations and attainment could relate differently to personality traits. The sample was mostly from the United States (83%), with the remainder from 50 other countries; due to cultural, economic, and personality differences, the findings may generalize best to U.S.-based online populations with higher openness and conscientiousness. It is important to note that causal claims cannot be drawn from these correlational data. Other variables, such as socioeconomic status, life stress and social support, may contribute to the observed relationships, highlighting the need for caution in interpreting these effects as causal. Future research could incorporate additional measures of well-being, including health outcomes, and examine how other personality traits, such as neuroticism, relate both to the goals people pursue and to their overall well-being. This would provide a more complete understanding of how personality influences well-being.

## Conclusion

This study demonstrates that personality traits, specifically conscientiousness and openness, contribute to well-being in part through goal setting and attainment. Conscientious individuals are more likely to pursue and achieve intrinsic goals, which in turn enhances feelings of autonomy, competence, and relatedness, supporting well-being. Openness similarly promotes intrinsic goal aspirations and attainment, although to a lesser extent, and de-emphasizes extrinsic goals. Intrinsic goals consistently emerged as a stronger predictor of well-being than extrinsic goals, highlighting the importance of pursuing personally meaningful objectives. Overall, these findings highlight the role of intrinsic goal pursuit as a key mechanism linking personality to well-being, in line with the predictions of Self-Determination Theory. While conscientiousness and openness contribute to well-being partly through goal-related pathways, it is evident other mechanisms also contribute to these relationships. Future research should examine additional personality traits, incorporate broader measures of well-being, and further explore how different types of goals mediate the relationship between personality and well-being.

## Acknowledgements

I would like to thank my supervisor, Dr. William Ryan, for his guidance and support throughout this project. I am also grateful to the WISH (Well-being, Identity, Stigma, and Health) Lab at the University of Toronto for their ongoing support and constructive feedback throughout the research process.

## Data Availability Statement

The data that support the findings of this study are not publicly available due to participant privacy.

## References

1. Baumert, A. Integrating personality structure, personality process, and personality development. *Eur. J. Pers* **31**, 503–528 (2017). 10.1002/per.2115
2. McCrae, R. & Costa Jr, P. Personality trait structure as a human universal. *Am. Psychol* **52**, 509–516 (1997). 10.1037/0003-066X.52.5.509
3. Roberts, B. *Conscientiousness. in Handbook of individual differences in social behavior* (eds Leary, M. & Hoyle, R.) Guilford Press, 2009).
4. Anglim, J. & Grant, S. Predicting psychological and subjective well-being from personality: Incremental prediction from 30 facets over the Big 5. *J. Happiness Stud* **17**, 59–80 (2016). 10.1007/s10902-014-9583-7
5. Fuente, J. et al. The Big Five factors as differential predictors of self-regulation, achievement emotions, coping and health behavior in undergraduate students. *BMC Psychol* **12**, Article 267 (2024). 10.1186/s40359-024-01768-9
6. Atherton, O., Robins, R., Rentfrow, P. & Lamb, M. Personality correlates of risky health outcomes: Findings from a large Internet study. *J. Res. Pers* **50**, 56–60 (2014). 10.1016/j.jrp.2014.03.002
7. Gartland, N., O'Connor, D., Lawton, R. & Ferguson, E. Investigating the effects of conscientiousness on daily stress, affect and physical symptom processes: A daily diary study. *Br. J. Health Psychol* **19**, 311–328 (2014). 10.1111/bjhp.12077
8. Javaras, K. et al. Conscientiousness predicts greater recovery from negative emotion. *Emotion* **12**, 875–881 (2012). 10.1037/a0028105
9. Judge, T. & Ilies, R. Relationship of personality to performance motivation: A meta-analytic review. *J. Appl. Psychol* **87**, 797–807 (2002). 10.1037/0021-9010.87.4.797
10. Roberts, B., Lejuez, C., Krueger, R., Richards, J. & Hill, P. What is conscientiousness and how can it be assessed? *Dev. Psychol* **50**, 1315–1330 (2014). 10.1037/a0031109
11. Bradshaw, E., Ryan, R. & Deci, E. A meta-analysis of the dark side of the American dream: Evidence for the universal wellness costs of prioritizing extrinsic over intrinsic goals. *J. Pers. Soc. Psychol* **124**, 873–899 (2023). 10.1037/pspp0000431
12. Schmuck, P., Kasser, T. & Ryan, R. Intrinsic and extrinsic goals: Their structure and relationship to well-being in German and U.S. college students. *Soc. Indic. Res* **50**, 225–241 (2000). 10.1023/A:1007084005278
13. Sheldon, K. & Elliot, A. Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *J. Pers. Soc. Psychol* **76**, 482–497 (1999). 10.1037/0022-3514.76.3.482
14. Lodi-Smith, J. & Roberts, B. Social investment and personality: A meta-analysis of the relationship of personality traits to investment in work, family, religion, and volunteerism. *Pers. Soc. Psychol. Rev* **11**, 68–86 (2007). 10.1177/1088868306294590
15. DeYoung, C., Quilty, L. & Peterson, J. Between facets and domains: 10 aspects of the Big Five. *J. Pers. Soc. Psychol* **93**, 880–896 (2007). 10.1037/0022-3514.93.5.880
16. Kasser, T. & Ryan, R. A dark side of the American Dream: Correlates of financial success as a central life aspiration. *Pers. Soc. Psychol* **65**, 410–422 (1993). 10.1037/0022-3514.65.2.410
17. Diener, E. et al. New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Soc. Indic. Res* **97**, 143–156 (2010). 10.1007/s11205-009-9493-y
18. Diener, E., Emmons, R., Larsen, R. & Griffin, S. The Satisfaction With Life Scale. *J. Pers. Assess* **49**, 71–75 (1985). 10.1207/s15327752jpa4901\_13
19. Hallford, D. & Mellor, D. Development and validation of the Awareness of Narrative Identity Questionnaire (ANIQ). *Assessment* **24**, 399–413 (2017). 10.1177/1073191115607046
20. Chen, B. et al. Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motiv. Emot* **39**, 216–236 (2015). 10.1007/s11031-014-9450-1
21. Ware, J. & Sherbourne, C. The MOS 36-Item Short-Form Health Survey (SF-36): I. Conceptual framework and item selection. *Med. Care* **30**, 473–483 (1992). 10.1097/00005650-199206000-00002
22. Pennebaker, J. *The Pennebaker Inventory of Limbic Languidness (PILL)* Unpublished inventory. 1982.
23. Condon, D. & Revelle, W. The international cognitive ability resource: Development and initial validation of a public-domain measure. *Intelligence* **43**, 52–64 (2014). 10.1016/j.intell.2014.01.004
24. Bogg, T. & Roberts, B. The case for conscientiousness: Evidence and implications for a personality trait marker of health and longevity. *Ann. Behav. Med* **45**, 278–288 (2013). 10.1007/s12160-012-9454-6
25. Hu, Y., Wang, Z. & Fan, Q. The relationship between conscientiousness and well-being among Chinese undergraduate students: A cross-lagged study. *Int. J. Environ. Res. Public Health* **19**, 13565 (2022). 10.3390/ijerph192013565
26. Duckworth, A., Weir, D., Tsukayama, E. & Kwok, D. Who does well in life? Conscientious adults excel in both objective and subjective success. *Front. Psychol* **3**, 356 (2012). 10.3389/fpsyg.2012.00356
27. Chen, S., Cheung, A. & Zeng, Z. Big Five personality traits and university students academic performance: A meta-analysis. *Personality Individ. Differ* **240**, 113163 (2025). 10.1016/j.paid.2025.113163
28. Deci, E. & Ryan, R. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am. Psychol* **55**, 68–78 (2000). 10.1037/0003-066X.55.1.68
29. Thomson, R. et al. How do income changes impact on mental health and wellbeing for working-age adults? A systematic review and meta-analysis. *Lancet Public Health* **7**, 515–528 (2022). 10.1016/S2468-2667(22)00058-5
30. Sheldon, K. & Elliot, A. Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *J. Pers. Soc. Psychol* **76**, 482–497 (1999). 10.1037/0022-3514.76.3.482
31. Chen, L., Qu, L. & Hong, R. Pathways linking the Big Five to psychological distress: Exploring the mediating roles of stress mindset and coping flexibility. *J. Clin. Med* **11**, 2272 (2022). 10.3390/jcm11092272