

Payne, J. W., & Schimmack, U. (2026). Beyond hedonism: Life satisfaction requires autonomy independent of affect. *The Journal of Positive Psychology*. <https://doi.org/10.1080/17439760.2026.2651076>

**Beyond Hedonism:
Life Satisfaction Requires Autonomy Independent of Affect**

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Both authors have no conflicts of interest to declare.

We are grateful for the financial support of this work by the Canadian Social Sciences & Humanities Research Council (SSHRC). Correspondence regarding this article should be addressed to jason_payne@sfu.ca, Burnaby, BC, V5A 4Y8, Canada

Abstract

Hedonic and eudaemonic theories offer distinct frameworks for understanding wellbeing. A different research question, central to subjective wellbeing research, is how people evaluate their own lives. As such, it is unclear how much individuals consider hedonic and eudaemonic aspects in evaluations of their lives. This study examined how these components independently and jointly predict Life Satisfaction. Life Satisfaction was regressed on measures of positive and negative affect, as well as fulfillment of Autonomy, Competence, and Relatedness needs. Confirmatory Factor Analysis in two general population samples was also used to control for measurement error. Of Self-Determination Theory needs, only Autonomy uniquely predicted Life Satisfaction in addition to Positive Affect and Negative Affect. Competence and Relatedness were only predictive of Life Satisfaction in so far as they overlapped with hedonic factors. These findings suggest that individuals are not merely hedonists and additionally rely on Autonomy, in their life-evaluations.

Keywords: Affect; Valence; Life Satisfaction; Eudaimonia; Self-Determination Theory;

Halo Bias

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One important goal is the search for a universal definition of happiness or wellbeing. However, a persistent problem is that wellbeing or happiness can be defined in different ways. This has led to three different approaches to the study of wellbeing that mirror philosophical traditions (Diener, 1984; Sumner, 1996). One school focuses on affective experiences as the guiding principle of behavior. Seeking pleasure and avoiding displeasure is the main objective and key criterion to evaluate lives (Kahneman et al., 2003). A second approach is called eudaemonic and follows Aristotle's writing. While eudaemonic theories differ from each other, they have in common that they reject purely hedonistic theories of wellbeing and further list criteria which purportedly capture essential elements for objectively defining a good life. A third approach takes the position that human nature is too diverse to evaluate lives based on a set of objective criteria that can be applied universally. These subjective theories assume that wellbeing can only be assessed by taking a person's own values, goals, and ideals into account (Diener, 1984). While subjective theories avoid the problem of defining wellbeing objectively, they do so by leaving people's conceptions of wellbeing unexamined.

So, a different research question, central to subjective wellbeing research, is how people evaluate their own lives. Although it has been suggested that individuals rely on fleeting information, like mood, to answer life-satisfaction questions (e.g. Schwarz & Strack, 1999), such mood effects have been difficult to replicate (Eid & Diener, 2004; Lucas et al., 2018). Further, temporary influences like item-order effects within surveys have yielded small and inconsistent effects (Schimmack & Oishi, 2005). It has also been suggested that individuals rely on their stable personality traits (Dobewall et al., 2013) which would make these judgements poor

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indicators of how one's life is going. However, other studies suggest that life-satisfaction judgements are mostly based on episodic information that is relatively stable over shorter time periods, like over the past four weeks, but far less stable than personality traits (Anusic & Schimmack, 2016). Further, it has been found that wellbeing judgements are based on information about subjectively important life domains (Payne & Schimmack, 2020; Schneider & Schimmack, 2010). However, the specific episodic information that people use to evaluate their lives remains unclear.

Although ample evidence shows that people partly rely on positive and negative affect when forming life-satisfaction judgements, affect measures do not explain all of the variance in life-satisfaction judgements (Andrews & Withey, 1976; Zou et al., 2013), and much less is known about other criteria that may also contribute to these evaluations.

One possible alternative way to make life-satisfaction judgements is to focus on aspects that are considered desirable by the individual even if they do not increase positive affect or decrease negative affect. Such views have been categorized together as flourishing or eudaemonic wellbeing. However, these perspectives do not constitute a consensus view. Rather, eudaemonic perspectives rely on specified lists of purported necessary preconditions that are seen to objectively define human nature and the factors that ought to be important to human wellbeing. Empirical justification for these list theories have often been deemed to be unnecessary (e.g. Ryff, 1989).

One very popular eudaemonic perspective is Self-Determination Theory (Deci & Ryan, 2000; Ryan & Deci, 2000). This perspective offers three potential candidates for wellbeing which should be viewed as important to individuals beyond hedonism. These are: the quality of social relationships (Relatedness), the sense of mastery over one's environment (Competence),

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and the perception that actions are voluntarily chosen (Autonomy) (Deci & Ryan, 1985; Ryan & Connell, 1989). In a direct view, people may evaluate their lives based on need fulfillment, like the quality of their social relationships, independent of the amount of positive and negative affect those social relationships have recently produced. At the same time, the fulfillment of basic needs is bound to produce positive affect, and unfulfilled needs often elicit negative feelings. An indirect view would suggest that life-satisfaction judgements can also be influenced by that need fulfillment by influencing life-satisfaction judgements through boosting Positive Affect and decreasing Negative Affect.

Here, we do not treat Life Satisfaction as the ultimate definition of wellbeing. The aim is to explain variance in life-satisfaction judgements as a widely used subjective wellbeing outcome. Although some eudaemonic approaches position their constructs as alternatives to Life Satisfaction rather than predictors of it (i.e. Ryff, 1989), Self-Determination Theory research does not uniformly take this position. In the original development of the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS), Chen, Vansteenkiste, Deci, Ryan, and colleagues (2015) explicitly situated Autonomy, Competence, and Relatedness satisfaction and frustration within a nomological network that included the Self-Determination Theory factors as predictors of Life Satisfaction. Subsequent BPNSFS validation and nomological studies have likewise treated Life Satisfaction as a relevant outcome alongside vitality and ill-being indicators (Chen, Van Assche, et al., 2015; Cordeiro et al., 2016; Liga et al., 2020; Nishimura & Suzuki, 2016). Beyond validation work, applied Self-Determination Theory research has continued to model basic need satisfaction and frustration as predictors of Life Satisfaction and related subjective wellbeing outcomes (e.g. Mabbe et al., 2018; Uysal et al., 2020). Accordingly, our analyses test whether Self-Determination Theory needs are associated with Life Satisfaction

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independently of affect, and whether any overlap is explained through affect, without requiring that Life Satisfaction is the ultimate criterion against which wellbeing theories must be validated.

Because affective experiences are known predictors of life-satisfaction judgements, it is implied that Self-Determination Theory need fulfillment may also influence Life Satisfaction indirectly through affect. This indirect pathway does not require individuals to explicitly think about their needs when evaluating their lives. Rather, it follows from the established associations between need fulfillment, affect, and Life Satisfaction. This model provides a theory for the finding that eudaemonic, hedonic, and subjective measures are positively correlated (e.g. Henderson & Knight, 2012).

However, this research question has not been fully addressed. One reason is that eudaemonic and hedonic theories are often researched separately, rather than treating them as complementary accounts of wellbeing (see Andrews & Withey, 1976; Henderson et al., 2013). Further, many Eudaemonic theorists rightly focus on purported elements of wellbeing that are not dependent on hedonic experience. Such Eudaemonic theorists have questioned the importance of life-satisfaction judgements if they are primarily based on feelings of positive and negative affect because positive affect and negative affect can be easily manipulated with drugs to feel good even if life-circumstances are far from ideal. In contrast, Henderson and colleagues (2013) found that life-satisfaction scales were not predicted by eudaemonic scales after partialling-out a hedonic scale which would support a purely hedonic perspective on life-satisfaction judgements.

In addition, Life Satisfaction has often been treated as a hedonic measure of wellbeing, suggesting that it is redundant with Positive and Negative Affect (Diener, 1984). Subsequently, we are not aware of a study that has simultaneously used eudaemonic and hedonic measures as

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predictors of Life Satisfaction. Henderson and Knight (2012) did however point out that many hedonic and eudaemonic factors may each be exclusively relevant to wellbeing in terms of flourishing. But this view is that ultimate wellbeing involves both hedonic and eudaemonic elements, that these measures may partially overlap, and that ultimate wellbeing is captured by flourishing measures.

However, arguments that factors are related to ultimate wellbeing because of observed or unobserved correlation with other wellbeing factors, are not sufficient to empirically validate a philosophical assertion about wellbeing. Rather, such eudaemonic lists, including flourishing, represent claims about what ought to be considered important. To validate such claims, some empirical measures should support purported theories. One possible source of empirical support would be the extent that individuals themselves may take information about their own hedonic and eudaemonic situation into account when evaluating their own overall wellbeing. It should be noted that even though this method of self-report validation is consistent with a subjective view that wellbeing is ultimately decided at the level of the individual, taking this perspective is not required in order to explore if individuals use different hedonic or eudaemonic elements to form their own overall evaluations of their lives. Further, we are not trying to define wellbeing in this paper. However, self-report overall life evaluations are intuitively a compelling source of validation for philosophical claims about wellbeing. Self-report wellbeing measures capture the extent that factors purportedly essential to defining wellbeing, are able to predict how individuals would rate their own overall wellbeing. Although it would be a philosophical assertion consistent with a subjective view that only individuals can judge what it means for them to live well, it would be more generally noteworthy which purported factors do not predict (or agree) with self-report wellbeing judgements.

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To summarize, this paper decomposes the variance in life-satisfaction judgements into three components. One component reflects the synergy between need-fulfillment and affect. Fulfilling basic psychological needs feels good. The other two sources imply trade-offs. Some people focus on need-fulfillment even when it does not increase pleasure. Others increase pleasure even if it does not increase need-fulfillment. Our model does not make any claims that one approach is better or worse, but philosophical discussions may benefit from empirical evidence on how much of the variance in life-satisfaction judgements is explained by these components, rather than simply assuming that people are hedonists and Life Satisfaction is a hedonistic construct.

The present study also goes beyond previous research, which predominantly relies on correlations between scale scores, by taking measurement error into account. In terms of predictive power, there are also spurious reasons for observed correlations. One reason these factors may correlate is through spurious systematic biases, in other words invalid variance. One such bias is called Halo. Halo bias refers to the tendency that individuals have to give consistently positive ratings (Thorndike, 1920). Another bias, often called Careless Responding bias, involves systematically giving the same ratings (numerical or checklist) even when the items are reverse coded. Another reason that Self-Determination Theory factors may overlap with hedonic factors may also be an overlap with personality trait measures. By including personality traits, this paper can examine the extent that personality trait information also may lead to spurious correlation between these wellbeing factors.

Rather than settle the millennia-long debate between hedonic and eudaemonic perspectives, this paper will model how much psychological wellbeing fulfillment explains self-report life-satisfaction judgements through or independent of affect. If some people are not just

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hedonists, they should use need fulfillment in a variety of ways even if it is not pleasurable (e.g. relatedness and caring for sick parents). Further, it is also not strictly necessary that psychological need fulfillment causes affect changes, if the reverse were the case, there would still be potential to identify the unique predictive validity for hedonic factors and eudaemonic factors independent of each other. In either case, the unique and shared variance would be observable in direct and indirect estimates.

Regardless of the structural theoretical assumptions about the relationship between these wellbeing factors, there are correlations implied by hedonic and eudaemonic perspectives. The eudaemonic perspective implies that (H₁) all Self-Determination Theory factors should have unique predictive validity. Alternatively, it would be implied by the hedonic perspective (H₂) that no Self-Determination Theory factors would have incremental predictive validity (e.g. Kahneman et al., 2006). The present study takes an agnostic view and examines across two datasets which, if any, of the Self-Determination Theory factors uniquely predict (or influence) life-satisfaction judgements independent of affect.

Method

Confirmatory Factor Analysis was conducted using Mplus 8.10 for Mac (Muthen & Muthen, 2017). Acceptable fit was considered to be about $CFI > .90$, $RMSEA < .06$, $SRMR < .08$, and “good” fit defined as about $CFI > .95$, $RMSEA < .06$, $SRMR < .08$ (Schermelleh-Engel et al., 2003). Analyses were not preregistered; however, alternative analyses were not found to meaningfully alter the underlying factor correlations. Additional measures were collected to answer other research questions; these are reported in detail elsewhere (Payne, 2024). All data, model syntax, model output, and survey materials can be accessed on OSF (<https://osf.io/uh5bq/>).

Participants

Informed consent was obtained for experimentation with human subjects. Data collection was conducted in accordance with the University of Toronto Human Ethics Protocol. Individuals were recruited from Prolific in February and November of 2022. Participants were compensated in their local currency in proportion to their local minimum wage. Sample 1 included 250 Canadians and 250 United Kingdom citizens who were also located in their respective countries. Eligibility required fluency in English and completion of at least one prior Prolific survey. Sample 2 similarly included 752 United Kingdom respondents. In both cases, all had the option to withdraw their consent and data at the end of the survey. Three Canadian and one United Kingdom member from Sample 1 and three United Kingdom participants from Sample 2 clicked for this option either deliberately or through careless responding. Among Sample 1 ($N = 496$), United Kingdom participants were 21.68% female with ages ranging from 18 to 68 years ($M = 36.29$ years, $SD = 11.85$) and Canadians were 45.34% female with ages ranging from 18 to 70 years ($M = 33.72$ years, $SD = 11.62$). Sample 2 ($N = 749$) respondents

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were by chance 50% female with ages ranging from 18 to 80 years ($M = 40.59$ years, $SD = 13.51$).

Procedure

The survey was conducted on the Qualtrics platform. Sample 1 data were collected with a fixed survey order and a randomized item order within questionnaires. Life-satisfaction items were collected first in order to mitigate the potential but small influence of item order effects of temporarily accessible information (Schimmack & Oishi, 2005; Schwarz & Strack, 1999). This was followed by personality items, valence items, activation items, Self-Determination Theory items, and finally demographics questions. Sample 2 data was collected with both a randomized survey order as well as a randomized item order within surveys. The exception to the random survey order was that life-satisfaction items were also first and demographic questions were asked last. In both data collections a Captcha control response was also included.

Measures

Sample 1 personality traits were captured using the shorter 15-item BFI (John & Srivastava, 1999; Lang et al., 2011). These trait items used the original instructions as well as a 7-point Likert-type scale (*Strongly disagree, disagree, somewhat disagree, neither disagree nor agree, somewhat agree, agree, strongly agree*). Sample 2 personality trait items were the 30-items of the Big Five Inventory–2 Short Form (BFI-2-S; Soto & John, 2017). The BFI-2-S instructions were to respond to agreement in items on a 5-point Likert-type scale (*Strongly disagree, disagree a little, neutral; no opinion, agree a little, strongly agree*).

The Basic Psychological Need Satisfaction and Frustration Scales (BPNSFS; Chen et al., 2015) was also collected. The original items and anchors were used with the addition that participants were asked to answer in reference to “the past four weeks”. This instruction

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encouraged participants to rely on episodic rather than heuristic information (see Schimmack et al., 2002). Sample 1 included a subset (items 2, 3, 6, 10, 11, 16, 18, 20, 23). The inclusion of these items was selected based on reported the highest factor loadings in Chen and colleagues (2015) with at least one positive and one negative item included for each need factor. Sample 2 included the full BPNSFS scale.

Valence was captured using pleasantness and unpleasantness items from the Scale of Positive and Negative Experience (SPANE; Diener et al., 2009; but also see Schimmack et al., 2002; Schimmack & Grob, 2000) “positive”, “good”, “pleasant”, “negative”, “bad”, “unpleasant” as well as the joy items “joyful”, “happy”, “content”. Joy items were also included based on a replication of Diener and colleagues (1995) finding that joy items are taken as equivalent or synonymous with positive valence (Payne & Schimmack, 2024). The original 5-point Likert-type scale (*very rarely or never, rarely, sometimes, often, very often or always*) with the original instructions were modified to request “the past four weeks”.

Similarly, Life Satisfaction in Sample 1 was captured with the Satisfaction with Life Scale (SWLS; Diener et al., 1985) using the first three items (see Oishi, 2006). Sample 2 included the full 5-item version. The original anchors and instructions were used with the additional instructions to assess the past four weeks.

Statistical Analyses

In both samples, Life Satisfaction was defined with all unstandardized loadings set to 1. Positive Valence and Negative Valence were similarly defined with all loadings set to 1. This design choice is consistent with scale score use of this measure. In addition, “unpleasant” and “bad” as well as “negative” and “positive” were allowed to have residual correlations based on modification indices.

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Similarly, Autonomy, Relatedness, and Competence were defined by their respective satisfaction items with all loadings set to 1 and all frustration items loading set to -1 . Although separating need factors into satisfaction and frustration elements was proposed by Chen and colleagues (2015), other authors have found evidence that the scales themselves capture three bipolar factors (Chen, 2013; Murphy et al., 2023; Payne, 2024; Payne & Schimmack, 2025). To account for the need frustration and need satisfaction distinction, these models allowed frustration items to have residual correlations as well as allowing need satisfaction items to have residual correlations. However, to allow for model identification in Sample 1, all of the three within-factor satisfaction correlations were not estimated. This fundamental limitation in degrees of freedom would not meaningfully impact model estimates.

Since there is a lack of perfect independence of Big Five personality trait items, some secondary relationships were allowed between Big Five items. In Sample 1, the item “gets nervous easily” was allowed to have a secondary loading on Extraversion. In addition, Sample 2 allowed, “is complex, a deep thinker” and “is original, comes up with new ideas” to have estimated loadings on trait Openness to Experience. Similarly, estimated loadings were allowed for trait Agreeableness for the items “is respectful, treats others with respect” and “can be cold and uncaring”. Similarly, trait Extraversion “is less active than other people” and “prefers to have others take charge” item loadings were estimated as well as “feels secure, comfortable with self” for trait Neuroticism. In addition, in Sample 2 for the longer BFI-2 the theoretically proposed facet structure was modelled with residual correlations between facet items. Lastly, several items for the longer BFI-2 were allowed to have secondary loadings on Big Five factors (for a full list see the supplemental materials). For example, “Is less active than other people” is meant to capture the proposed energy level facet of trait Extraversion but would also

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theoretically overlap with the productiveness facet of trait Conscientiousness. These secondary relationships account for the otherwise lack of complete independence of the Big Five (see Anusic et al., 2009).

Careless Responding bias was defined by all personality items (both positive and negative keyed) constrained to 1. Halo bias was first defined with items with positive connotations constrained to 1 and negative connotations constrained to -1 (Payne & Schimmack, 2025). Theoretically, items should have relatively stronger and relatively weaker connotative value. As such, in both samples available Neuroticism items were given an unstandardized loading of 2 or -2 as those items appear to have a stronger connotative value. The value of 2 or -2 unstandardized units is roughly the estimated value of those items across samples when allowed to be estimated. Fixing loadings of at least some positive connotation and some negative connotation items is needed for identification. Additionally, including an unstandardized unit constraint helps with model stability by ensuring Halo bias is not conflated with trait Neuroticism. Further, some items were allowed to have lower connotative value towards defining Halo bias. In Sample 1, the items “values artistic, aesthetic experiences” and “has an active imagination” were allowed to have a constrained loading estimated. Also, the item “is reserved” was also allowed to have an estimated loading. In Sample 2, “is fascinated by art, music, or literature”, “is complex, a deep thinker.”, “has few artistic interests”, “has little interest in abstract ideas” were allowed to have their loadings freely estimated.

Structural Model

For both samples, all non-personality items were allowed to be influenced by Halo and by Careless Responding bias. Personality-item variance was used to define these bias factors. This partials-out the effect of these shared-method biases from estimates. Based on strong

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modification indices, Autonomy was allowed to be influenced by Extraversion, Agreeableness, and Neuroticism. Relatedness was allowed to be influenced by Agreeableness and Neuroticism, Competence was allowed to be influenced by Conscientiousness, Extraversion, and Neuroticism (Payne & Schimmack, 2025). The three Self-Determination Theory factors were allowed to correlate.

Consistent with the literature, Positive Affect was allowed to be influenced by Extraversion and Neuroticism, and Negative Affect by Neuroticism (Anglim et al., 2020; Myers & Diener, 1995). Positive and Negative Affect were allowed to correlate. Positive and Negative Affect were allowed to be influenced by the three Self-Determination Theory Factors. Life Satisfaction was allowed to be influenced by Self-Determination Theory Factors as well as Positive and Negative Affect. Also consistent with the literature, Big Five influences on Life Satisfaction were observed to be fully mediated by Positive and Negative Affect (valence).

The alternative model where personality measures, and associated bias correction are removed can be seen in the supplement materials. This design choice does not meaningfully impact the results. In other words, these results are not an artefact of bias correction nor inclusion of the Big Five into the model.

Results

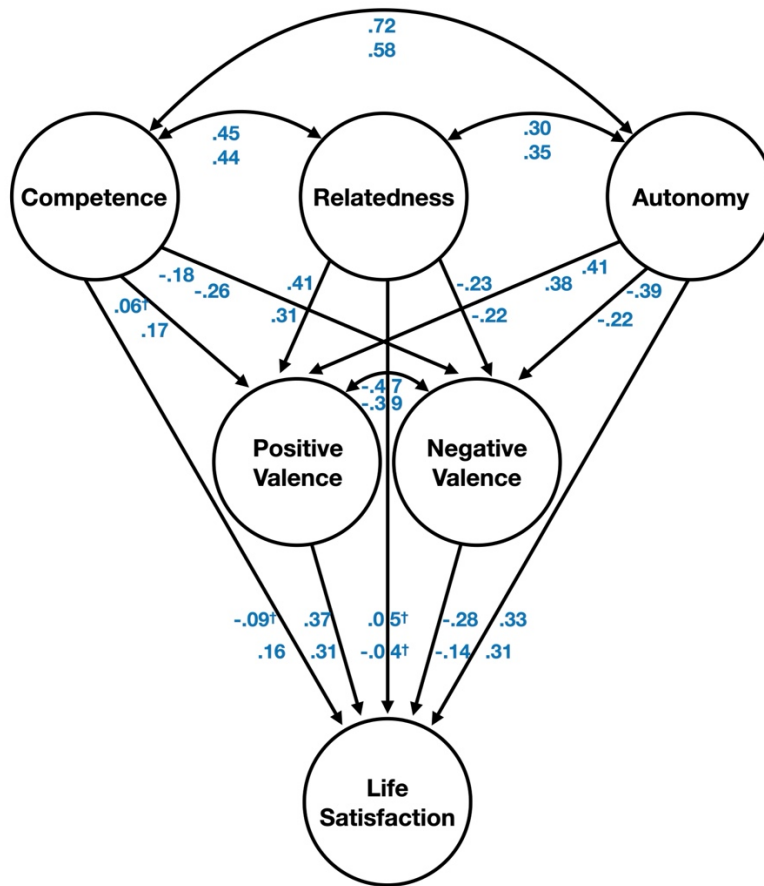
All study models had acceptable model fit (Table 1). Statistical significance was considered to be 95% confidence intervals that do not include zero ($\alpha = .05$; Cumming & Finch, 2005). Estimates were broadly consistent across both samples.

The total indirect effect of Autonomy on Life Satisfaction was significant in both samples: Sample 1: .59 (95% CI [.42, .76]); Sample 2: .45 (95% CI [.35, .56]). For Relatedness, the total indirect effect was .26 (95% CI [.14, .38]) in Sample 1 and .09 (95% CI [.01, .17]) in Sample 2. Competence had no significant indirect effect in Sample 1 (–.02, 95% CI [–.24, .21]), but it was significant in Sample 2 (.25, 95% CI [.13, .36]).

Model estimates (see Figure 1) further indicated that Autonomy had a significant direct effect on Life Satisfaction that was not fully mediated by valence. However, Relatedness and Competence showed no consistent or substantial direct effects beyond their influence through valence.

Figure 1

Model Estimates



Note. Upper and lower numbers represent standardized estimates from Samples 1 and 2, respectively. The dagger symbol represents estimates that are not significantly different from zero.

Table 1

Model Fit Indices

	CFI	RMSEA [90%CI]	SRMR
Sample 1	.950	.042 [.038, .046]	.054
Sample 2	.943	.037 [.035, .039]	.064

Note. Conventional three-decimal-place format was used for model fit indices. Conventional 90%

confidence interval was used for RMSEA.

Discussion

Theories of wellbeing often distinguish between hedonic perspectives, which infer that Life Satisfaction should be determined by affective experiences, and eudaemonic perspectives, which list factors that ought to define a good life regardless of affective experience (e.g., Autonomy, Relatedness, and Competence). A purely hedonic account would predict that factors relevant to Life Satisfaction should be entirely explained by affect, whereas a purely eudaemonic account would suggest that these psychological needs influence Life Satisfaction, at least in part, independent of affect (e.g. caring for sick relatives). This study tested these competing claims by examining whether Self-Determination Theory needs predict Life Satisfaction directly or indirectly through affect.

We find that fulfillment of psychological needs does predict Life Satisfaction, but mostly these effects can be explained through affect. These data also suggest that Self-Determination Theory's Autonomy is uniquely predictive (or influential) on life-satisfaction judgements above and beyond what would be explained by affect. As such, it appears that Autonomy—or some other construct captured by Autonomy items—is uniquely predictive (or influential) for individual Life Satisfaction. Other evident explanations were addressed here. Shared-method response bias in the form of Halo and Careless Responding were partialled-out at the item level. Further, Big Five personality trait factors were also disentangled from these observed effects in our analyses. However, the alternate model without the Big Five and without controlling for Halo bias, also yield the same substantive result (see supplement material for alternative model). In addition, although the valence (pleasantness and unpleasantness) dimensions of affect were analyzed here, other analyses show that the activation (or arousal) dimensions (Watson et al., 1988) of affect do not predict substantively more than valence (Payne & Schimmack, manuscript

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under review). As such, these data are not consistent with a purely hedonic explanation for wellbeing. In other words, individuals are relying on purportedly valid wellbeing information not captured by affect.

On the other hand, eudaemonic wellbeing theories like Self-Determination Theory, propose lists of criteria on which to define a life well lived. In these data, not all three Self-Determination Theory Needs were uniquely predictive (or influential) on life-satisfaction judgements. The effect of Relatedness was fully mediated by valence. More precisely, the raw correlation between Relatedness could be accounted for by valence, as well as personality and spurious method-bias factors. Competence showed a similar pattern, where this effect is fully explained in Sample 1 and is left with only a very small observed effect in Sample 2 ($.16^2 * 100 = 2.56\%$ explained variance). This effect could be real, or: it could also be due to small differences in modelling criteria, it could also be due to impreciseness of available measures to capture their respective underlying latent construct, and there is always a possibility of such small effects being due to sampling error. Regardless of the reason for the small observed correlation in Sample 2, neither Relatedness nor Competence seems to match the implication of Self-Determination Theory that satisfaction of these needs is uniquely impactful for individuals judging themselves as living a good life. Perceived Autonomy, though, seems to be valued in a way that is not explained by affect, nor by personality, nor shared-method bias. Thus, one practical implication of these findings is that public policy aimed at wellbeing, should also be mindful of the extent that such policy involves coercion.

Limitations

It should be noted that, although these cross-sectional models imply a causal connection, the causal direction is theoretically inferred rather than directly tested with longitudinal data.

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These analyses also do not answer the question about individual differences in weighting between hedonic and eudaemonic information. It is therefore possible, from a subjective wellbeing perspective, that some individuals choose to be more hedonists and others choose to be more eudaemonic. Support for a view that humans are more different and less similar should probably come with a relatively high burden for evidence.

Also, these data are limited to Western and English samples. These results should be replicated in more diverse populations such as samples from collectivist cultures in order to determine the overall appropriateness of generalizability as a potentially pan-cultural effect. However, it would be consistent with available literature that collectivist cultures would provide relatively less weight to Autonomy. Importantly, cross-national evidence indicates that a single-item measure of perceived autonomy is positively associated with wellbeing in almost all countries examined. However, this association tends to be weaker in more collectivistic contexts and stronger in wealthier and more individualistic countries (Martela et al., 2026). It remains to be seen, if those cultures would demonstrate a unique effect for Relatedness for example.

In addition, there is also a potential view of these data that could be consistent with a Hedonistic perspective. This view would argue that people will make choices that maximize pleasure and minimize pain. Thus, the effect on Life Satisfaction should be fully explained (mediated) by affect. However, perhaps there may be longer lasting impact on valence beyond the four-week timeframe that was assessed here. Longitudinal studies may find that current autonomy might impact future pleasure for example. It might also be argued that individuals may not be aware of their affect as a function of Autonomy. This is perhaps a slippery slope to infer that the theory is correct, and that people just do not know better. However, future studies could examine how experience sampling may suggest that Autonomy is more pleasant than

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retrospective self-evaluations may capture.

Also, it was stated here that self-report life-satisfaction judgements would be a source of empirical evidence for eudaemonic lists of objective wellbeing measures. Future research should also explore other empirical measures. For example, individuals may unfairly discount the positive effect of eudaemonic factors. Positive longitudinal outcomes may be improved (e.g. Diener & Chan, 2011) through Competence or Relatedness need satisfaction. Other possible measures might require agreement from independent observer (informant reports). In other words, it may be in the eyes of others that eudaemonic factors are considered in wellbeing. Such empirical evidence might account for why wellbeing is defined by some eudaemonic factors that do not seem to be uniquely important in self-report wellbeing judgements.

Lastly, these data are cross-sectional. Future research could employ extensive longitudinal data collection like ecological momentary assessment to better resolve the extent that changes in Self-Determination Theory need satisfaction similarly affect life-satisfaction ratings.

Conclusion and Recommendations

These data do not empirically support a view that individuals are merely hedonists. These data suggest that Self-Determination Theory's Autonomy has a large amount of incremental predictive validity for life-satisfaction judgements. Further, this effect is not explained by personality trait information nor shared-method response bias. Thus, more research is needed to better reconcile hedonic and eudaemonic perspectives. In the democratized judgements of people about their own wellbeing, neither 'side' of the hedonic-eudaemonic perspective is fully supported. Rather, individuals rely on both sources in judging overall Life Satisfaction.

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