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A Review of the Flourishing Scale (FS): Clinical and Community Normative Data and Qualitative Descriptors

The Flourishing Scale (FS), created by Diener et al. (2010), measures psychological well-being through eight self-reported items. The scale evaluates key aspects of human flourishing, including positive relationships, life purpose, and engagement. This technical review presents updated normative data from both community and clinical populations, along with detailed percentile rankings and interpretive guidelines, to help clinicians better understand and utilize the assessment in practice.

[View the FS on NovoPsych.com.au](https://www.novopsych.com.au)

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December 2024

Developer

The Flourishing Scale (FS) was developed by Diener and colleagues (2010):

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156. <http://dx.doi.org/10.1007/s11205-009-9493-y>

This document was developed by NovoPsych to review contemporary literature, describe original scoring methodologies, provide interpretation material, enhance normative data and provide qualitative descriptors.

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Description

The Flourishing Scale (FS) is an 8-item self-report measure designed to assess meaning and fulfillment in adults. The scale provides a single psychological well-being score that captures important aspects of human functioning including positive relationships, feelings of competence, having meaning and purpose in life, and engagement in activities.

The scale takes a broad approach to measuring well-being compared to scales focused solely on life satisfaction or positive emotions. It targets eudaimonic (associated with meaning), as opposed to hedonic (associated with pleasure) aspects of well-being in its assessment of psychological prosperity (Diener et al., 2010). The scale has been used with groups as young as 12 years old, but was originally validated in an adult population (Diener et al., 2010; Romano et al., 2020).

Higher scores on the FS have been associated with various indicators of well-being including optimism, happiness, and life satisfaction (Diener et al., 2010). The scale has also demonstrated relationships with significant life events, for example, veterans with service-related disabilities were observed to score significantly lower on the FS compared to those without service-related disabilities (Umucu et al., 2019).

The FS can provide valuable insights beyond traditional symptom-focussed measures that typically only assess distress or dysfunction. The FS captures positive aspects of psychological functioning that may remain impaired even after symptoms improve, such as meaning in life, social connectedness, and optimism about the future. Tracking FS scores over time is particularly valuable because it can demonstrate therapeutic progress in terms of positive gains rather than just symptom reduction - for example, a client's depression symptoms might improve while their sense of purpose or quality of relationships remains low, suggesting additional therapeutic work is needed.

Psychometric Properties

The FS was originally introduced as the Psychological Well-Being scale in a book chapter (Diener et al., 2009), and was later renamed to the Flourishing Scale to better reflect its content. The scale was developed based on multiple theories of psychological well-being including self-determination theory and Ryff's model of psychological well-being (Ryan & Deci, 2000; Ryff, 1989), as well as theories related to social relationships and purpose in life (Diener et al., 2010). The scale has been validated across diverse populations and cultural contexts, including adolescents, university students, working adults, older adults, and clinical populations. It has been translated and validated in multiple languages and countries including China, France, Iran, Italy, India, Japan, Portugal, Russia among others (Tong et al., 2017; Villieux et al., 2016; Fassih-Ramandi et al., 2020; Giuntoli et al., 2017; Singh et al., 2018; Sumi et al., 2014; Silva & Caetano et al., 2013; Didino et al 2019).

The FS has demonstrated strong psychometric properties across multiple studies and populations. The original validation study reported excellent internal consistency with a Cronbach's alpha of .87 and test-retest reliability of .71 over a one-month period (Diener et al., 2010). Subsequent studies have consistently found high internal reliability, with alpha coefficients ranging from .83 to .95 across different cultural contexts and translations (Hone et al., 2014; Silva & Caetano, 2013; Sumi, 2014).

Factor analyses consistently support a unidimensional structure. The original study revealed one strong factor with an eigenvalue of 4.24, accounting for 53% of the variance, with factor loadings ranging from .61 to .77 (Diener et al., 2010). This single-factor structure has been replicated across various populations and cultural adaptations (Howell & Buro, 2015; Silva & Caetano, 2013; Umucu et al., 2019).

The scale has demonstrated good convergent validity, correlating positively with other well-being measures. Studies have found significant positive correlations with life satisfaction ($r = .62$ to $.67$), positive emotions ($r = .58$), and measures of psychological well-being ($r = .63$ to $.67$) (Diener et al., 2010; Romano et al., 2020). The scale also shows expected negative correlations with measures of depression, anxiety, and stress (Howell & Buro, 2015).

Measurement invariance has been established across gender, age, and various cultural contexts. Romano et al. (2020) demonstrated strict measurement invariance across gender and grade levels in a large adolescent sample, indicating that the scale measures the same construct across these groups. Cross-cultural studies have validated the scale's use across multiple countries and languages while maintaining strong psychometric properties (Sumi, 2014; Tang et al., 2016).

The original study by Diener et al. (2010) reported a mean score of 44.97 (SD = 6.56) from a combined sample of university students. More recent normative data from a large nationally representative sample of New Zealand adults (n = 9,646, ages 18-110) found similar results with a mean score of 43.82 (SD = 8.36), with females scoring slightly higher (M = 44.33, SD = 8.07) than males (M = 43.30, SD = 8.63) (Hone et al., 2014).

Clinical norms estimated by NovoPsych (n = 2,186, mean age = 41 years) indicate substantially lower scores in a clinical population of therapy clients, with a mean of 33.77 (SD = 11.00). Female clients (M = 34.10, SD = 11.18) scored similarly to male clients (M = 33.75, SD = 10.91). Gender differences observed within community and clinical samples are minimal, and research suggests the scale possesses configural, metric and scalar invariance across gender. This indicates that differences (or lack thereof) are not attributable to gender-bias within items (Rando et al., 2022).

Based on these normative samples, percentiles can be calculated to aid interpretation:

Community Sample (n = 9,646):

- raw score 50-56 = percentile 74-93
- raw score 38-49 = percentile 22-73
- raw score 27-37 = percentile 3-21
- raw score 8-26 = percentile 1-2

Clinical Sample (n = 2,186):

- raw score 50-56 = percentile 93-99
- raw score 38-49 = percentile 61-92
- raw score 27-37 = percentile 28-60
- raw score 8-26 = percentile 1-27

Scoring & Interpretation

The FS total scores range from 8 to 56, with higher scores indicating greater meaning and fulfillment. High scores on the FS indicate that the client is experiencing strong positive functioning across multiple important life domains. Low scores on the FS indicate that the client is experiencing difficulties in several key areas of life functioning, such as feeling disconnected from a sense of purpose, struggling with social relationships, feeling disengaged from daily activities, and having a pessimistic view of their future.

Percentiles are calculated based upon internal NovoPsych data (n=2,186) and summed scores and their standard deviations from a national sample of New Zealand (Hone et al., 2014) that included 9,646 adults. Descriptors are also presented which are based upon score ranges within the community and clinical data:

- 50-56 (74th-93rd): High

- 38-49 (22nd-73rd): Moderate
- 27-37 (3rd-21st percentile): Low
- 8-26 (1st-2nd percentile): Very Low

When used to monitor progress in therapeutic settings, changes of 4 or more points (approximately .5 SD in the community sample) can be considered meaningful, suggesting either improvement or deterioration in psychological well-being. This criterion is based upon the Minimally Important Difference (MID) calculation (Turner et al., 2010).

On first administration a bar graph is presented showing the total scores. If administered multiple times, results are graphed to show changes over time, providing feedback on therapeutic progress. The FS can be complemented by measures of emotional well-being or life satisfaction to provide a more comprehensive picture of well-being.

Examining individual item responses can provide clinically useful information about specific areas of strength or challenge. For example, low scores on "My social relationships are supportive and rewarding" helps to identify interpersonal relationships as a specific area for therapeutic focus.

Supporting Information

This section details the community and clinical combined gender norms for the FS. By using the latest data, these norms enhance the accuracy of FS scores. Table 1 shows the percentiles for the clinical sample and the previous and updated community samples.

NovoPsych has computed clinical percentiles using its data on clients in therapy (Table 1). For community percentiles, the mean and standard deviation from a nationally representative sample of New Zealanders from Hone et al. (2014) was used to convert FS scores to percentiles as shown in Table 1, according to the following equation.

$$\text{Percentile} = 100 \times \Phi(x - M) / SD$$

Where:

- x is the score
- M is the mean
- SD is the standard deviation
- Φ is the standard normal cumulative distribution function

This equation first standardises the score to a z-score by subtracting the mean and dividing by the standard deviation, then converts the z-score to a percentile by applying the standard normal cumulative distribution function and multiplying by 100. The percentiles contextualise each score relative to typical scores among those in clinical as well as general community settings, offering a clear perspective on how the respondent's level of psychological flourishing compares to those of their peers.

Table 1. Descriptive information and mean FS score for community and clinical samples.

Source	Sample Type	N	Age Range (M, SD)	Gender	Mean (SD)
Diener et al. (2010)	University Students	689	-	Combined	44.97 (6.56)
Hone et al. (2014)	Community	9,646	18-110 (44.21, 16.40)	Combined	43.82 (8.36)
				Female	44.33 (8.07)
				Male	43.30 (8.63)
NovoPsych (2024)	Clinical	2,186	18-93 (41.00, 14.25)	Combined	33.77 (11.00)
				Female	34.10 (11.18)
				Male	33.75 (10.91)

Table 2. Percentile distributions of community and clinical samples.

Score	Clinical	Updated Community	Previous Community	Descriptor
8	2.19	0.00	0.00	
9	2.48	0.00	0.00	
10	2.89	0.00	0.00	
11	3.42	0.00	0.00	
12	4.12	0.01	0.00	
13	4.70	0.01	0.00	
14	5.42	0.02	0.00	
15	6.39	0.03	0.00	
16	7.61	0.04	0.00	Very Low
17	9.09	0.07	0.00	
18	10.31	0.10	0.00	
19	11.74	0.15	0.00	
20	13.29	0.22	0.01	
21	14.63	0.32	0.01	



22	16.41	0.45	0.02	
23	18.68	0.64	0.04	
24	20.72	0.89	0.07	
25	23.14	1.22	0.12	
26	25.85	1.65	0.19	
27	28.24	2.21	0.31	
28	30.96	2.92	0.48	
29	33.81	3.81	0.75	
30	36.16	4.92	1.12	
31	39.00	6.26	1.66	
32	41.78	7.87	2.40	Low
33	45.24	9.78	3.40	
34	48.76	12.01	4.72	
35	52.37	14.57	6.43	
36	55.70	17.48	8.58	
37	58.56	20.73	11.22	
38	61.26	24.32	14.40	
39	63.68	28.21	18.14	
40	66.23	32.39	22.43	
41	68.54	36.79	27.25	
42	71.36	41.38	32.54	
43	74.68	46.09	38.20	Moderate
44	77.08	50.86	44.12	
45	79.96	55.61	50.18	

46	82.67	60.29	56.24	
47	85.57	64.82	62.15	
48	89.66	69.15	67.79	
49	91.71	73.22	73.05	
50	93.45	77.01	77.84	
51	95.01	80.48	82.10	
52	96.12	83.61	85.81	
53	97.16	86.39	88.95	High
54	97.99	88.83	91.57	
55	98.92	90.94	93.69	
56	99.99	92.74	95.37	

Interpretive Text

The interpretive text for the FS follows a structured format that adapts based on the client's scores, comparative position, and change over time.

High Flourishing (50-56, 77th percentile and above):

The client's total score indicates healthy levels of psychological flourishing. Their score is higher than XX% of the general population and XX% of individuals in clinical settings. This suggests they are experiencing strong positive functioning across multiple life domains.

Responses to the following items contributed to the client's high score: <Top three highest scored items >. i.e.,
 6. *I am a good person and live a good life (Strongly agree)*
 7. *I am optimistic about my future (Strongly agree)*
 8. *People respect me (Agree)*

Moderate Flourishing (38-49, 24th-73rd percentile):

The client's total score indicates moderate levels of psychological flourishing. Their score is higher than XX% of the general population and XX% of individuals in clinical settings. This suggests they are generally functioning well and have a positive evaluation of important life domains.

Responses to the following items contributed to the client's moderate score: <Top two highest scored items >. i.e.,
 6. *I am a good person and live a good life (Strongly agree)*
 7. *I am optimistic about my future (Strongly agree)*

Low Flourishing (27-37, 3rd-21st percentile):

The client's total score suggests low levels of psychological flourishing. Their score is higher than XX% of the general population and XX% of individuals in clinical settings. While they report some positive functioning, there are clear areas for improvement.

Responses to the following items contributed to the client's low score: <Two lowest scored items >. i.e.,
6. I am a good person and live a good life (Strongly disagree)
7. I am optimistic about my future (Strongly disagree)

Very Low Flourishing (8-26, 1st-2nd percentile):

The client's total score indicates very low levels of psychological flourishing. Their score is in the bottom XX% of the general population but similar to XX% of individuals in clinical settings. This suggests they may be experiencing poor well-being across multiple life domains.

Responses to the following items contributed to the client's low score: <Three lowest scored items >. i.e.,
6. I am a good person and live a good life (Strongly disagree)
7. I am optimistic about my future (Strongly disagree)
8. People respect me (Disagree)

Tracking score change over time.

Since the respondent was first assessed on [Date], their Flourishing score has [not changed | not shown meaningful change (if change <4) | increased | decreased] [, from the (initial range) to the (current range) range] OR if in the same range, [and has remained in the (current range) range] [if change > 0: (score change = X)]. A change of half a standard deviation (4) or more points is considered meaningful based on a minimally important difference calculation.

Example: Since the respondent was first assessed on 03 Dec 2024, their Flourishing score has not shown meaningful change and has remained in the Moderate range (score change = 3).

A note is also provided to inform users of the updated percentiles.

Note, the normative samples were updated on '<Date>' so percentile calculations before this date may vary from current percentiles on graphs.

To recalculate percentiles you can follow

<<https://novopsych.com.au/support/user-guide/percentiles-based-on-age-and-gender-how-to-re-norm-and-assessment/>>.

Developer

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156. <http://dx.doi.org/10.1007/s11205-009-9493-y>

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Assessment Questions



NovoPsych

Flourishing Scale (FS)

Instructions:

These questions are designed to measure your self-perceived success in important areas such as relationships, self-esteem, purpose, and optimism. Below are 8 statements with which you may agree or disagree. Using the scale below, indicate your agreement with each item.

		Strongly agree	Agree	Slightly agree	Mixed or neither agree nor disagree	Slightly disagree	Disagree	Strongly disagree
1	I lead a purposeful and meaningful life.	7	6	5	4	3	2	1
2	My social relationships are supportive and rewarding.	7	6	5	4	3	2	1
3	I am engaged and interested in my daily activities.	7	6	5	4	3	2	1
4	I actively contribute to the happiness and well-being of others.	7	6	5	4	3	2	1
5	I am competent and capable in the activities that are important to me.	7	6	5	4	3	2	1
6	I am a good person and live a good life.	7	6	5	4	3	2	1
7	I am optimistic about my future	7	6	5	4	3	2	1
8	People respect me	7	6	5	4	3	2	1

Developer Reference:

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2009). New measures of well-being: Flourishing and positive and negative feelings. *Social Indicators Research*, 39, 247-266 Please visit: <http://internal.psychology.illinois.edu/~ediener/FS.html>

Administer Now

Sample Result

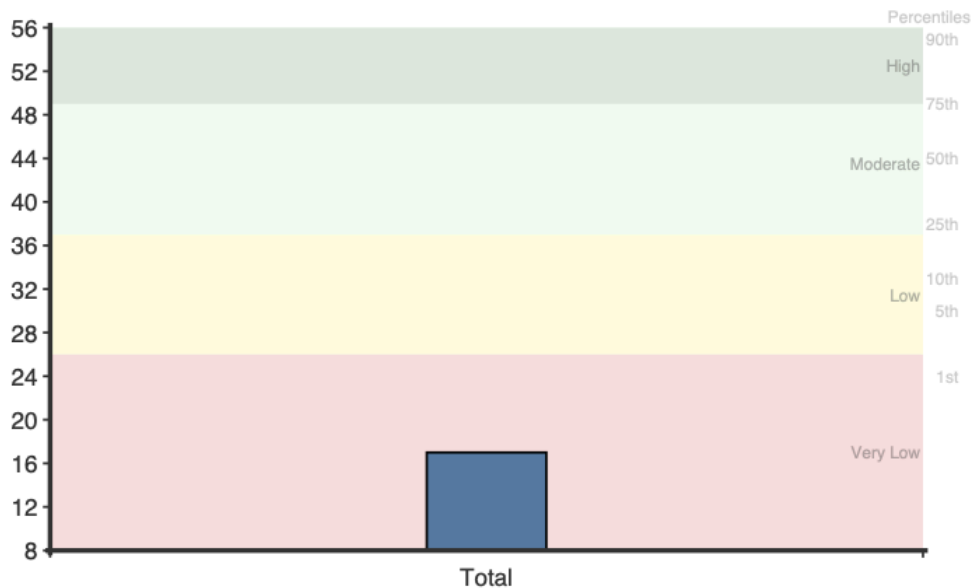
Flourishing Scale (FS)

<i>Client Name</i>	Generic Client	<i>Date administered</i>	1 Oct 2024
<i>Date of birth (age)</i>	1 Jan 1999 (25)	<i>Time taken</i>	7s
<i>Assessor</i>	Dr Emerson Bartholomew		

Results

	Raw Score (8-56)	Community Percentile	Descriptor
Flourishing	17	0.1	Very Low

Flourishing Score



Interpretation

The client's total score indicates very low levels of psychological flourishing. Their score is below the bottom 1% of the general population but similar to 9.1% of individuals in clinical settings. This suggests they may be experiencing poor well-being across multiple life domains.

Responses to the following items contributed to the client's very low score:

- 1. *I lead a purposeful and meaningful life. (Strongly disagree)*
- 5. *I am competent and capable in the activities that are important to me. (Strongly disagree)*
- 2. *My social relationships are supportive and rewarding. (Disagree)*

Scoring and Interpretation Information

For comprehensive information on the Flourishing Scale, [see here](#).

The FS total scores range from 8 to 56, with higher scores indicating greater meaning and fulfillment. High scores on the FS indicate that the client is experiencing strong positive functioning across multiple important life domains. Low scores on the FS indicate that the client



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Client Name	Generic Client
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Scoring and Interpretation Information (cont.)

is experiencing difficulties in several key areas of life functioning, such as feeling disconnected from a sense of purpose, struggling with social relationships, feeling disengaged from daily activities, and having a pessimistic view of their future.

Percentiles are calculated based upon internal NovoPsych data (n=2,186) and summed scores and their standard deviations from a national sample of New Zealand (Hone et al., 2014) that included 9,646 adults. Descriptors are also presented which are based upon score ranges within the community and clinical data:

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Examining individual item responses can provide clinically useful information about specific areas of strength or challenge. For example, low scores on "My social relationships are supportive and rewarding" helps to identify interpersonal relationships as a specific area for therapeutic focus.

Client Responses

		Strongly agree	Agree	Slightly agree	Mixed or neither agree nor disagree	Slightly disagree	Disagree	Strongly disagree
1	I lead a purposeful and meaningful life.	7	6	5	4	3	2	1
2	My social relationships are supportive and rewarding.	7	6	5	4	3	2	1
3	I am engaged and interested in my daily activities.	7	6	5	4	3	2	1
4	I actively contribute to the happiness and well-being of others.	7	6	5	4	3	2	1
5	I am competent and capable in the activities that are important to me.	7	6	5	4	3	2	1
6	I am a good person and live a good life.	7	6	5	4	3	2	1



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Client Name	Generic Client
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Client Responses (cont.)

		Strongly agree	Agree	Slightly agree	Mixed or neither agree nor disagree	Slightly disagree	Disagree	Strongly disagree
7	I am optimistic about my future	7	6	5	4	3	2	1
8	People respect me	7	6	5	4	3	2	1