

The Design and Validity of the
OBSTACLES TO GROWTH SURVEY

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Design and Validity Information for the Obstacles to Growth Survey

The Obstacles to Growth Survey (OGS) is a self-assessment designed to measure four impediments spiritual growth:

1. Independence from God
2. Lack of knowledge about how to grow
3. Busyness, and
4. Poor environment for growth

OGS appears to be valid measure of four impediments to spiritual progress. This document presents some evidence of the instrument's validity.

Version 1 of the instrument included 46 items to measure these four constructs. Using version 1, we collected data from approximately 1,600 respondents anonymously via our website, www.assess-yourself.org. The demographics of this first sample are as follows:

- 64 % Female
- 19.8 % Black, 70.6 % White, 5.0 % Asian, 2.6 % Hispanic, 2.1 % other races
- Average age 36.6
- Age range: 16 to 85
- Average years as a Christian 17.7
- Respondent come from 49 states and 39 other countries (90% of the sample is from the US)

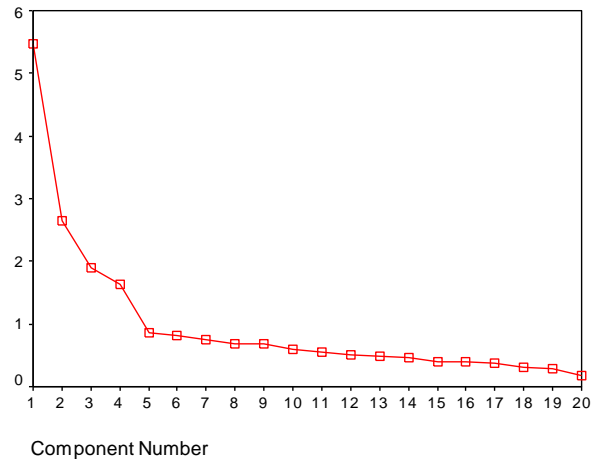
We then revised the survey, based on our factor analyses. We retained the best five items for each construct (20 items), as well as a face valid correlate item for each construct (to assess content validity – 4 items). Thus, version 2 of the instrument includes 24 items.

We collected 468 responses to version 2 using the same method as the collection for version 1. Demographics were similar to version 1 for gender, race, age, and years as a Christian. From this sample of 468, we found the following:

Factor and Reliability Analysis for Version 2

The Scree Plot below demonstrates clearly that there are four factors in the Obstacle to Growth Survey. The varimax-rotated factor structure (principle-components extraction) indicates the factor loadings, demonstrating the soundness and orthogonality of the four factors, as well as the virtual absence of cross-loading. The reliability analysis reveals Cronbach's alphas above the 0.7 threshold.

Scree Plot



Rotated Factor Structure

Extraction Method: Principal Component Analysis
 Rotation Method: Varimax with Kaiser Normalization.

Rotated Component Matrix

		Component			
		1	2	3	4
Independence from God	Q3	.677	.276	.325	-6.651E-02
	Q7	.687	8.462E-02	.406	-4.966E-02
	Q19	.813	.125	5.960E-02	-3.682E-02
	Q21	.745	3.013E-02	.117	-5.705E-03
	Q24	.783	.195	.113	-3.781E-02
Lacks knowledge about how to grow	Q2	-2.828E-02	.284	.680	1.986E-02
	Q6	7.728E-02	.137	.703	5.108E-02
	Q8	.347	1.450E-02	.586	6.680E-04
	Q9	.250	4.501E-02	.743	-2.593E-02
	Q12	.170	.111	.709	5.705E-02
Busyness	Q17	-.105	3.943E-02	-1.616E-03	.777
	Q18	-.129	6.108E-02	1.187E-02	.621
	Q20	.122	-8.121E-02	1.809E-02	.706
	Q22	8.163E-02	-6.067E-02	-2.411E-02	.797
	Q23	-8.637E-02	1.986E-02	7.004E-02	.684
Poor environment for growth	Q1	6.574E-02	.544	.335	-2.184E-02
	Q4	.318	.765	.117	1.478E-02
	Q5	.358	.783	7.028E-02	-2.634E-02
	Q10	-.181	.703	4.785E-02	4.723E-02
	Q11	.269	.766	.171	-4.147E-02

Reliability Analysis

Independence from God	$\alpha = 0.844$
Lack of Knowledge	$\alpha = 0.764$
Busyness	$\alpha = 0.761$
Poor Environment	$\alpha = 0.807$

Content Validity

Four items in the Obstacle to Growth Survey are not used in the scales, but instead, are used to check the content validity of the scales. Correlations between the scales and these items provide evidence that the scales are reasonable measures of these obstacles. Content validity correlations are as follows:

- The *Independence from God* scale is significantly correlated with item 13: “God makes the rules for my life, I don’t” ($r = -0.532, p = 0.000$)
- The *Lack of Knowledge About How to Grow* scale is significantly correlated with item 14: “I know the steps I must take to become a more Godly person” ($r = -0.421, p = 0.000$)
- The *Busyness* scale is significantly correlated with item 15: “The busyness of my life gets in the way of developing my relationship with God” ($r = 0.377, p = 0.000$)
- The *Poor Environment for Growth* scale is significantly correlated with item 16: “I am kept back from growing spiritually by friends and/or family” ($r = 0.310, p = 0.000$)

Averages for the Obstacles to Growth Survey

Based on a survey of 11,396 Christians worldwide

Group	n	Independence from God	Lack of knowledge about how to grow	Busyness	Poor environment for growth
All Survey Respondents	11,396	3.12	1.88	5.44	3.07
Men	7,591	3.21	1.92	5.42	2.86
Women	3,571	3.07	1.85	5.46	3.16
Teenagers	951	3.38	2.07	5.24	2.58
Age 20-29	2,143	3.29	1.91	5.48	2.86
Age 30-39	2,846	3.23	1.88	5.63	3.12
Age 40-49	2,991	3.02	1.86	5.46	3.26
Age 50-59	1,624	2.80	1.71	5.28	3.15
Age 60-69	370	2.73	1.79	5.18	3.15
70 and over	68	2.83	2.05	4.89	2.98