



Psychological Growth and Benefit Finding in Multiple Sclerosis (MS) and Their Relationship to Symptom Burden



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Objective

Our goal was to measure psychological post-traumatic growth and benefit finding and their relationship to symptom burden in multiple sclerosis (MS).

Background

Positive psychological change can occur following diagnosis with a serious illness and is commonly assessed by the Post-Traumatic Growth Inventory (PTGI) and the Benefit Finding Scale (BFS).

The PTGI is a 21-item instrument for assessing positive outcomes reported by persons who have experienced traumatic events. It consists of 5 subscales: New Possibilities, Relating to Others, Personal Strength, Spiritual Change and Appreciation of Life.

The BFS is 17-item scale for assessing the perception that positive contributions were made to one's life by the experience of being diagnosed with an illness, such as MS.

Across disorders, there is a general link between disease-related stress and psychological growth.

Methods

MS participants enrolled in a cognitive remediation trial completed the PTGI and BFS, along with representative measures of symptom severity: cognitive impairment with the Symbol Digit Modalities Test (SDMT), motor slowing with the Timed 25 Foot Walk (TFW), and fatigue with the Fatigue Severity Scale (FSS).

The SDMT is a useful screening tool to measure cognitive impairment.

The TFW is a quantitative mobility performance test based on a timed 25 foot walk.

The FSS is a 9-item scale that rates the severity of fatigue symptoms and their impact on an individual.

Results

Table 1. Demographic and Clinical Features of Sample (N = 26)

Demographic			Clinical		
Gender	Female	77%	Expanded Disability Status Scale (EDSS)	Median	3.5
	Male	23%		Range	0-8.5
Age	Mean (years)	48	Disease Duration	Mean (years)	12
	Range	20-69		SD	9.79
Race	White	(85%)	Subtype	Relapsing-remitting	n = 17
	African American	(11%)		Secondary progressive	n = 4
	Asian	(4%)		Primary progressive	n = 1
Ethnicity	Hispanic/Latino	(4%)			
Education	Mean (years)	15			
	SD	2.46			

Table 2. PTGI and BFS Sample Items

PTGI: Possible areas of growth	BFS: Having MS has...
An appreciation of the value of my own life	led me to be more accepting of things
Being able to accept the way things work out	made me more sensitive to family issues
New opportunities are available which wouldn't have been otherwise	led me to deal better with stress and problems
A better understanding of spiritual matters	helped me realize who my real friends are

Summary of Results

Overall, participants exhibited a relatively small degree of growth. However, participants diagnosed at a younger age showed greater positive psychological change in categories of appreciation of life and new possibilities. Patients diagnosed at a younger age were also more likely to perceive their positive growth as a result of being diagnosed with MS.

Both the BFS and PTGI significantly correlated with the SDMT, but not with the TFW, nor with fatigue.

Table 3. Age of Onset Predicts Psychological Growth

Age of Onset	Benefits Finding Total	PTGI Item: Appreciation of life	PTGI Item: New possibilities
	r= -0.499* p=0.025	r= -0.532* p=0.016	r= -0.473* p=0.035

Table 4. Symptom Burden Correlations

	PTGI	BFS
SDMT	r= -0.42*, p= 0.04	r= -0.40*, p= 0.05
TFW	r= -0.11, p= 0.64	r= -0.18, p= 0.44
Fatigue	r= 0.04, p= 0.86	r= -0.01, p= 0.94

Conclusions

- MS patients may experience positive psychological growth in reaction to their diagnosis.
- A younger age of disease onset may lead to greater psychological growth.
- Disease severity measured by cognitive impairment predicts greater positive psychological change,

References

Carver CS. *The benefit finding scale for breast cancer. Measurement instrument database for the social science.* 2003.
 Tedeschi RG, Calhoun LG. *The post-traumatic growth inventory: measuring the positive legacy of trauma.* J Trauma Stress. 1996 Jul; 9: 455-471.