

## **Supplementary Material**

**Title:** A questionable version of the Post-Traumatic Growth Inventory – Short Form in women diagnosed with breast cancer.

**Authors:** *To be filled in if the article is accepted*

**Journal:** British Journal of Health Psychology

**DOI:** *To be filled if the article is accepted*

**Number of appendices:** 5

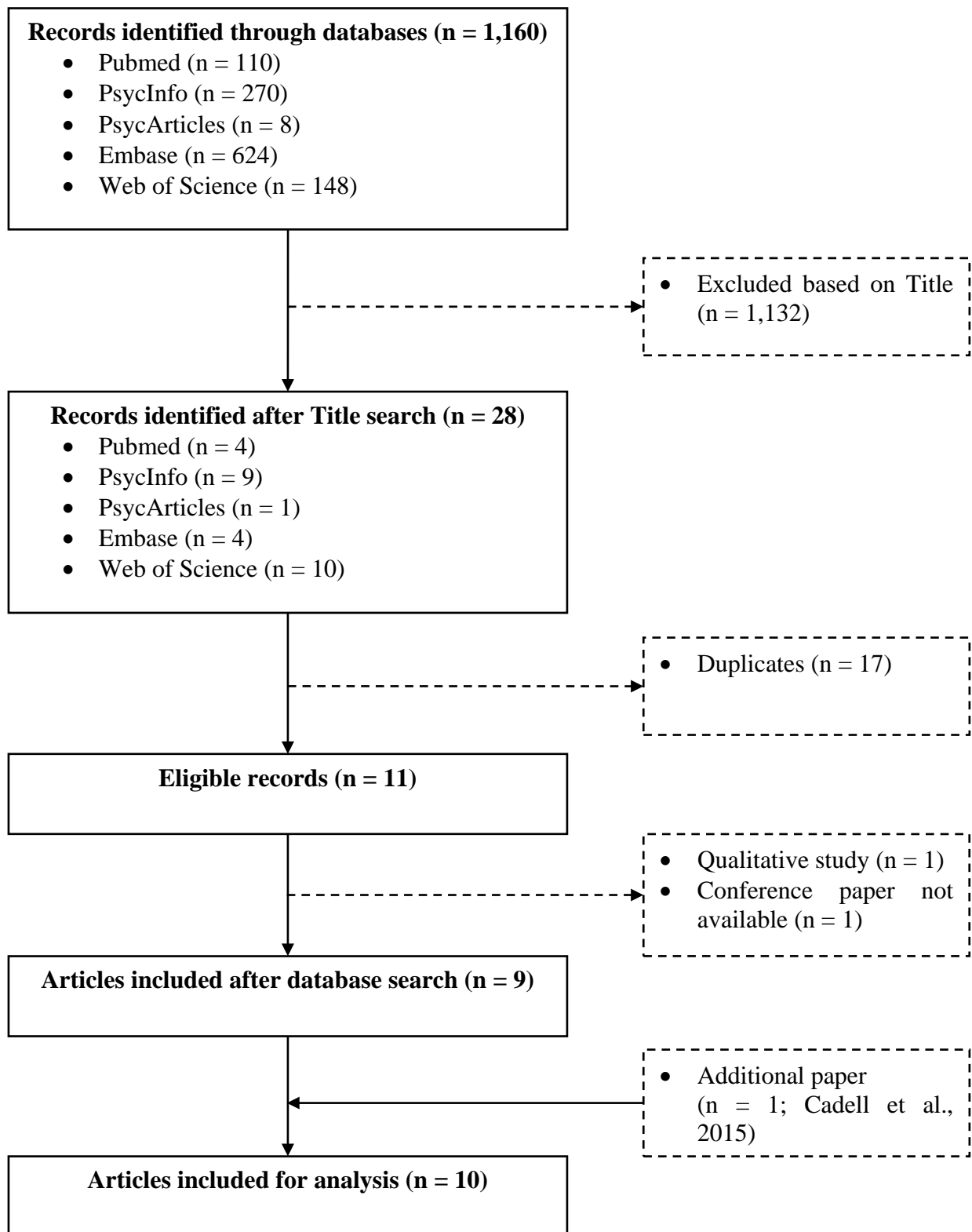
## **Appendix A: Literature review**

In order to identify studies focusing on the validation of the Post-Traumatic Growth Inventory – Short Form (PTGI-SF), a literature review was conducted up to March 30, 2021 on the following databases: Pubmed, PsycInfo, PsycArticles, Embase and Web of Science.

The Boolean sentence was as follows: ("post traumatic growth inventory" OR "posttraumatic growth inventory" OR "post-traumatic growth inventory" OR "PTGI") AND ("short form" OR "short-form" OR "short version" OR "short-version" OR "SF" OR "ten" OR "10").

Studies, in English or French, were included if they proposed a validation of the PTGI-SF or if they proposed the development of a short version of the PTGI, including psychometric analyses. The “references” section of each selected article was also examined to identify articles that may not have been identified in the investigated databases. Studies proposing a short version of the PTGI based on a modified version of the initial PTGI (Tedeschi et al., 1998), as well as those not performing psychometric analyses, were not eligible.

The data collected in the included studies concerned the number of items, number of dimensions, fit indices ( $\chi^2$ ; Root Mean Square Error of Approximation, RMSEA; Standardized/Weighted Root Mean Squared Residual, SRMR/WRMR; Comparative Fit Index, CFI; and Tucker-Lewis Index, TLI), and Cronbach’s alphas of the final model selected by the authors. Figure S1 describes the studies selection flow diagram and Table S1 shows the results of the literature review.



**Figure S1.** Studies selection flow diagram

**Table S1.** Results of the literature review

Authors	Country	Population	Factors	Items	Goodness-of-Fit					Cronbach's Alphas					
					<i>Chi</i> <sup>2</sup> ( <i>df</i> )	SRMR/WRMR	RMSEA	CFI	TLI	RO	NP	PS	SC	AL	PTGI-SF
<b>Original version</b>															
Cann et al. (2010)	USA	186 college students	5	10	60.57 (25)***	-	0.09	0.96	0.93	0.81	0.72	0.82	0.84	0.75	0.89
Kaler et al. (2011)	USA	327 veterans from the Iraq war	5	10	58.18 (15)*	WRMR = 0.58	0.09	0.98	0.99	0.72	0.76	0.82	0.89	0.69	0.90
Lamela et al. (2014)	Portugal	482 divorced adults	5	10	104.68 (25)**	-	0.07	0.96	-	0.70	0.66	0.79	0.71	0.74	0.88
Castro et al. (2015)	Spain	681 college students	5	10	82.03 (25)***	-	0.06	0.97	0.94	0.72	0.52	0.62	0.66	0.58	0.83
Cadell et al. (2015)	Canada (French)	47 caregivers	5	10	29.86 (30)	SRMR = 0.07	0.00	1.00	-	-	-	-	-	-	0.87
García and Włodarczyk (2016)	Chile	726 adults exposed to an earthquake	5	10	215.51 (25)***	-	0.10	0.96	0.94	0.81	0.82	0.82	0.85	0.84	0.94
Abdullah et al. (2017)	Malaysia	195 cancer patients	5	10	125.30 (25)***	-	0.14	0.93	0.90	0.88	0.90	0.91	0.91	0.86	0.89
Veronese and Pepe (2019)	Palestine	338 professional helpers	5	10	72.30 (25)**	-	0.08	0.98	-	0.77	0.74	0.81	0.73	0.71	0.93
<b>Modified versions</b>															
Prati and Pietrantonì (2014) <sup>a</sup>	Italy	1,244 adults who have experienced a traumatic event	5	10	149.32 (25)***	-	0.06	0.98	-	-	-	-	-	-	-
Kaur et al. (2017) <sup>b,c</sup>	USA	67,922 adults who have experienced a traumatic event	1	11	-	SRMR = 0.05	0.08	0.94	0.92	-	-	-	-	-	-

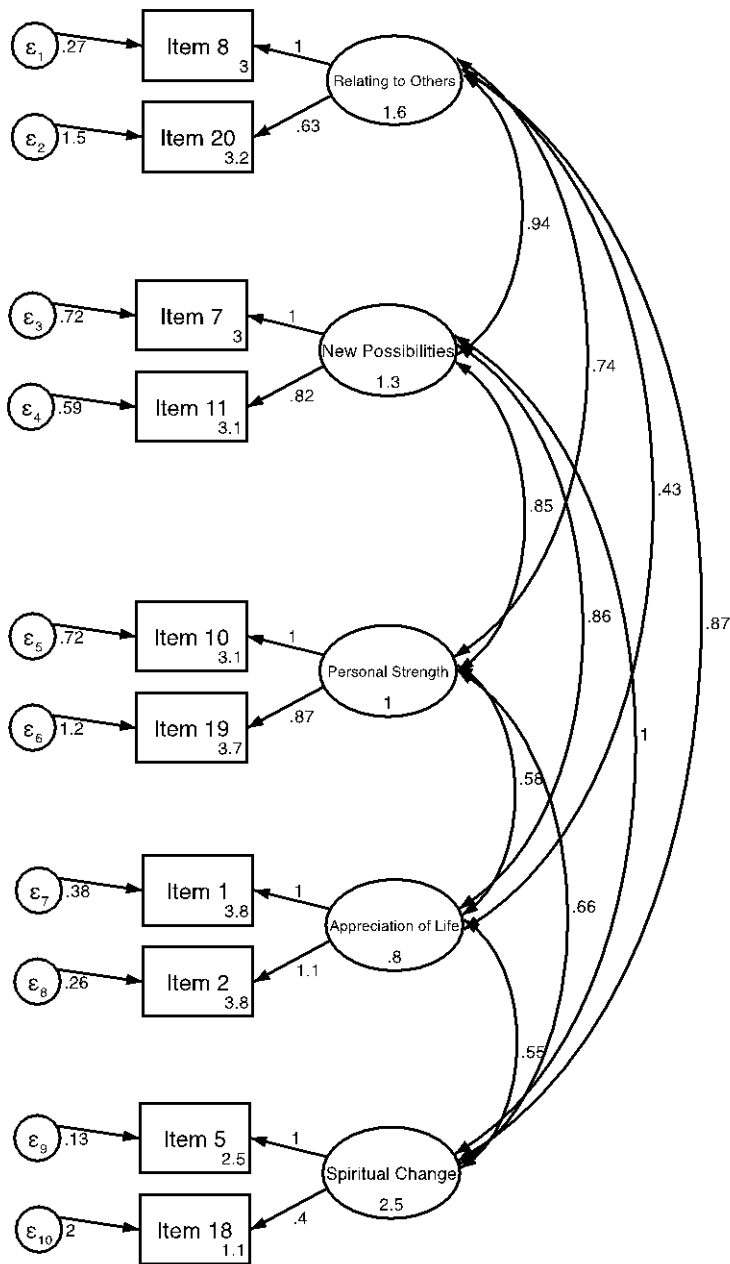
Notes. \*: p < .05; \*\*: p < .01; \*\*\*: p < .001; RO: Relating to Others; NP: New Possibilities; PS: Personal Strength; SC: Spiritual Change; AL: Appreciation of Life.

<sup>a</sup> Three items were replaced compared with the original version of the PTGI-SF as follows: **Item 14** “New opportunities are available which wouldn’t have been otherwise” (Prati and Pietrantonì, 2014) instead **Item 7** “I established a new path for my life” (Cann et al., 2010); **Item 4** “A feeling of self-reliance” (Prati and Pietrantonì, 2014) instead **Item 19** “I discovered that I’m stronger than I thought I was” (Cann et al., 2010); **Item 13** “Appreciating each day” (Prati and Pietrantonì, 2014) instead **Item 1** “My priorities about what is important in life” (Cann et al., 2010).

<sup>b</sup> This version comprised one additional item compared with the original version of the PTGI-SF: **Item 15** “Having compassion for others”

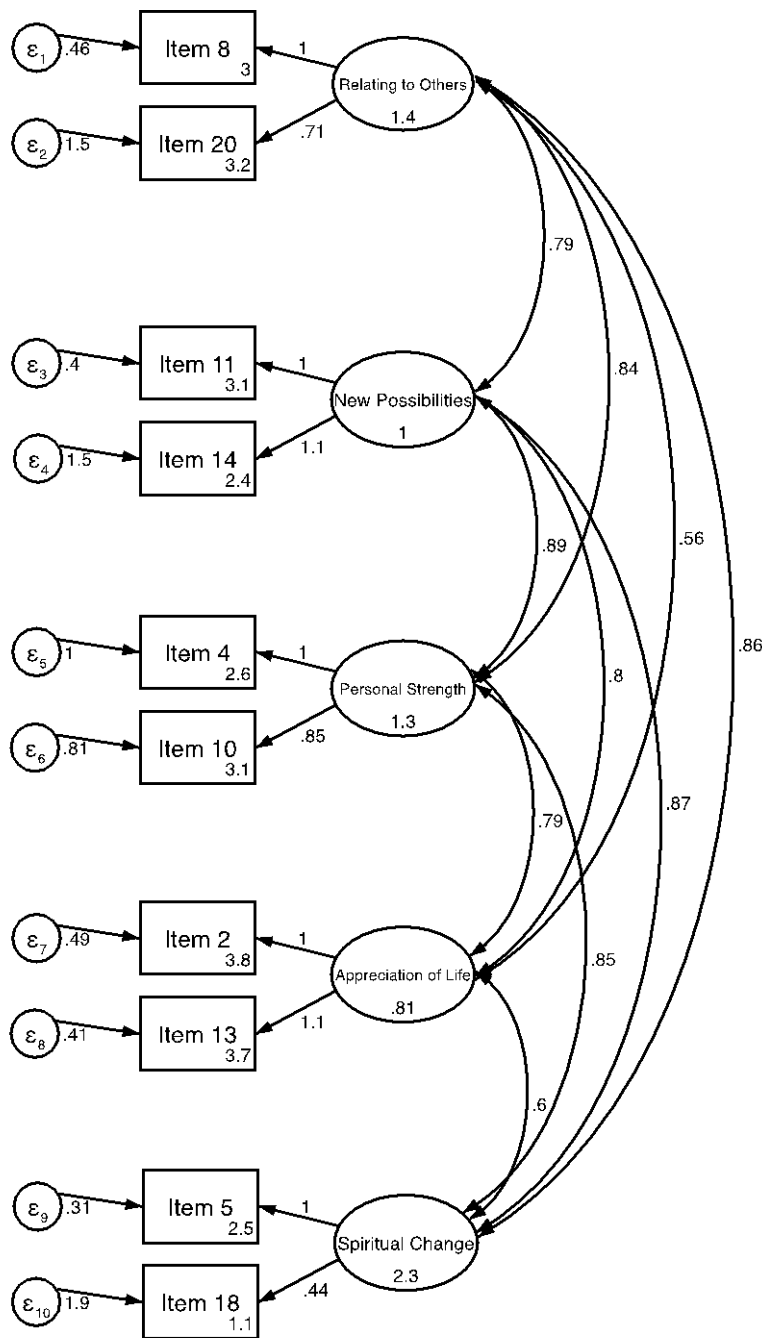
<sup>c</sup> Associations between two pair of items were added as follows: Pair 1 – **Item 5** “A better understanding of spiritual matters” and **Item 18** “I have stronger religious faith”; Pair 2 – **Item 15** “Having compassion for others” and **Item 20** “I learned a great deal about how wonderful people are”

## Appendix B: Tested models



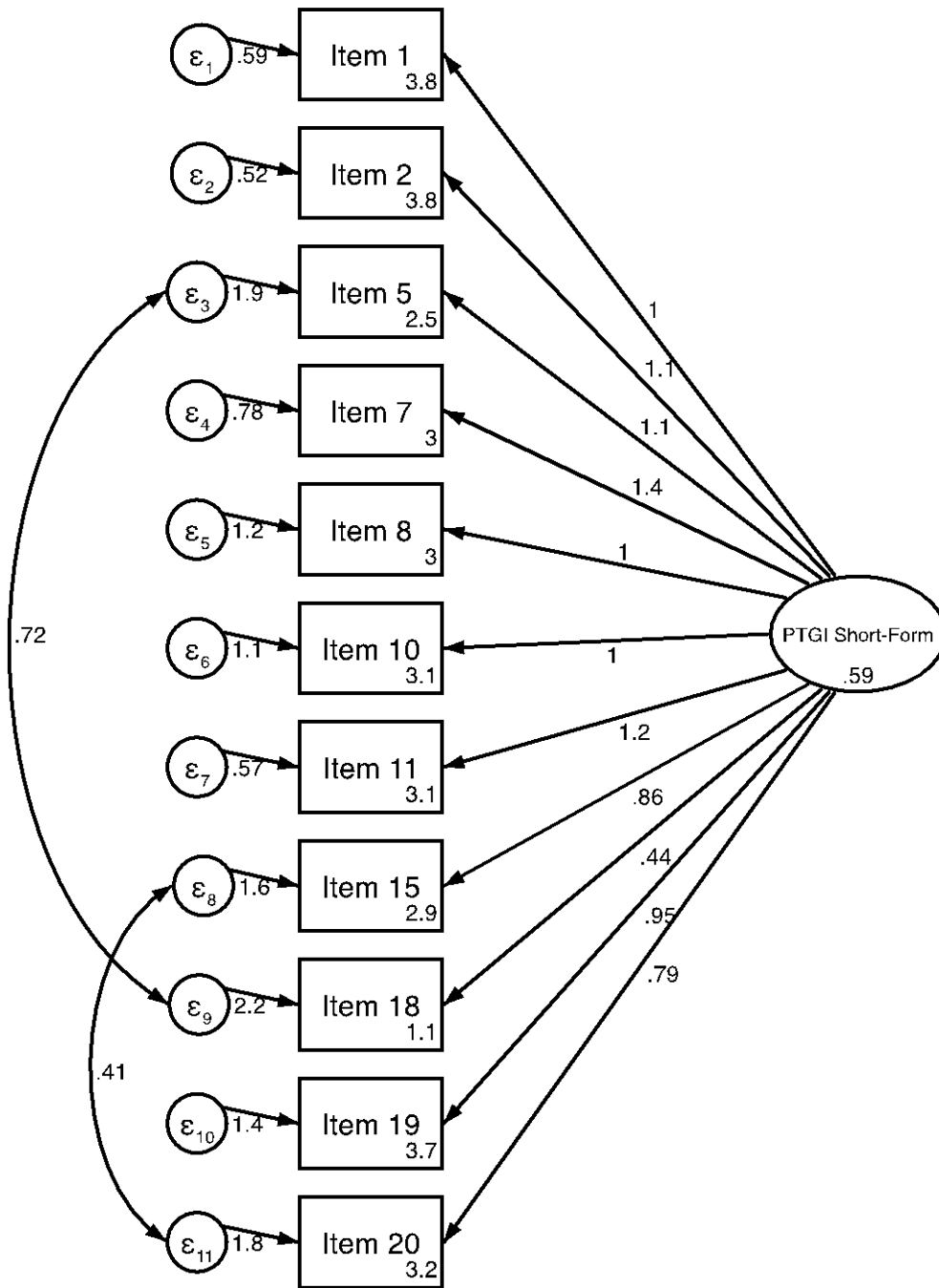
**Figure S2.** Tested model proposed by Cann et al. (2010)

*Notes.* The item numbers correspond to those of the full version of the PTGI. **Item 8.** “A sense of closeness with others”; **Item 20.** “I learned a great deal about how wonderful people are”; **Item 7.** “I established a new path for my life”; **Item 11.** “I’m able to do better things with my life”; **Item 10.** “Knowing I can handle difficulties”; **Item 19.** “I discovered that I’m stronger than I thought I was”; **Item 1.** “My priorities about what is important in life”; **Item 2.** “An appreciation for the value of my own life”; **Item 5.** “A better understanding of spiritual matters”; **Item 18.** “I have stronger religious faith.”



**Figure S3.** Tested model proposed by Prati and Pietrantoni (2014)

*Notes.* The item numbers correspond to those of the full version of the PTGI. **Item 8.** “A sense of closeness with others”; **Item 20.** “I learned a great deal about how wonderful people are”; **Item 11.** “I’m able to do better things with my life”; **Item 14.** “New opportunities are available which wouldn’t have been otherwise”; **Item 4.** “A feeling of self-reliance”; **Item 10.** “Knowing I can handle difficulties”; **Item 2.** “An appreciation for the value of my own life”; **Item 13.** “Appreciating each day”; **Item 5.** “A better understanding of spiritual matters”; **Item 18.** “I have a stronger religious faith.”



**Figure S4.** Tested model proposed by Kaur et al. (2017)

*Notes.* The item numbers correspond to those of the full version of the PTGI. **Item 1.** “My priorities about what is important in life”; **Item 2.** “An appreciation for the value of my own life”; **Item 5.** “A better understanding of spiritual matters”; **Item 7.** “I established a new path for my life”; **Item 8.** “A sense of closeness with others”; **Item 10.** “Knowing I can handle difficulties”; **Item 11.** “I’m able to do better things with my life”; **Item 15.** “Having compassion for others”; **Item 18.** “I have stronger religious faith”; **Item 19.** “I discovered that I’m stronger than I thought I was”; **Item 20.** “I learned a great deal about how wonderful people are.”

## Appendix C: Variance-Covariance matrices

**Table S2.** Variance-Covariance matrix for the model proposed by Cann et al. (2010)

Items	1	2	5	7	8	10	11	18	19	20
1	1.18632									
2	.915439	1.3021								
5	.550438	.625224	2.64527							
7	.987729	.963292	1.05837	1.98291						
8	.413066	.472469	.858901	.932562	1.85278					
10	.496396	.690394	.636511	.791182	.736243	1.75061				
11	.622411	.80129	.837576	1.02739	.804156	.792711	1.43269			
18	.141486	.182096	1.01802	.359182	.329261	.272336	.404363	2.37597		
19	.435252	.644	.612707	.612021	.612021	.895063	.69486	.372719	1.94631	
20	.357002	.498207	.636194	.423825	.423825	.508755	.526282	.364245	.88826	2.17095

*Notes.* The item numbers correspond to those of the full version of the PTGI.

**Item 1.** “My priorities about what is important in life”; **Item 2.** “An appreciation for the value of my own life”; **Item 5.** “A better understanding of spiritual matters”; **Item 7.** “I established a new path for my life”; **Item 8.** “A sense of closeness with others”; **Item 10.** “Knowing I can handle difficulties”; **Item 11.** “I’m able to do better things with my life”; **Item 18.** “I have stronger religious faith”; **Item 19.** “I discovered that I’m stronger than I thought I was”; **Item 20.** “I learned a great deal about how wonderful people are.”



**Table S3.** Variance-Covariance matrix for the model proposed by Prati and Pietrantonì (2014)

Items	2	4	5	8	10	11	13	14	18	20
2	1.3021									
4	.880402	2.33814								
5	.625224	.965191	2.64527							
8	.472469	.819099	.858901	1.85278						
10	.690394	1.09801	.636511	.736243	1.75061					
11	.80129	.869308	.837576	.804156	.792711	1.43269				
13	.912679	.796245	.673359	.664692	.772353	.917232	1.43219			
14	.766095	1.05842	1.06872	.858479	.723076	1.10244	.983686	2.73475		
18	.182096	.315935	1.01802	.329261	.272336	.404363	.263721	.509493	2.37597	
20	.498207	.635614	.636194	.990137	.508755	.526282	.520692	.605692	.364245	2.17095

*Notes.* The item numbers correspond to those of the full version of the PTGI.

**Item 2.** “An appreciation for the value of my own life”; **Item 4.** “A feeling of self-reliance”; **Item 5.** “A better understanding of spiritual matters”; **Item 8.** “A sense of closeness with others”; **Item 10.** “Knowing I can handle difficulties”; **Item 11.** “I’m able to do better things with my life”; **Item 13.** “Appreciating each day”; **Item 14.** “New opportunities are available which wouldn’t have been otherwise”; **Item 18.** “I have a stronger religious faith”; **Item 20.** “I learned a great deal about how wonderful people are.”

**Table S4.** Variance-Covariance matrix for the model proposed by Kaur et al. (2017)

Items	1	2	5	7	8	10	11	15	18	19	20
1	1.18632										
2	.915439	1.3021									
5	.550438	.625224	2.64527								
7	.987729	.963292	1.05837	1.98291							
8	.413066	.472469	.858901	.932562	1.85278						
10	.496396	.690394	.636511	.791182	.736243	1.75061					
11	.622411	.80129	.837576	1.02739	.804156	.792711	1.43269				
15	.296122	.485637	.766165	.502514	.935709	.629443	.71476	2.07391			
18	.141486	.182096	1.01802	.359182	.329261	.272336	.404363	.533244	2.37597		
19	.435252	.644	.612707	.612021	.612021	.895063	.69486	.793977	.372719	1.94631	
20	.357002	.498207	.636194	.423825	.423825	.508755	.526282	.811856	.364245	.88826	2.17095

*Notes.* The item numbers correspond to those of the full version of the PTGI.

**Item 1.** “My priorities about what is important in life”; **Item 2.** “An appreciation for the value of my own life”; **Item 5.** “A better understanding of spiritual matters”; **Item 7.** “I established a new path for my life”; **Item 8.** “A sense of closeness with others”; **Item 10.** “Knowing I can handle difficulties”; **Item 11.** “I’m able to do better things with my life”; **Item 15.** “Having compassion for others”; **Item 18.** “I have stronger religious faith”; **Item 19.** “I discovered that I’m stronger than I thought I was”; **Item 20.** “I learned a great deal about how wonderful people are.”

**Appendix D: PTGI-SF proposed by Cann et al. (2010), and translated French version**

**The Post-Traumatic Growth Inventory – Short Form**

**[Inventaire du Développement Post-Traumatique – Version Courte]**

As a result of my cancer: [Du fait de mon cancer :]	I did not experience this change [Pas du tout]	Very small degree [Très peu]	A small degree [Peu]	A moderate degree [Un peu]	A great degree [Beaucoup]	I experienced this change to a very great degree [Totalemment]
1. My priorities about what is important in life. [1. J'ai changé de priorités dans la vie.]						
2. An appreciation for the value of my own life. [2. J'apprécie plus ma vie à sa vraie valeur.]						
3. A better understanding of spiritual matters. [3. J'ai développé une certaine spiritualité.]						
4. I established a new path for my life. [4. J'ai donné une nouvelle direction à ma vie.]						
5. A sense of closeness with others. [5. Je me sens plus proche des autres.]						
6. Knowing I can handle difficulties. [6. Je suis davantage capable de gérer les situations difficiles.]						
7. I'm able to do better things with my life. [7. Je fais de ma vie quelque chose de meilleur.]						
8. I have a stronger religious faith. [8. J'ai une foi religieuse plus grande.]						
9. I discovered that I'm stronger than I thought I was. [9. J'ai découvert que je suis plus fort(e) que ce que je pensais.]						
10. I learned a great deal about how wonderful people are. [10. J'ai vraiment compris à quel point les gens pouvaient être formidables.]						

**Appendix E: PTGI-SF proposed by Prati and Pietrantonì (2014), and translated French version**

**The Post-Traumatic Growth Inventory – Short Form**

**[Inventaire du Développement Post-Traumatique – Version Courte]**

As a result of my cancer: [Du fait de mon cancer :]	I did not experience this change [Pas du tout]	Very small degree [Très peu]	A small degree [Peu]	A moderate degree [Un peu]	A great degree [Beaucoup]	I experienced this change to a very great degree [Totement]
1. Appreciating each day. [1. J'apprécie davantage chaque jour de ma vie.]						
2. An appreciation for the value of my own life. [2. J'apprécie plus ma vie à sa vraie valeur.]						
3. A better understanding of spiritual matters. [3. J'ai développé une certaine spiritualité.]						
4. New opportunities are available which wouldn't have been otherwise. [4. De nouvelles opportunités sont apparues qui ne seraient pas apparues autrement.]						
5. A sense of closeness with others. [5. Je me sens plus proche des autres.]						
6. Knowing I can handle difficulties. [6. Je suis davantage capable de gérer les situations difficiles.]						
7. I'm able to do better things with my life. [7. Je fais de ma vie quelque chose de meilleur.]						
8. I have a stronger religious faith. [8. J'ai une foi religieuse plus grande.]						
9. A feeling of self-reliance. [9. J'ai acquis plus de confiance en moi.]						
10. I learned a great deal about how wonderful people are. [10. J'ai vraiment compris à quel point les gens pouvaient être formidables.]						