

Appendix F.

EmpathiSEr-U Scale Scoring Key

The EmpathiSEr-U scale assesses the extent to which software practitioners perceive themselves as empathetic towards users during software development. It composed of multiple subscales representing different dimensions of empathy:

- Cognitive Empathy: The ability to understand the perspectives and emotions of users.
- Affective Empathy: The ability to emotionally relate to or feel with the users.
- Empathic Responses: Behavioural empathy or outward expression of empathy through actions, such as active listening or adapting communication based on user needs.

Each item was rated on a 7-point Likert scale:

- 1 - Does not describe me at all
- 2 - Barely describes me
- 3 - Somewhat describes me
- 4 - Moderately describes me
- 5 - Generally describes me
- 6 - Mostly describes me
- 7 - Completely describes me

1	I make an effort to understand the needs and concerns of users, by considering how things look from their perspective.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
2	I get emotionally affected when users express negative emotions due to issues in our software.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
3	I don't usually take users' experiences or emotional states into account when responding to them.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me

4	I consider users' needs to guide development decisions, rather than focusing solely on completing tasks.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
5	I don't usually consider the users' perspective to understand their experience of using the software.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
6	I often become emotionally engaged with users' feelings during conflicts or disagreements.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
7	I don't make an effort to build a human-level connection with users.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
8	I try to understand the concerns of users about our solutions by considering their perspective and feedback.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
9	I am emotionally affected when users face challenges while using the software we developed.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
10	Generally I am able to make decisions based on my knowledge and without being overly influenced by emotions of users.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
11	I clarify users' doubts about the software by taking their perspective into account.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
12	I am emotionally moved when users share personal stories about how our software has helped them.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
13	I rarely reflect on my interactions with users to understand their emotions and perspectives.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
14	I consider users' needs and perspective when creating documentation to ensure it is easy to understand.	Does not describe	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me

		me at all						
15	I get emotionally involved with the users' experiences and emotional responses of using our software.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
16	I do not make an effort to understand the technical limitations and other challenges users face from their perspective.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
17	I get deeply involved with the feelings of users during failures in our software.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me
18	When working with users, I don't always try to understand how things look from their perspective.	Does not describe me at all	Barely describes me	Somewhat describes me	Moderately describes me	Generally describes me	Mostly describes me	Completely describes me

Empathy Sub Scale	Included Item Numbers
Cognitive Empathy	1, 4, 5, 8, 11, 14, 16, 18
Affective Empathy	2, 6, 9, 12, 15, 17
Empathic Responses	3, 7, 10, 13

Scoring Method:

- Scoring was performed by summing all item scores within each subscale and for the total scale.
- Positively worded items are scored directly.
- Items that were negatively worded (i.e., those reflecting a lack of empathy) are reverse scored to ensure that higher scores consistently represented higher empathy.
 - **Negatively worded items:** 3, 5, 7, 10, 13, 16, 18

A higher total score on the EmpathiSEr-U indicates that the practitioner views themselves as more empathetic in their interactions with other practitioners.