

Appendix 1 Item scores of PTGI

| PTGI Items | Mean score | SD | Median | Minimum value | Maximum value |
|---|-------------|------|--------|---------------|---------------|
| 1. My priorities about what is important in life. | 2.92 | 1.52 | 3.00 | 0.00 | 5.00 |
| 2. An appreciation for the value of my own life. | 4.05 | 1.05 | 4.00 | 0.00 | 5.00 |
| 3. I developed new interests. | 2.57 | 1.43 | 3.00 | 0.00 | 5.00 |
| 4. A feeling of self-reliance. | 3.84 | 1.10 | 4.00 | 0.00 | 5.00 |
| 5. A better understanding of spiritual matters. | 3.60 | 1.06 | 4.00 | 0.00 | 5.00 |
| 6. Knowing that I can count on people in times of trouble. | 2.68 | 1.43 | 3.00 | 0.00 | 5.00 |
| 7. I established a new path for my life. | 2.86 | 1.41 | 3.00 | 0.00 | 5.00 |
| 8. A sense of closeness with others. | 2.99 | 1.28 | 3.00 | 0.00 | 5.00 |
| 9. A willingness to express my emotions. | 3.20 | 1.25 | 3.00 | 0.00 | 5.00 |
| 10. Knowing I can handle difficulties. | 3.52 | 1.12 | 4.00 | 0.00 | 5.00 |
| 11. I'm able to do better things with my life. | 3.50 | 1.22 | 4.00 | 0.00 | 5.00 |
| 12. Being able to accept the way things work out. | 3.09 | 1.21 | 3.00 | 0.00 | 5.00 |
| 13. Appreciating each day. | 3.67 | 1.16 | 4.00 | 0.00 | 5.00 |
| 14. New opportunities are available which wouldn't have been otherwise. | 2.87 | 1.49 | 3.00 | 0.00 | 5.00 |
| 15. Having compassion for others. | 3.82 | 1.05 | 4.00 | 0.00 | 5.00 |
| 16. Putting effort into my relationships. | 3.58 | 1.03 | 4.00 | 0.00 | 5.00 |
| 17. I'm more likely to try to change things which need changing. | 3.72 | 1.03 | 4.00 | 0.00 | 5.00 |
| 18. I discovered that I'm stronger than I thought I was. | 3.65 | 1.09 | 4.00 | 0.00 | 5.00 |
| 19. I learned a great deal about how wonderful people are. | 3.97 | 1.02 | 4.00 | 0.00 | 5.00 |
| 20. I accept needing others. | 3.43 | 1.29 | 4.00 | 0.00 | 5.00 |

PTGI: Posttraumatic Growth Inventory

SD: Standard Deviation

Appendix 2 Item scores of ERRI

| ERRI Items | Mean score | SD | Median | Minimum value | Maximum value |
|---|-------------|-------|--------|---------------|---------------|
| 1. I thought about the event when I did not mean to. | 1.56 | 0.708 | 2 | 0 | 3 |
| 2. Thoughts about the event came to mind and I could not stop thinking about them. | 1.34 | 0.794 | 1 | 0 | 3 |
| 3. Thoughts about the event distracted me or kept me from being able to concentrate. | 1.04 | 0.745 | 1 | 0 | 3 |
| 4. I could not keep images or thoughts about the event from entering my mind. | 1.11 | 0.816 | 1 | 0 | 3 |
| 5. Thoughts, memories, or images of the event came to mind even when I did not want them. | 1.09 | 0.761 | 1 | 0 | 3 |
| 6. Thoughts about the event caused me to relive my experience. | 1.19 | 0.799 | 1 | 0 | 3 |
| 7. Reminders of the event brought back thoughts about my experience. | 1.43 | 0.767 | 1 | 0 | 3 |
| 8. I found myself automatically thinking about what had happened. | 1.18 | 0.759 | 1 | 0 | 3 |
| 9. Other things kept leading me to think about my experience. | 1.08 | 0.699 | 1 | 0 | 3 |
| 10. I tried not to think about the event, but could not keep the thoughts from my mind. | 0.97 | 0.807 | 1 | 0 | 3 |
| 11. I thought about whether I could find meaning from my experience. | 1.51 | 0.778 | 2 | 0 | 3 |
| 12. I thought about whether changes in my life have come from dealing with my experience. | 1.38 | 0.818 | 1 | 0 | 3 |
| 13. I forced myself to think about my feelings about my experience. | 1.25 | 0.787 | 1 | 0 | 3 |
| 14. I thought about whether I | 1.67 | 0.742 | 2 | 0 | 3 |

have learned anything as a result of my experience.

15. I thought about whether the experience has changed my beliefs about the world. **1.53** 0.778 2 0 3

16. I thought about what the experience might mean for my future. **1.54** 0.769 2 0 3

17. I thought about whether my relationships with others have changed following my experience. 1.36 0.783 1 0 3

18. I forced myself to deal with my feelings about the event. 1.45 0.801 1 0 3

19. I deliberately thought about how the event had affected me. 1.4 0.797 1 0 3

20. I thought about the event and tried to understand what happened. 1.23 0.781 1 0 3

ERRI: Event Related Rumination Inventory.

SD: Standard Deviation

Appendix 3 Estimates of the correlation between individual characteristics and the ERRI and PTGI scores

| | PTGI | | | | | |
|---|-------------|--------------------|-------------------|----------------------|-------------------|------------------|
| | Total score | Relating to others | New possibilities | Appreciation of life | Personal strength | Spiritual change |
| ERRI | | | | | | |
| Total score | 0.517** | 0.454** | 0.419** | 0.451** | 0.425** | 0.533** |
| Intrusive rumination | -0.413** | -0.368** | -0.314** | -0.343** | 0.343** | 0.459** |
| Deliberate rumination | 0.557** | 0.483** | 0.471** | 0.502** | 0.454** | 0.541** |
| Age | 0.230** | 0.104 | 0.226** | 0.271** | 0.231** | 0.199** |
| Sex | -0.139 | -0.145 | -0.103 | -0.105 | -0.093 | -0.163* |
| Marital status | 0.138 | 0.039 | 0.131 | 0.178* | 0.229** | 0.074 |
| Children | 0.128 | 0.014 | 0.113 | 0.180* | 0.219** | 0.064 |
| Educational background | 0.274** | 0.210* | 0.278** | 0.262** | 0.288** | 0.185* |
| Working years | 0.229** | 0.066 | 0.202** | 0.285** | 0.306** | 0.173* |
| Religious beliefs | 0.102 | 0.013 | 0.069 | 0.149 | 0.064 | 0.118 |
| Professional title | 0.161* | 0.047 | 0.124 | 0.189* | 0.170* | 0.173* |
| Previous rescue experience in a public health emergency | 0.210** | 0.160* | 0.168* | 0.205** | 0.207** | 0.156* |
| Psychological intervention or training during the COVID-19 epidemic | 0.214** | 0.177* | 0.195* | 0.225* | 0.239** | 0.186* |
| Feeling of being well prepared for front-line work | 0.185* | 0.114 | 0.198* | 0.179* | 0.172* | 0.088 |
| Confidence about front-line work | 0.293** | 0.176* | 0.300** | 0.273** | 0.343** | 0.191* |
| Awareness of the risk of front-line work | 0.279** | 0.125 | 0.219** | 0.244** | 0.320** | 0.300** |

PTGI: Posttraumatic Growth Inventory; ERRI: Event-Related Rumination Inventory.

* P<0.05; ** P<0.01

Appendix 4 Assignment of variables in the multiple linear regression analysis

| Variables | Category | Value |
|---|-----------------------------|-------|
| Age | ≤30 | 0 |
| | >30 | 1 |
| Sex | Male | 0 |
| | Female | 1 |
| Marital status | Not married | 0 |
| | Married | 1 |
| Children | No | 0 |
| | Yes | 1 |
| Educational background | Junior college degree | 0 |
| | Bachelor's degree and above | 1 |
| Religious beliefs | No | 0 |
| | Yes | 1 |
| Working years b | ≤3 | 1 |
| | 4~5 | 2 |
| | 6~10 | 3 |
| | >10 | 4 |
| Professional title | Junior | 1 |
| | Middle | 2 |
| | Senior | 3 |
| Previous rescue experience in a public health emergency | No | 0 |
| | Yes | 1 |
| Psychological intervention or training during the COVID-19 epidemic | No | 0 |
| | Yes | 1 |
| Feeling of being well prepared for front-line work | Not sure | 0 |
| | Yes | 1 |
| Confidence about front-line work | Not sure | 0 |
| | Yes | 1 |
| Awareness of the risk of front-line work | Low risk | 0 |
| | High risk | 1 |