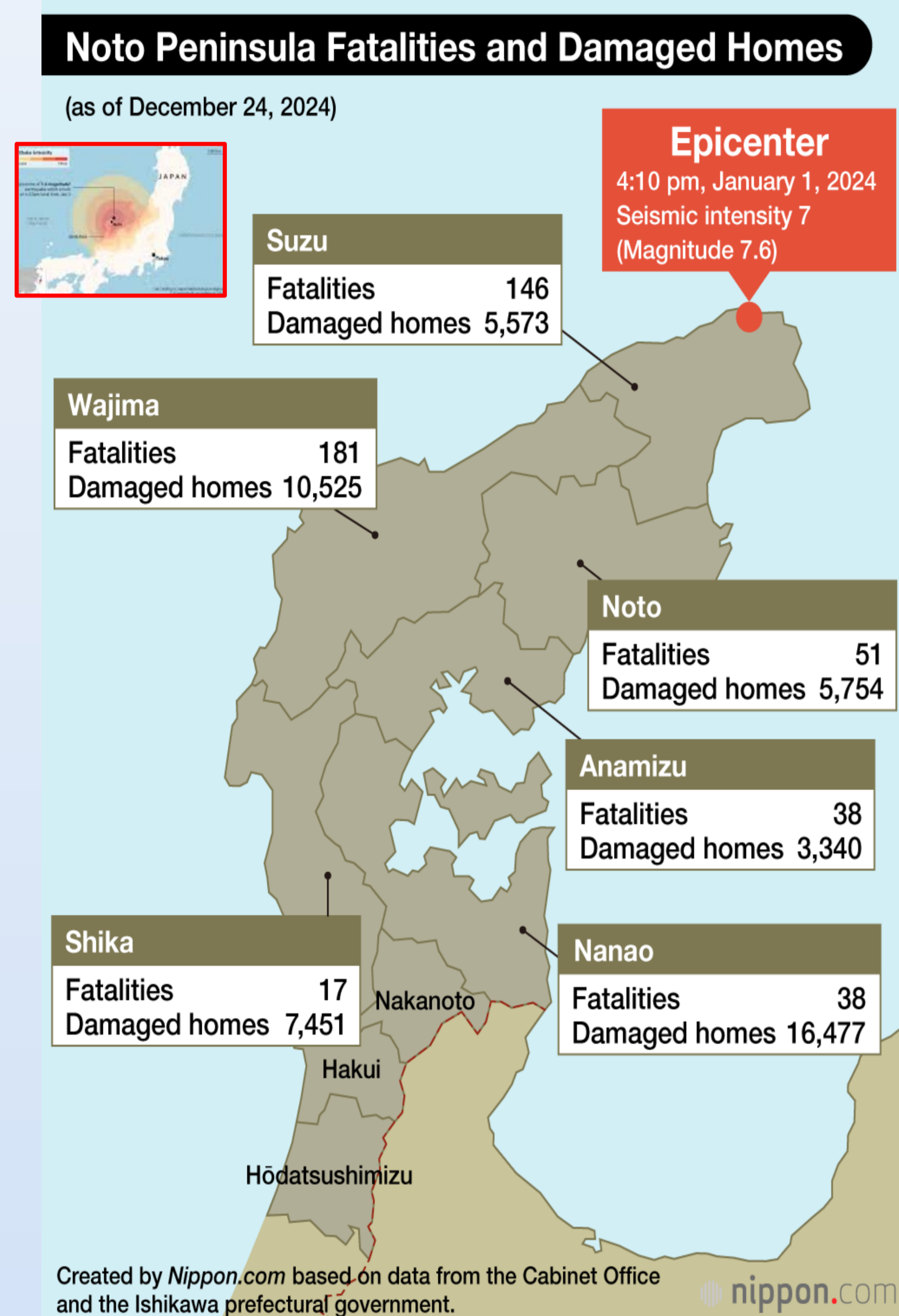


Psychological Resilience of Tourism Workers in Post-Disaster Recovery

Li-Pin (Lynn) Lin, Professor, MingChuan University, Taipei, Taiwan (email: lynnlm@mail.mcu.edu.tw)
 Rahmawati (Ama) Husein, Assistant Professor, Universitas Muhammadiyah, Yogyakarta, Indonesia

Background

Many tourism-dependent communities with rich natural resources have become increasingly vulnerable to complex natural hazards. Hualien, Taiwan, faced a significant impact on tourism development following a magnitude 7.2 earthquake in April 2024 and subsequent heavy rainfall. Similarly, Japan's Noto Peninsula was struck by a magnitude 7.6 earthquake on New Year's Day of 2024.



Methods

The research aims to understand the strategies, behaviors, and perceptions of the research sample at various stages of post-hazard recovery. The researchers developed and confirmed a research model through face-to-face interviews with representatives of the tourism industry in the first stage. The face-to-face interviews, conducted in Noto, Japan, and Hualien, Taiwan, between October and December 2025, involved owners, managers, or supervisors from relevant public and private tourism and hospitality institutions or businesses (see the Table). And, they were requested to self-assess the level of perceived stress and resilience within the 18 months after the PTEs

Interviewees in Noto and Hualien					
	Noto (Japanese)			Hualien (Taiwan)	
	Subsector of tourism industry	Age		Subsector of tourism industry	Age
N1	Souvenir/art	3	H1	Tourism services/tour guide	2
N2	Hotel/accommodation	4	H2	Hotel/accommodation	1
N3	Tourism services/tour guide	5	H3	Hotel/accommodation	2
N4	Tourism attraction/art & souvenir	4	H4	Hotel/accommodation	5
N5	Massage/wellness services	2	H5	Food/restaurant	2
N6	Food/restaurant	2	H6	Food/restaurant	1
N7	Tourism services/organization	6	H7	Tourism/natural resources/government	5
N8	Food/retails/souvenir	5	H8	Tourism/attraction site/government	4
N9	Hotel/accommodation	4	H9	Food/retails/souvenir	4
N10	Tourism services/tour guide	4	H10	Tourism services/organization	4
N11	Food/retails	4	H11	Food/retails/souvenir	5
N12	Community services (medical doctor)	5	H12	Accommodation/organization	4
			H13	Tourism services/cultural heritage site	5

Note: AGE 1=21-30 yr. old, 2=31-40 yr. old, 3=41-50 yr. old, 4=51-60 yr. old, 5=61-70 yr. old, 6=71 yr. old and above. All interviewees are anonymous and indicated by alphabetical symbols.



Results

- In Japan, respondents who experienced severe property damage and significant disruption to their daily lives for three months reported high levels of stress during Stage I, followed by a gradual recovery. Conversely, in Taiwan, respondents whose primary losses were in tourism revenue exhibited a relatively low and stable stress trajectory until Stage III.
- For both Japanese and Taiwanese respondents, perceived resilience increased over time in a similar pattern. These post-PTE resilience trajectories align closely with the framework proposed by Bonanno (2004).
- Respondents from both countries validated the causal relationships proposed in the research model.

Literature Review

In psychological research, resilience denotes the capacity to maintain or recover mental functioning and health following external adversity and potentially traumatic events (PTEs) (Bonanno et al., 2011; van der Meer et al., 2018). It is the product of managing stress and growing stronger through adversity. Characterized by a relatively stable health trajectory and minimal long-term impairment, resilience may see an initial drop after a PTE, followed by a steady recovery over the next 18 months. Ultimately, resilience ensures emotional and physical wellbeing of disaster survivors. (Center for Health and Happiness, 2024)

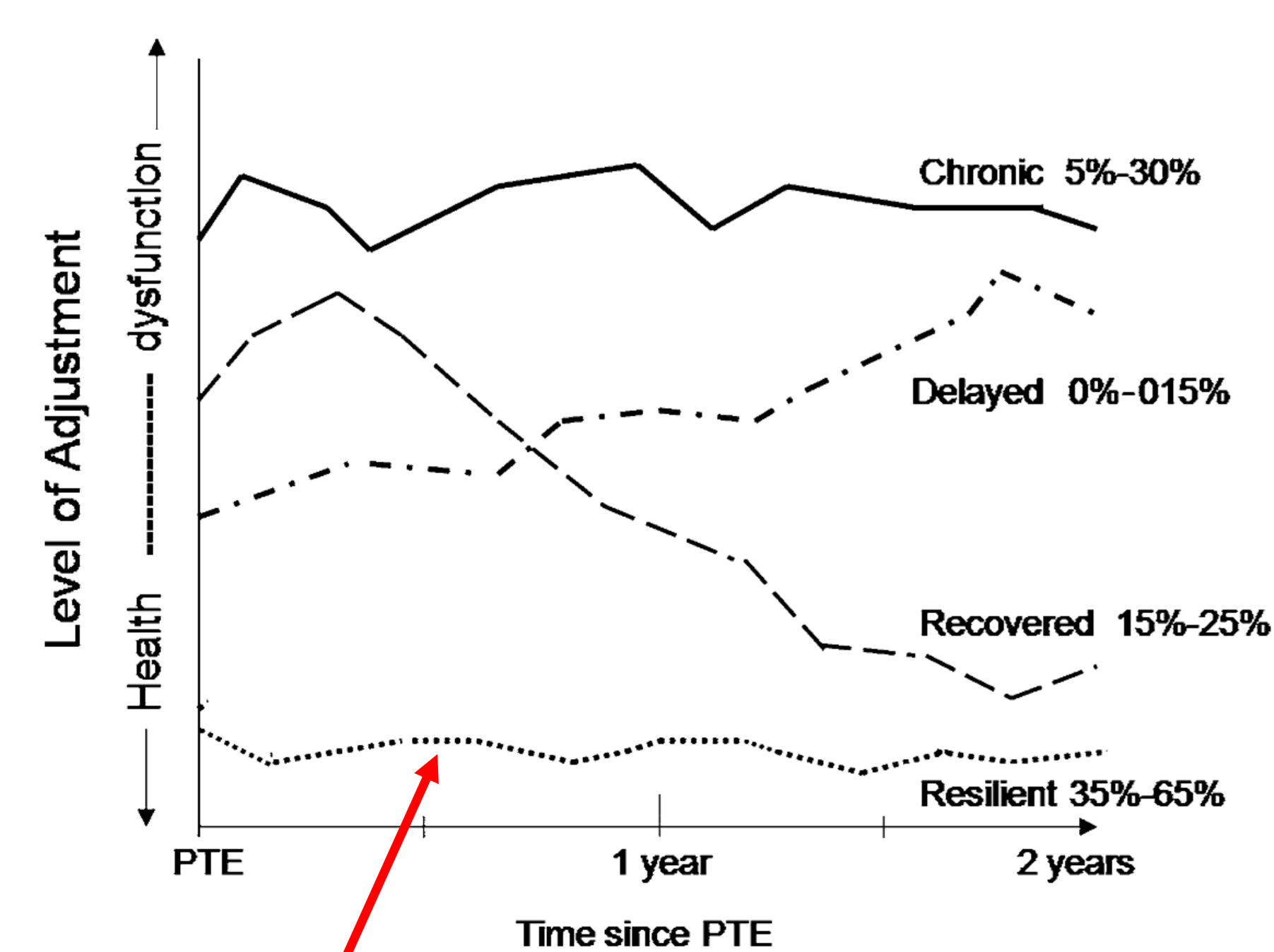
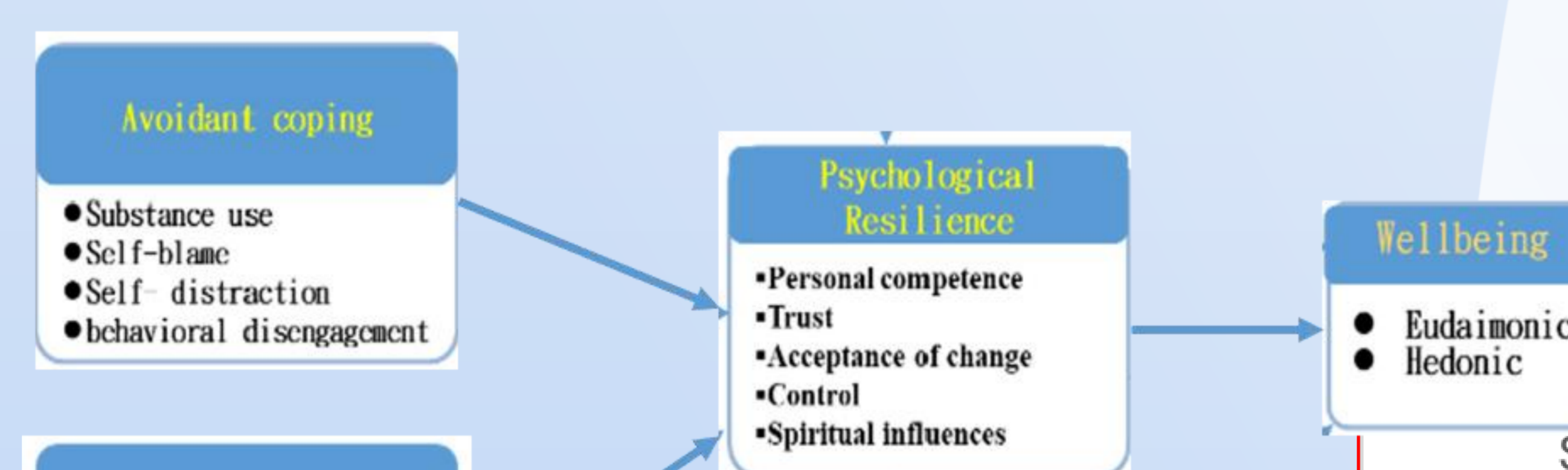
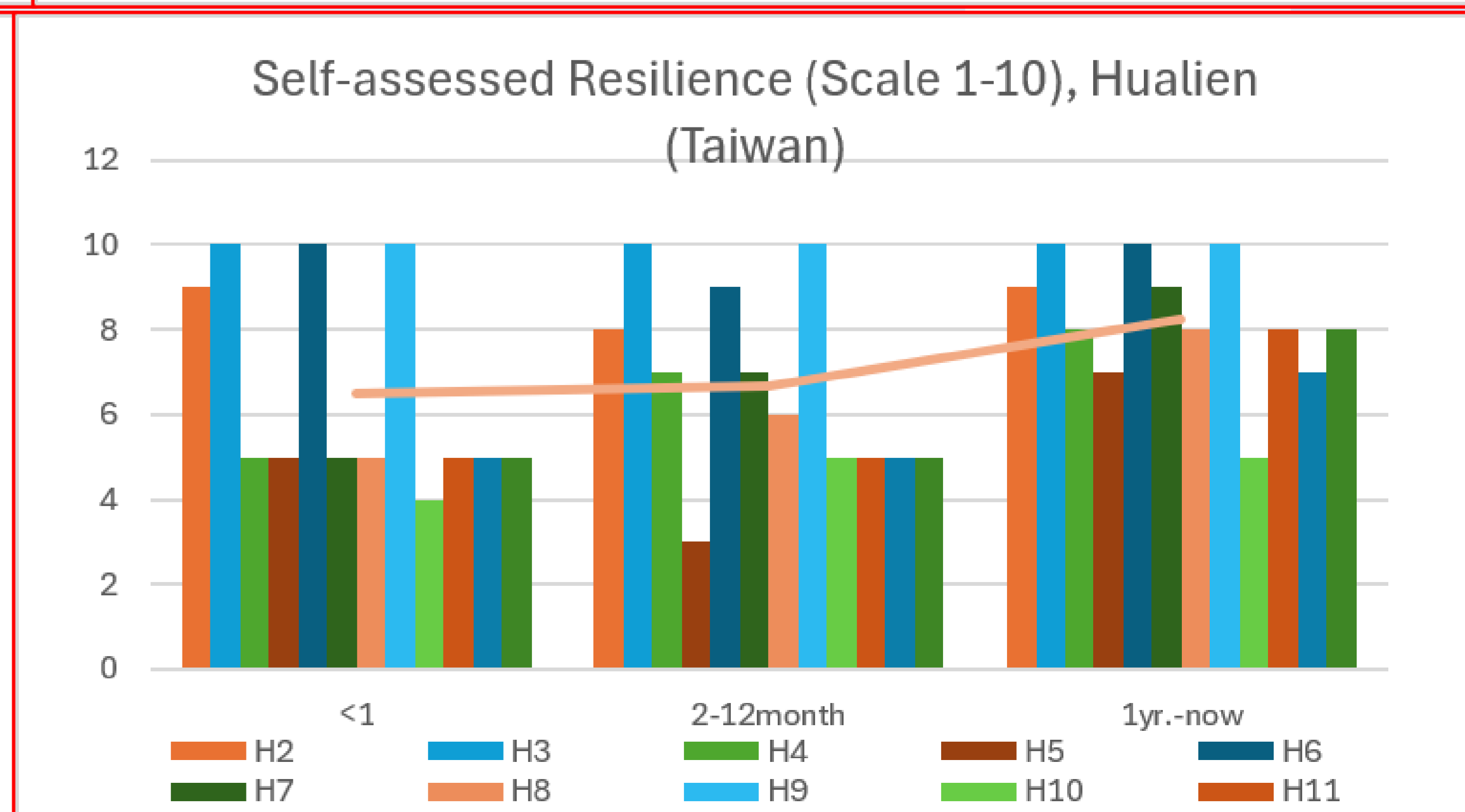
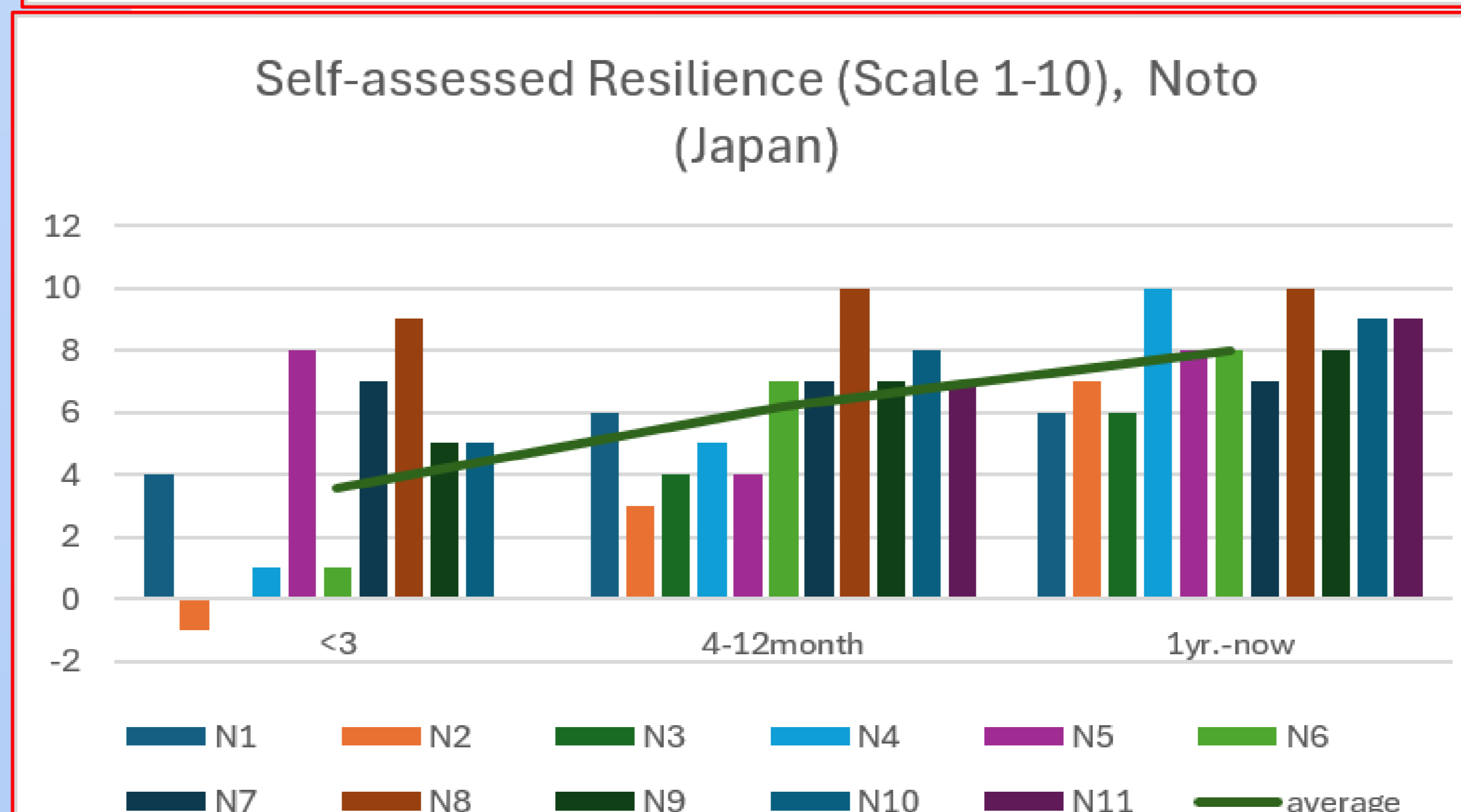
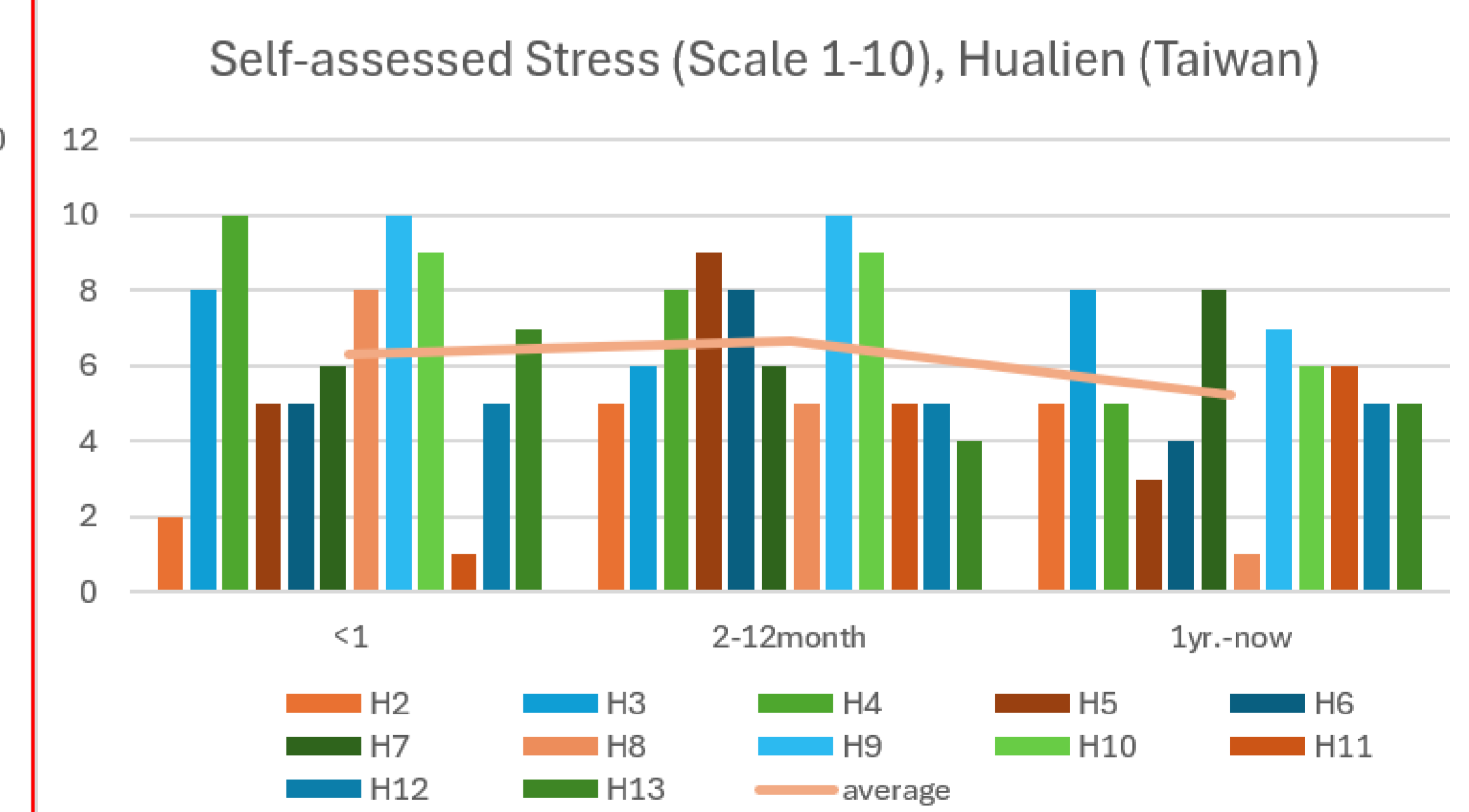
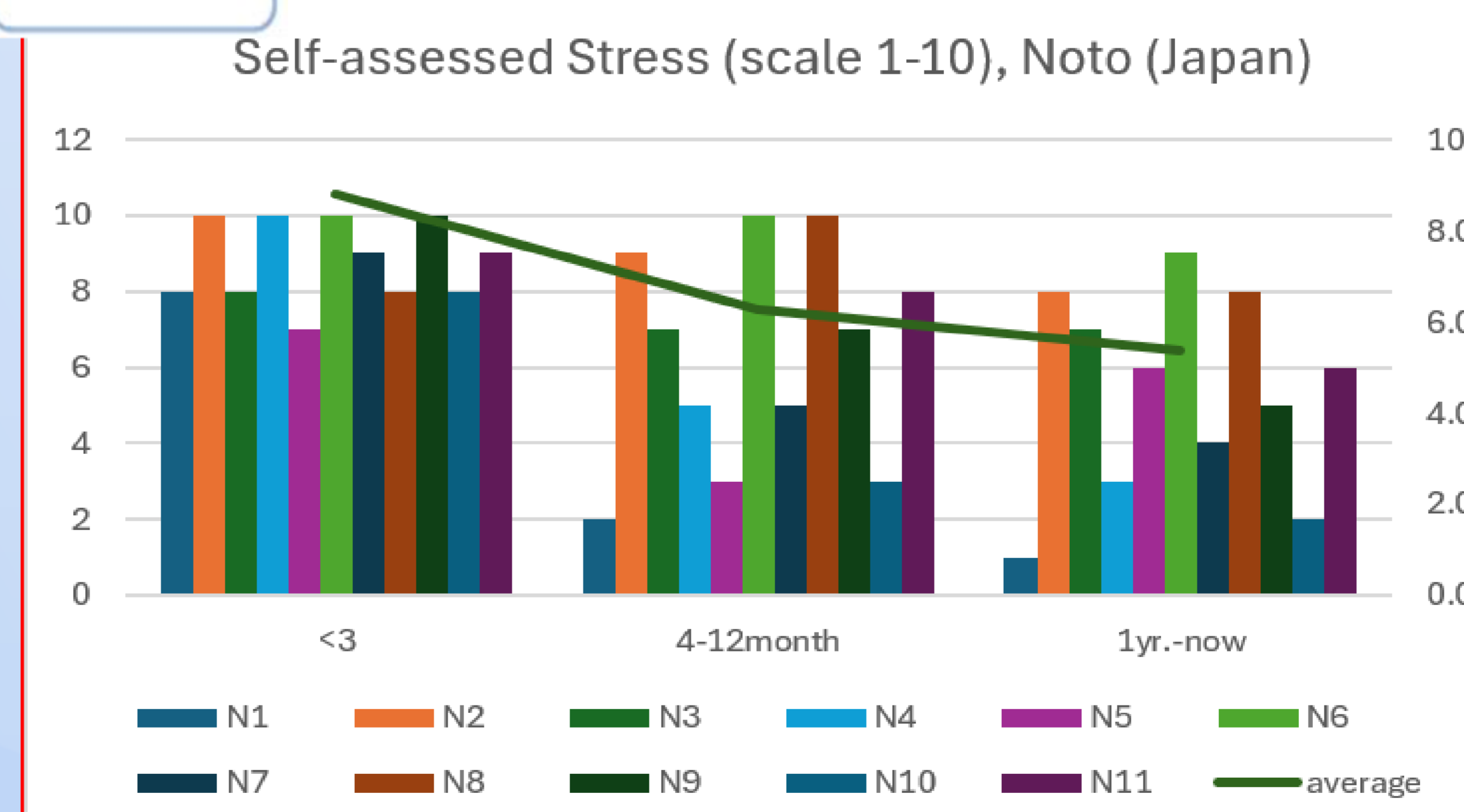


Figure 1
 Prototypical trajectories of adjustment following a PTE. (adapted from Bonanno 2004).

Research Model



According to psychiatric experts, predictors of resilience at the individual level include personalities with better coping capabilities (Connor & Davidson, 2003) and demographic variations (Bonanno et al., 2006). Scoglio et al. (2024) suggested the bi-directional association between psychological resilience and coping strategies (either active or avoidant), leading to improved psychological wellbeing. Therefore, in the devastated tourism communities, tourism workers play a vital role in recovery if they become mentally resilient. Their resilience leads to greater mental well-being, fostering healthy tourism sectors.



Research implications

- Tourism workers in tourism-dependent communities tend to become increasingly resilient through their involvement in life recovery, community redevelopment, and economic revival following a PTE.
- The immediate restoration of basic needs and public infrastructure must be prioritized as a matter of urgency.