

US-Taiwan Workshop on the Advancement of Societal Responses to Mega-Disasters afflicting Mega-Cities

Group 4: Post-event Management Plans (05.06.2010)



Disaster-/Trauma-related Psychological Studies in Taiwan

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Disaster-/Trauma-related Psychological Studies in Taiwan

- ◆ Mostly 921Chi-Chi Earthquake-related
- ◆ Post- rather than pre- trauma research
- ◆ Mainly disease-focused
- ◆ More short-term psychological sequelae

May be due to.....

- ✓ The context
- ✓ The researchers

Current Accomplishments

(Disaster-/Trauma-related Psychological Studies in Taiwan)

- ◆ PTSD prevalence rates and severities
- ◆ Development and revision of measurements:
 - EEI (Earthquake Exposure Inventory)
 - PTSRI (Posttraumatic Stress Response Index)
 - PPRI (Peri-traumatic Psychological Reaction Index)
 - PCQ (Psychosocial Changes Questionnaire)
 - **UCLA PTSD RI** (UCLA PTSD Index for DSM-IV, Adolescent version)
 - **PTCI** (Posttraumatic cognition Inventory)
 - PTG (Posttraumatic Growth Scale)
 - etc.

921 EQ Studies 1/3

- Exposure dose-effect on PTSD symptoms? → **Yes!**
 - In adult survivors three months after the earthquake (Chen, Lin, Tseng, Wu, 2002)
 - In EQ-impacted adolescents 1-2 years after the 921 EQ (Wu, Chen, Weng, & Wu, 2008)

- Gender differences in PTSD symptoms? → **Yes!**
 - In EQ-impacted adults 3 and 6 months after the 921 EQ (Chen, Lin, Tseng, Wu, 2002; Lin, Chen, Hung, & Tseng, 2005)

921 EQ Studies 2/3

- Age differences in PTSD symptoms? → **Yes!**
 - Children and the aged are more vulnerable
- Social status and PTSD symptoms? → **Yes!**
 - those with lower SES are more vulnerable

921 EQ Studies 3/3

May Trauma and Loss Produce Valuable Gains?



Methods

Participants: n = 114 @ Y⁹

400+ @ Y¹, with 70[±]% follow-up rate → n = 79 @ Y⁵

Age	Mean	S.D.
Male	49.28	8.73
Female	50.31	8.91
<hr/>		
Sex	N	%
Male	34	29.8%
Female	80	70.2%
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Education		
Elementary	9	7.9%
Junior High	9	7.9%
Senior High	53	46.5%
College and above	43	37.7%

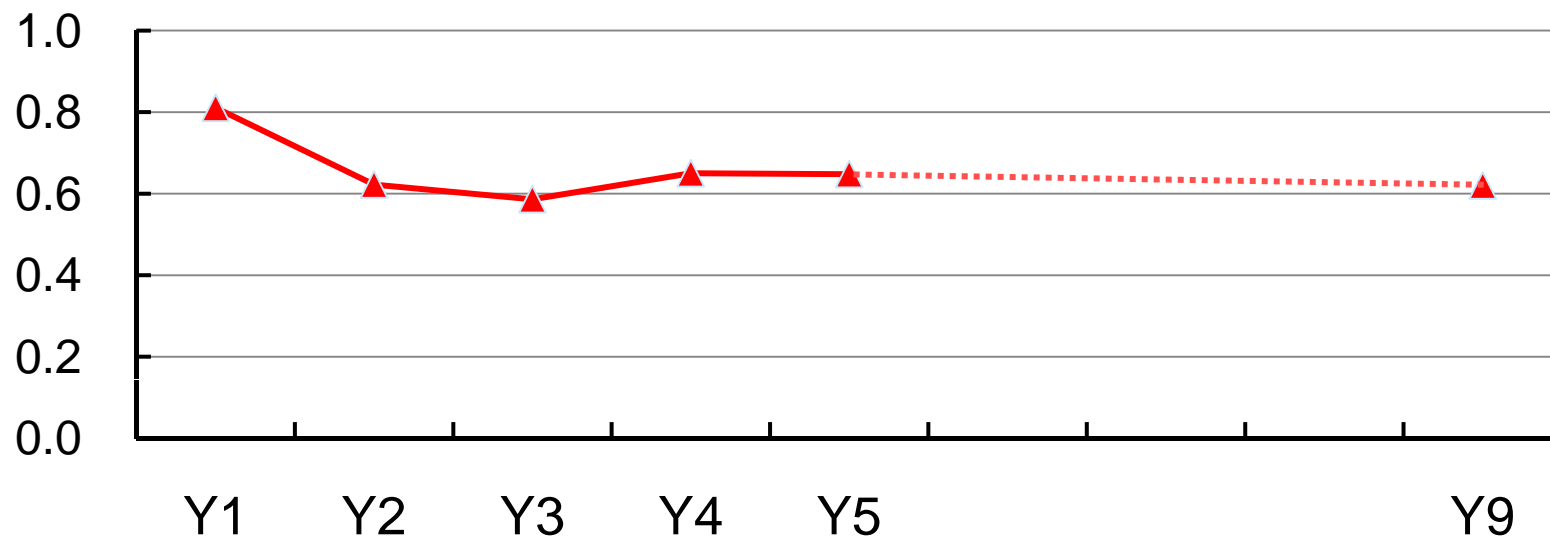
Participants

Injury & Household Damage @ Y¹

	N	%
Injured @ Y ¹	19	16.7%
Household damage @ Y ¹		
none	7	6.1%
damaged	80	70.2%
collapsed	27	23.7%

Changes of PTSD Symptoms

Natural recovery may occur during the 1st~2nd year following the 921 EQ, and stay unchanged through the 10th year.



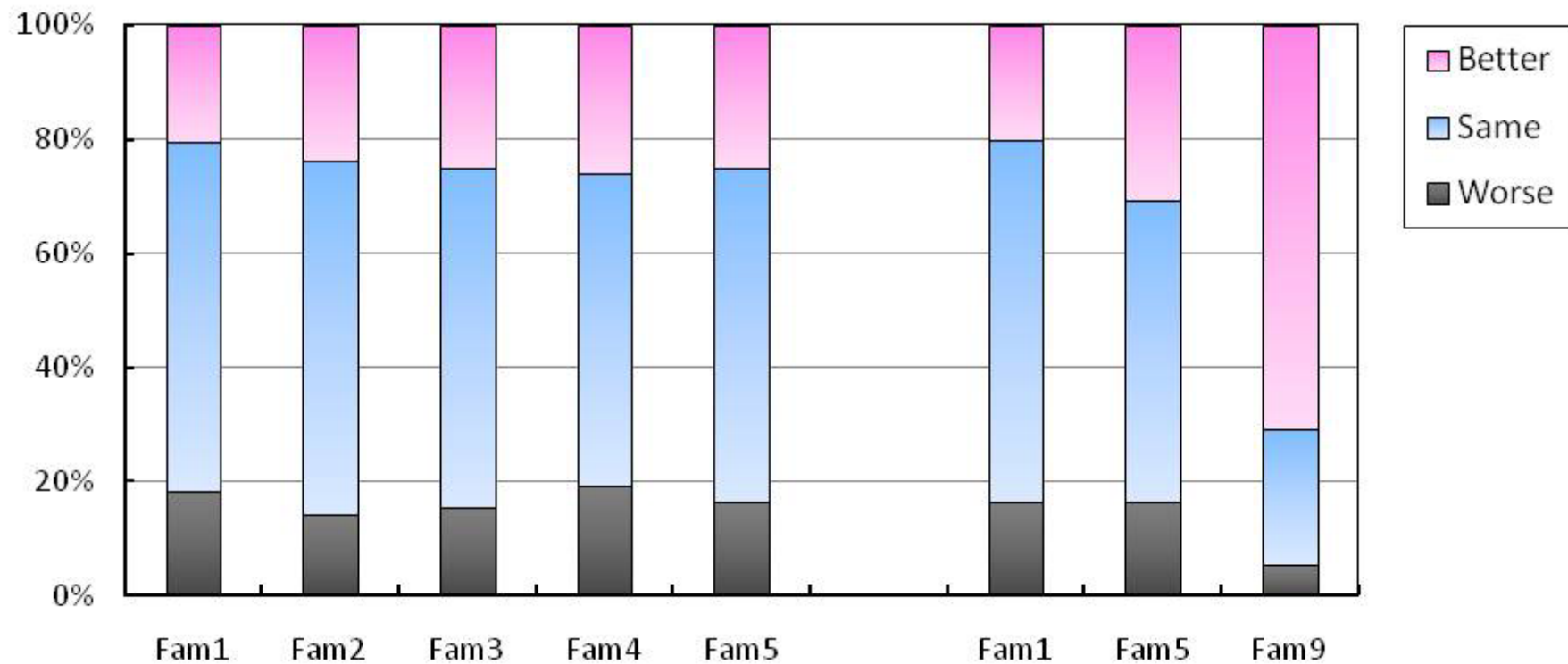
Life Changes over the 10 years Following 921EQ

- **Marriage:** 22% (married, separated, divorced, widowed).
- **Job:** 35% (starting new job, changed job, lost job). ◦
- **Religion:** 15% (starting a religion, converting into other religion, giving-up religion)
- **Physical health:** 13% (DM, hyperthyroidism).
- **Psychological health:** 8.3% (Major Depressive Disorder, Panic Disorder).

Changes in Interpersonal Relationships

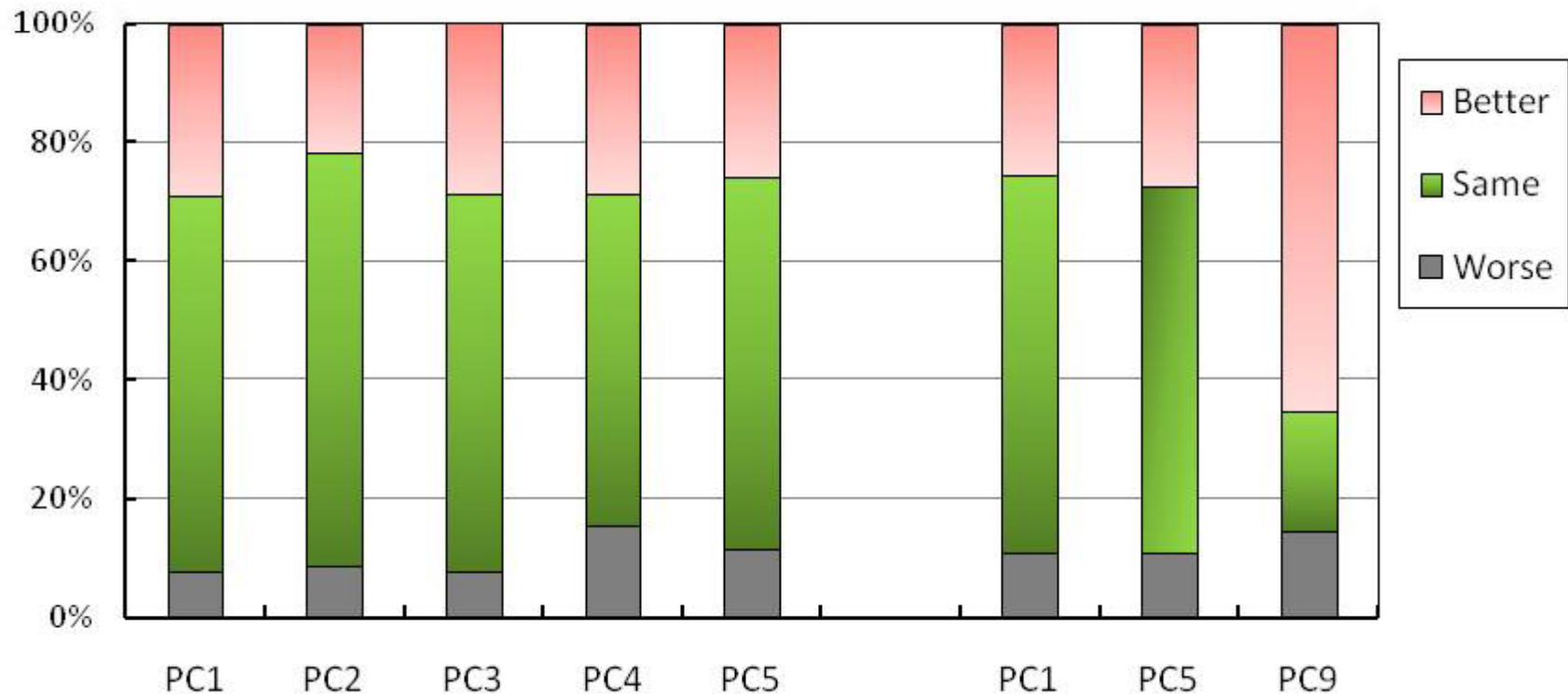
- Overall, more respondents reported having better relationships with family, parent-child, relatives, and neighbors.

3. Changes in Interpersonal Relationships: Family Relationships



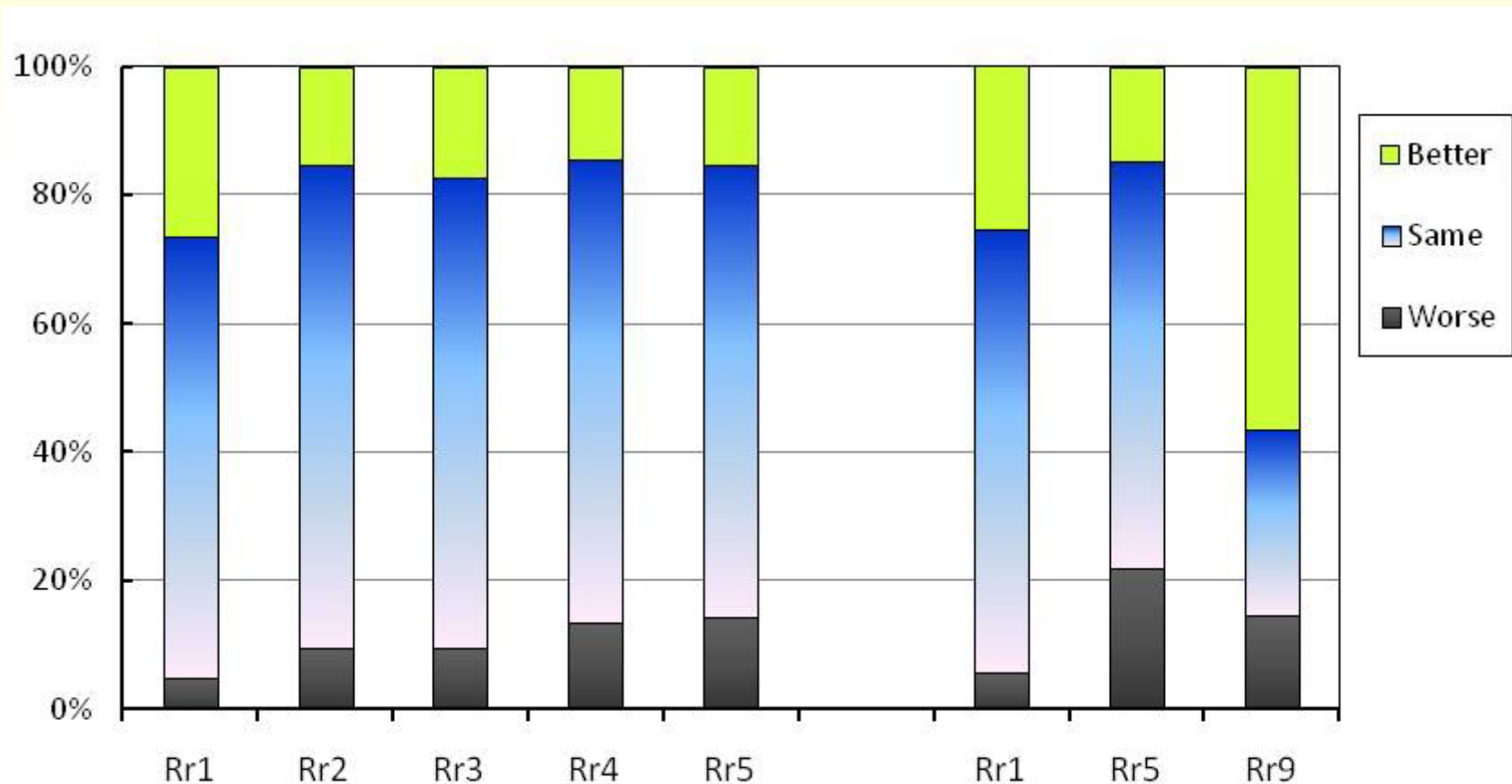
- Overall, most people have improved family relationships over the past 10 years.

3. Changes in Interpersonal Relationships: Parent-Child Relationships

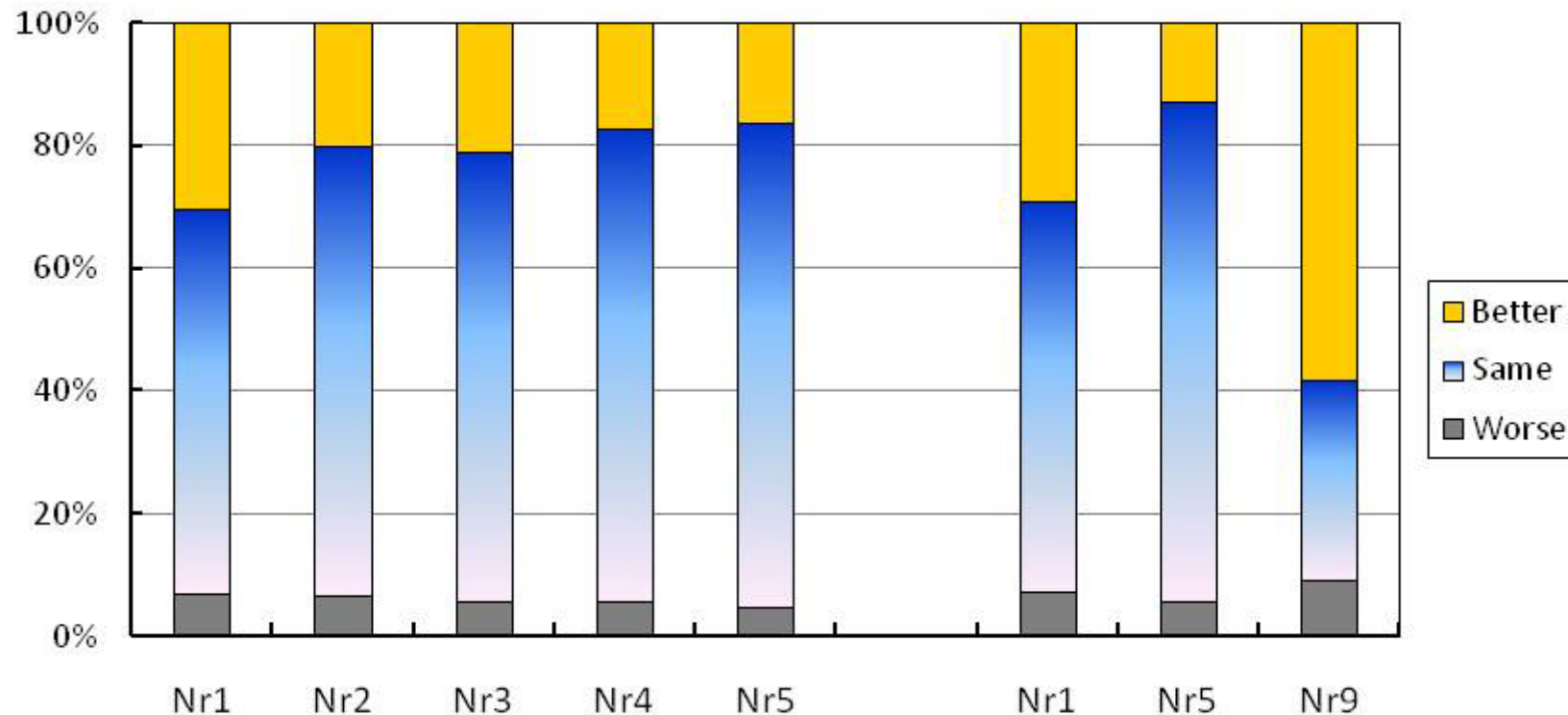


- Overall, most people have improved parent-child relationships over the past 10 years.

3. Changes in Interpersonal Relationships: Relative Relationships



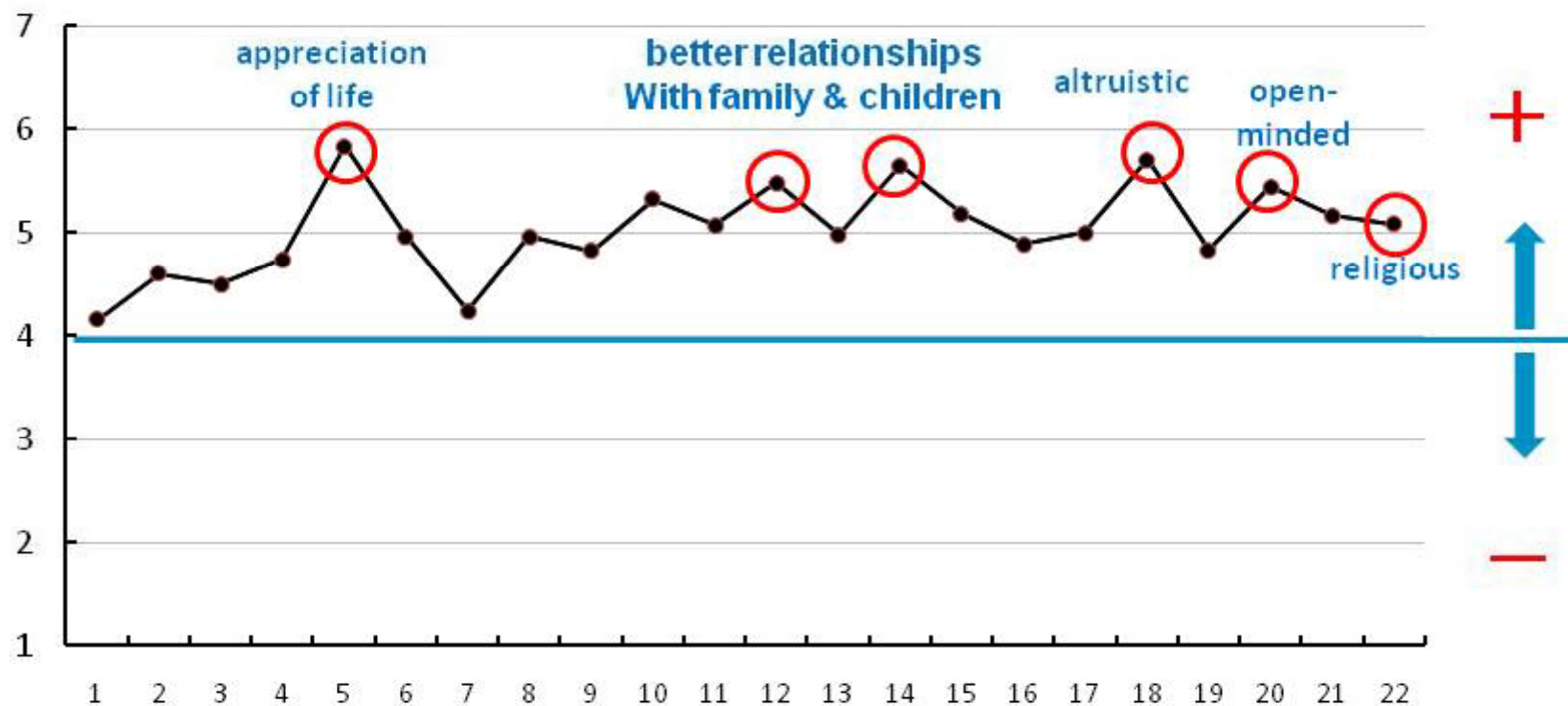
4. Changes in Interpersonal Relationships: Neighbor Relationships



- Overall, better relationships with neighbors were noted at T1, and then returned as usual.

5. Posttraumatic Growth

Attribution to the 921 Chi-Chi Earthquake



Training Programs

Indebted to Foreign Expertise, e.g.,

1. UCLA trauma psychiatry team, Dr. Pynoos
2. Psychotherapy Experts, Dr. E. Foa
3.

Issues and Suggestions for Psychological Work Concerning Disasters and Traumas

- Process approach is very important for better understanding individual and collective posttraumatic recovery
- More frequent periodic assessments may do better for course description and policy-making.



5 basic needs challenged by traumas

- 安全感 Security
- 信任 Trust
- 掌控 Control / Mastery
- 尊重 Respect
- 親密感 Intimacy

(Rosenbloom, 1999)

Goals for Immediate and Mid-Term Intervention for Mass Trauma



Hobfoll, Watson, Bell, *et al.* (2007).

Programs and Interventions for Collective Recovery and Growth following Mass Disasters

Trauma tic Memory?

- an honest accounting
and
- a restoration of dignity, peace, and stability
to victims.

(cited from B. A. van der Kolk, 1996)

Taiwanese Style of Coping to Disaster Crisis?

Yes, seeking positive ways to face the very negative ordeal!



**If experiencing trauma is
an essential part of being human,
what lessons
can we learn from the suffering?**

Professional Capacities-Building

■ Research

■ Psychological Vulnerabilities

Pre-disaster conditions (e.g., quality of life)

Exposure factors (e.g., injuries & death, loss of property)

Objective & subjective sense of controllability

■ Social Vulnerability

SES

Ethnic & cultural minority ...

■ Professional Services

■ Localization & empowerment

■ Foreign experiences & expertise



National Taiwan University

Thank You!

