

Ultra-Brief Therapeutic Assessment with Three Chinese Adult Clients: A Case-Based Time-Series Pilot Study

Qi-Wu Sun, Zhi-Huan Wang, Ming Wang & Stephen E. Finn

To cite this article: Qi-Wu Sun, Zhi-Huan Wang, Ming Wang & Stephen E. Finn (11 Nov 2024): Ultra-Brief Therapeutic Assessment with Three Chinese Adult Clients: A Case-Based Time-Series Pilot Study, Journal of Personality Assessment, DOI: [10.1080/00223891.2024.2422432](https://doi.org/10.1080/00223891.2024.2422432)

To link to this article: <https://doi.org/10.1080/00223891.2024.2422432>



Published online: 11 Nov 2024.



Submit your article to this journal [↗](#)



Article views: 56



View related articles [↗](#)



View Crossmark data [↗](#)



Ultra-Brief Therapeutic Assessment with Three Chinese Adult Clients: A Case-Based Time-Series Pilot Study

Qi-Wu Sun¹ , Zhi-Huan Wang¹, Ming Wang²  and Stephen E. Finn³

¹School of Psychology, Central China Normal University, Wuhan, Hubei, China; ²Center for Mental Health Education, Wuhan University of Technology, Wuhan, Hubei, China; ³Center for Therapeutic Assessment, Austin, Texas, USA

ABSTRACT

Therapeutic Assessment (TA) is a relatively new, short-term intervention that uses psychological tests to address clients' persistent problems in living. The core feature of TA is that assessors and clients work collaboratively in all the phases of the process, and psychological tests are used as "empathy magnifiers" to help assessors understand clients' "dilemmas of change" and promote positive change. An "ultra-brief" TA protocol involving an Initial Session, Test Administration and Extended Inquiry, and Summary/Discussion Session was undertaken with three adult clients in China. A case-based time-series design with daily measures was used to assess the outcome of TA. Recruited in a natural setting, all 3 clients benefited from participation in the TA. These results suggest that Ultra-brief TA may be a promising treatment for Chinese adult clients with a variety of psychological concerns.

ARTICLE HISTORY

Received 21 February 2024

Accepted 14 October 2024

Therapeutic Assessment (TA; Finn, 2007; Fantini et al., 2022) is a semi-structured collaborative assessment intervention in which assessors and clients use psychological tests to address clients' persistent problems in living. Recent meta-analyses have shown that TA is well-suited to a broad array of adult clients with various types of difficulties, and that it generally produces three types of change when compared to credible controls: reductions in clients' symptomatology (with effect sizes from .19-.37), increased satisfaction with ongoing treatment and motivation for future treatment (with effect sizes from .59-1.11), and reductions in shame and increases in self-esteem (effect sizes from .37-.42; Aschieri et al., 2023; Durosini & Aschieri, 2021; Poston & Hanson, 2010). For single-case studies, Aschieri et al. (2023) found a moderate effect size of TA in reducing symptomatic distress ($d = -.50$) between the baseline phase and the combined intervention and follow-up phases.

The full TA model often involves 6 to 8 90-120-minute sessions (Finn & Tonsager, 1992; Finn 2003), but Finn et al. (2017) and Fantini et al. (2022) have described and summarized the evidence for an "ultra-brief" version that uses only 3-4 sessions. In both the full and ultra-brief models of TA, practitioners enlist clients' curiosity and their cooperation by helping them develop individualized "Assessment Questions (AQs)" at the beginning of the intervention. Then clients and assessors use psychological tests as "empathy magnifiers" to understand clients' "dilemmas of change" and identify and practice viable next steps they can take in addressing those

dilemmas (Fantini et al., 2022; Finn, 2007). Finally, clients and assessors review answers to the clients' AQs co-constructed during the TA and discuss their implications for "next steps." Most clients are given both oral and written feedback about the assessment results.

Since its inception in the mid-1990s in Austin, Texas, TA has received more and more attention, mostly in the USA and Europe, but also recently in Japan and China (Asai & Asai, 2023; Li et al., 2021; Ogura et al., 2021; Sun, 2022; Yan et al., 2023). This raises the question of whether TA will be effective for Chinese clients. Encouraging evidence is that TA has been adapted successfully to many countries around the world, including Argentina, Brazil, Denmark, France, Italy, Japan, Mexico, the Netherlands, Sweden (S. Finn, personal communication, 2024). However, empirical validation of TA's effectiveness for Chinese clients is necessary. As a small step in this direction, we aspired to conduct a time series case study with 3 Chinese clients using Ultra-brief TA and the MMPI. Notably, the first documented example of TA in the literature was an Ultra-brief TA using the MMPI-2 and its feedback as an intervention method (Finn & Tonsager, 1992).

Conducting effectiveness studies of TA in China is challenging, even when using a case study design. A significant issue is the absence of certified TA assessors in China. Questions may arise about why, how and the cost to switch to another treatment model and the level of training required to master TA, as intensive training is

often necessary for a new treatment modality. Given the high demand for psychological services and the limited resources in China (Sun, 2022), Ultra-brief TA—if it achieves outcomes comparable to those indicated in the literature (Durosini & Aschieri, 2021; Poston & Hanson, 2010), even with a novice TA assessor—could be promising. This would mean it will take less time to train qualified assessors to gain comparable treatment outcomes. This case study presents an opportunity to evaluate the outcomes with a novice TA assessor.

Another issue is the limited availability of standardized psychological tests in China. As one of TA's essential elements is the clinical utility of various psychological tests, this is a substantial obstacle. Most Chinese versions of psychological tests, such as personality, performance-based, and intelligence tests for adults, are outdated. It is expected that the TA's core values of cooperation, respect, humility, openness, and curiosity (Finn, 2009) would compensate for the inaccuracy of the test results in such situations because the assessor will facilitate the client's cooperation, input, and correction in each phase of the assessment.

Findings from this initial case study can guide future research in many aspects. For example, if TA is effective for clients in China, further study could try to identify the most effective aspects of TA, such as the utility of psychological tests, the core value of TA, the assessor's experience, or cultural adaptability. Insights gained can inform the adaptation of TA practices to better suit the cultural and contextual specifics of Chinese populations and suggest modifications for subsequent studies. Additionally, data from case studies enrich the TA literature, providing an in-depth look at the unfolding process of TA. This not only aids in fostering a consistent understanding of TA's effectiveness globally but also serves as a reference for introducing TA in other cultural settings.

To summarize, the current study aims to explore the question of whether ultra-brief TA can produce positive outcomes for three adult clients in China. A case-based time-series design was employed, characterized by a small number of cases (*n*) and a large amount of intensive time-series data (*T*). This design, with its baseline measurements, seemed ideal for the purpose of the current study because of the possibility of analyzing change processes individually (For details see Borckardt et al., 2008).

Method

Description of research procedures

This study received approval from the Human Subjects Committee of Central China Normal University (ccnu-irb-202203021). Clients voluntarily seeking services at a university counseling center were engaged during the routine triage interview. Each interview, lasting approximately 15 min, aimed to assess aspects like suicidal risk and problem severity to determine further clinical management steps. Given that the TA model was relatively new to clients in China, clients were invited to participate in the study

voluntarily “to aid in scientific research.” Those expressing interest were provided with the research assistant's contact information. Out of the six clients approached, three—referred to by the pseudonyms Su-Min, Gao-Qiang, and Mei-Fang—connected with the research assistant, signed the consent forms, and completed the TA research between April and September 2022. Clients completed standardized outcome measures before each session and alliance measures after each session. The TA was provided at no charge to the clients, and they received no additional incentives for participation.

The assessor, a faculty member specializing in clinical and counseling psychology, had approximately two decades of psychotherapy experience. He had participated in an introductory workshop on TA and another focusing on the clinical use of MMPI-2. During the three assessments used for this study, the assessor received close consultation before each step of the TAs to ensure fidelity to the model from Dr. Stephen Finn, the developer of TA. The research assistant, a Master's student in training, managed the assessment scheduling, administered the standard outcome measures at each TA session, and facilitated the clients' daily idiographic ratings. During the initial contact, the assistant also talked with each client to determine the idiographic indices of change (distinct from the AQs formulated with the assessor) that would be rated by the client throughout the study. The assessor was blind to the clients' ratings of outcome variables throughout the TA process.

Description of clinical procedures

The treatment protocol used was the Ultra-brief TA adult model (Fantini et al., 2022; Finn et al., 2017). This streamlined model consists of three components of the full TA protocol: (1) the Initial Session, (2) Standardized Test Sessions and Extended Inquiry, and (3) the Summary/Discussion Session (Fantini et al., 2022; Finn et al., 2017). The Initial Session aims to cultivate a secure therapeutic relationship that facilitates the client's attachment system regulation and the establishment of epistemic trust. As TA is largely unknown in China, the assessor paid particular attention to explaining the TA model to the clients and addressing any of their concerns or questions. Also, the assessor and clients collaboratively framed the individualized AQs, which formed the focus of the remaining assessment sessions (Fantini et al., 2022). Next, psychological tests were administered following standardized protocols. Given the limited tests accessible in China and the assessor's restricted clinical test training, the tests used in each assessment were the Minnesota Multiphasic Personality Inventory (MMPI, Song, 1989), and the Early Memories Procedure (EMP, Bruhn, 1992), a performance-based test of autobiographical memory, in which clients write early memories in response to prompts presented in a test booklet. After each client completed the EMP, the assessor conducted an Extended Inquiry (EI), whose aim was to connect the client's test experiences, responses, and behaviors with their persistent problems in living and their AQs (Fantini et al., 2022). In the

Summary/Discussion Session the assessor consolidated all the acquired information with the ultimate objective of aiding the client to developing a more constructive and self-compassionate narrative, thereby facilitating their ongoing change (Fantini et al., 2022; Finn, 2007). As is typically done in TA, as test results were presented, each client was asked to confirm, deny, and/or give examples of how the test finding fit with their experience and to reflect on how the test finding helped address their AQs.

Description of time series procedures

We utilized a single-case A-B-phase design with a follow-up to examine the hypothesis that clients would benefit from participating in the Ultra-brief TA. After the initial contact, three to four dependent variables were set as the idiographic treatment goals for each client. Baseline measurements were taken 5 to 8 days after this initial contact. The intervention phase, commencing after the Initial Session, spanned 30 to 40 days, with sessions held either weekly or biweekly based on the availability of the client, the assessor, and Dr. Finn. The follow-up phase extended between 61 to 65 days. In line with Smith et al. (2010), we labeled these periods as the baseline (B), intervention (I), and follow-up (F) phases.

Measures

Outcome Questionnaire 45.2 (OQ45.2; Lambert et al., 2004). OQ45.2 is a 45-item self-report measure that assesses three subscales of treatment outcome: Subjective Distress (SD), Interpersonal Relationships (IR) and Social Performance (SP). Clients rate items using a 5-point Likert-type scale (0 = *never* to 4 = *almost always*). It has demonstrated good psychometric properties in Chinese samples (Qin & Hu, 2008). Clients were asked to rate the OQ45.2 items based on their subjective experiences in the previous week, with high scores representing severe symptoms. Scores from each subscale were used in the analysis.

Rosenberg Self-Esteem Scale (RSES). The 10-item RSES (Rosenberg, 1965) was used to evaluate self-esteem. It has demonstrated good psychometric properties in Chinese samples (Han et al., 2005). Clients used a 4-point Likert-type format (1 = *strongly disagree* to 4 = *strongly agree*) to evaluate their global self-worth by measuring both positive and negative feelings about the self, with higher scores representing greater self-esteem. The total score was used for the analysis.

The Working Alliance Inventory-Short (WAI-S; Tracey & Kokotovic, 1989) consists of 12 items that reflecting Bordin's (1979) three alliance components: agreement on tasks, agreement on goals, and a positive emotional bond. It has demonstrated good psychometric properties in Chinese samples (Zhu & Jiang, 2011). Clients used a 5-point Likert-type format (1 = *never* to 5 = *always*), to evaluate their alliance with the assessor, with higher scores indicating better quality of the working alliance. The total score was used for the analysis.

The Daily Idiographic Time-series Indices. These were generated for each client by the research assistant. Su-Min rated the following 4 items daily: *feel guilty this morning, worry my partner doesn't like me enough, feel distressed, and feel satisfied with myself*; Gao-Qiang rated the following 3 items daily: *anxious about unfinished task today, not affected by others today, and satisfied with sleep last night*; Mei-Fang rated the following 4 items daily: *Emotions not fluctuating dramatically, didn't force myself to smile to others, want to get approval of others, have a sense of safety today*. All items were rated on a 10-point Likert-type scale.

Data analytic strategy

To determine whether the idiographic indices generated by clients could be combined into a global measure for a client's improvement, a confirmatory factor analysis (CFA) was employed to determine if the indices pointed to a singular latent factor. Given the small N and large T time-series data, it was feasible to conduct a first-order autoregressive AR (1) CFA using Bayes estimators, even for $n=1$ data. This Bayesian method employs Markov chain Monte Carlo (MCMC) for estimation, using potential scale reduction (PSR) to evaluate the convergence degree of the model. PSR is the ratio of the total variance of all Markov chains to the combined variance of a Markov chain. When the PSR is below 1.05, the iterative computation is terminated since continuing would produce similar model parameter estimates. This analysis was conducted using Mplus version 8.3 (Muthén & Muthén, 2017).

A single-case A-B-phase design with a follow-up permits two types of analyses: determining if a change occurred and pinpointing when the change took place. The latter, which focuses on the process of change, can be addressed through three phase-effect comparisons. Analysis 1 contrasts the baseline (B) with the intervention periods (I) to ascertain if the treatment intervention led to change. Analysis 2 compares the combined intervention and follow-up periods (I+F) against the baseline (B) to discern if changes were a consequence of the treatment intervention and persisted afterward. Meanwhile, Analysis 3 measures the combined baseline and intervention periods (B+I) against the follow-up period (F), providing evidence of any changes post-treatment cessation.

For time-series data, the observation at $T+1$ depends on the observation at T. If the value of one observation relies (at least in part) on the value of one or more immediately preceding observations, later observations are explained by earlier ones. Such data are said to be autocorrelated. Overlooking autocorrelation with time-series data when testing changes between different phases (e.g., baseline vs. intervention) could lead to a high risk of making a Type I error, i.e., concluding that there is an effect that doesn't actually exist. For this reason, the time-series datasets were analyzed using Simulation Modeling Analysis (SMA; Borckardt, 2006), a statistical approach that accounts for autocorrelation. Through a level change analysis, SMA calculates an effect of

phase by comparing the mean score of the phases in question. The actual probability of obtaining this effect size, drawn from a pool of 5,000 data streams with similar numbers of data points and autocorrelation estimates, is then provided. (For a detailed description, see Borckardt, 2006; Borckardt et al., 2008). This analysis was performed using SMA version 8.3.3 (<https://www.clinicalresearcher.org/>).

Due to the measurement of four or five interdependent variables on a daily basis, a stringent Bonferroni correction was applied to establish the significance of the observed effects (Bonferroni, 1935). With an alpha value set at .05, the corrected p-value was calculated to be .0125 (0.05/4) or .010 (0.05/5), respectively. The Gradual Effects Model of Single-Case was used to calculate the effect size for each analysis of each case (Swan & Pustejovsky, 2016).

Missing values for daily time-series were addressed using the expectation maximization algorithm (Dempster et al., 1977), which was found to be superior to other missing data methods, such as listwise deletion, mean substitution, and mean of adjacent observations (Velicer & Colby, 2005) in time-series data streams with up to 40% missing data. Missing data were minimal for all the three cases, ranging from 5.3% (Mei-Fang) to 12.5% (Gao-Qiang). All data are available upon the reasonable request to the corresponding author.

Results

The composite score of idiographic time-series indices

The first-order autoregressive AR (1) CFA ($n=1$) model converged after 15,000 iterations for the daily time-series data of all three clients. The autocorrelation of the latent factor was significant for each: Su-Min ($r = .89$, Posterior $SD = .07$, one-tailed $p < .001$), Gao-Qiang ($r = .96$, Posterior $SD = .06$, one-tailed $p < .001$), and Mei-Fang ($r = .84$, Posterior $SD = .09$, one-tailed $p < .001$). These results indicated that the indices generated by the clients pointed to a single latent factor. Therefore, for each client we opted to compile a composite score of all dependent variables to derive a global measure. An increase in the composite score represented improvement.

Case I: Su-Min - feeling stuck in open relationship

Therapeutic assessment sessions

Su-Min, a 28-year-old woman, had previously received individual psychotherapy in a counseling center due to relationship issues. At the time she returned to the counseling center, Su-Min had been in a close relationship for two years with someone she referred to as “an elder sister”. Six months before her current visit, Su-Min had also entered an open relationship with another woman. During the Initial Session, Su-Min appeared pale, listless, and depressed. However, she was very forthcoming about her concerns, such as her open relationship and her shame about masturbation—a topic she noted was not commonly broached by Chinese clients at the

outset of therapy. She felt comfortable discussing these issues, attributing her openness to the expertise she perceived the assessor had demonstrated during the triage interview. Su-Min was also perceptive, showing a strong understanding of her own issues and seeming well-prepared to develop the Assessment Questions (AQs).

Su-Min’s main concerns were about feeling buffeted by her own emotions, especially when feeling rejected by others. She also recognized that it was difficult for her to speak up for her needs in close relationships. During the Initial Session, Su-Min and the assessor defined five AQs: (a) Why am I so dependent on close relationships? (b) How can I assert myself when I feel denied, judged, or considered unqualified? (c) Why do I have such strong emotional reactions when I feel denied? (d) How can I ensure my life is less swayed by emotions? And (e) How and why should I alleviate feelings of guilt when expressing my own needs?

A week after the Initial Session, Su-Min was given the Chinese version of the MMPI (Song, 1989) via a computer-based test system. She chose to complete the test alone in the assessment room, so the assessor stepped out, only returning periodically to see if she had questions. After reviewing her MMPI responses, the assessor noticed thirty-three unanswered items, which typically indicates an invalid test (Graham, 1987)¹. However, this was inconsistent with Su-Min’s open demeanor during the Initial Session, so the assessor inquired if Su-Min had any reservations about taking the MMPI. She expressed concerns about unethical practices, and specifically that the results might be shared with her professors since they were generated from the same test system she had previously used for her academic courses. The assessor reiterated his commitment to confidentiality, then presented Su Min with the unanswered MMPI items and asked if she would be willing to rate those items again. This changed Su-Min’s attitude toward the test. After completing the unanswered items, Su-Min also verified all the other items to ensure they matched her authentic responses.

The Welsh code for Su-Min’s MMPI profile was 4”7815062’3-9/F+LK#. Apparently, Su-Min’s concerns about confidentiality were successfully addressed, as she produced an open, non-defensive profile ($L=39T$, $K=36T$) with significant clinical elevations. The Clinical Scales suggested a moderate level of psychological distress and a variety of longstanding symptoms, including somatic complaints (Scale 1=74T) and depression (Scale 2=71T), in addition to a pattern of emotional dyscontrol followed by severe shame and self-recrimination (Scale 4=86T; Scale 7=78T; Scale 8=77T). The overall profile was consistent with Complex Post-Traumatic Stress Disorder (CPTSD; Friedman et al., 1989; Herman, 2022).

One week later, Su-Min easily completed the first part (six memories) of the EMP in a room by herself (Bruhn, 1992). After completing the task, she mentioned that it wasn’t challenging for her since she had often reflected upon the

¹The computer administration system provided three options for each item: True, False, and Cannot Say. This likely contributed to the high ‘?’ scores in all three cases.

memories she had written. In the EMP booklet, clients are asked to rate each memory according to how positive vs. negative it is and how clear vs. unclear it is. Su-Min rated two of her six memories as most negative. Many were from middle childhood (ages 7-9) and concerned incidents of extreme punishment for minor infractions, physical abuse, and family violence, accompanied by failed protection from other family members. One memory concerned threatened abandonment by her mother when she found Sun-Min masturbating (age 7-9). Based on Bruhn's (1990) Cognitive Perceptual Theory, the assessor paid particular attention to Su Min's most negative clear memories, as these are believed to provide insights into her current struggles and life problems. Below is one of the two most vivid and negative memories:

In the afternoon, Mom, Dad, and I were at home. Mom was scrubbing the floor. Dad begged Mom to go to his friend's house for dinner. Mom didn't want to go there and said to Dad to go himself. Dad was very angry (I can't remember clearly what happened then). Dad put Mom on the bed and beat her, and Mom shouted loudly. I stood at the door of the bedroom, saw it, and froze there. Mom asked me to use her mobile phone to call Grandpa. I was stuck and couldn't move. Mom was crying in the bedroom bed. Grandpa and another relative came from the countryside later (we lived in the city, and grandma's home was in the surrounding countryside. Call my grandpa to question him. I can't remember sitting in a corner).

To the standard test query, "If you could change the memory in any way, what would that be?" Su-Min wrote, "*It never happened.*" These and other of her EMP responses provided evidence of the traumatic events that had been suggested by her MMPI profile. They also demonstrated features of CPTSD: dissociation, shame, difficulties with emotion regulation, distrust, and marked ambivalence about intimacy (Herman, 2022). It was completely understandable that Su-Min struggled with self-esteem, feeling unstable, and being confused about close relationships.

Two Extended Inquiry (EI) sessions focused on Su-Min's EMP. The assessor reviewed Su-Min's memories with her, demonstrating complete acceptance of her shame about masturbation and compassion for the extreme violence she had been subjected to while growing up. Because of the strong filial piety in Chinese culture (Yeh & Bedford, 2003), the assessor was careful not to criticize Su-Min's parents and family, suggesting that her caregivers had been doing "the best they could" based on their own backgrounds, but that they had acted in ways that had affected Su-Min negatively and from which she was still recovering. Additionally, the assessor sought to identify positive elements within the memories and introduce new, positive narratives related to them. Sun-Min teared up several times during the EI sessions and appeared to get more in touch with negative emotions that she had previously split off. She seemed to grow in self-compassion about her difficulties and to begin to construct answers to her AQs.

During the Summary/Discussion Session, the assessor discussed his tentative case conceptualization with Sun-Min, highlighting the following points: (a) She had grown up in an environment where she experienced deep and long-standing hurt from people she was dependent on, although

these people had done the best they could, given their backgrounds. (b) As a result, Su-Min lacked trust in others, feared abandonment, was easily hurt, and yet still yearned for close relationships. (c) Su-Min harbored an extremely negative self-image, constantly feeling that no one liked her. She was always on the lookout for evidence that people disliked her in close relationships. Meanwhile, positive feedback from others was difficult for her to reconcile with her negative self-perception. (d) Bearing the weight of her pain and continuous psychological struggles, Su-Min was both mentally and physically exhausted. (e) However, she also had a resilient side that enabled her to achieve high academic performance and successfully navigate her open relationship.

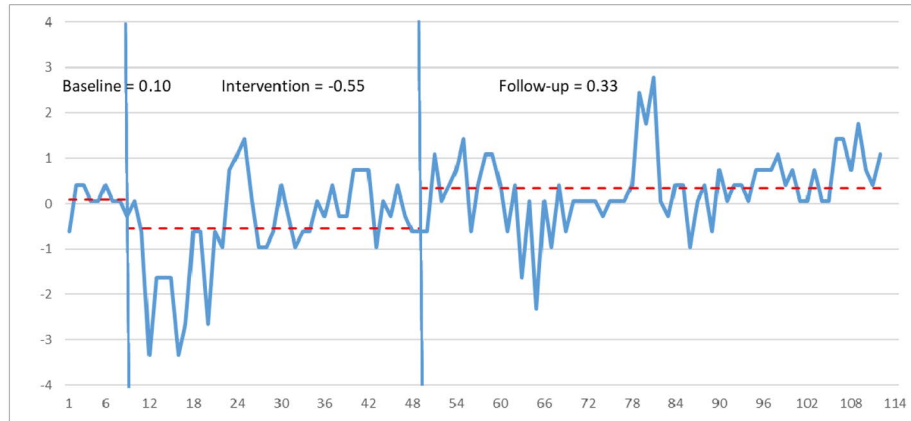
Su-Min felt that the assessment information closely aligned with her experiences and helped her make sense of many aspects of her life. She said she felt relieved to better understand the source of her difficulties. She and the assessor were able to collaborate easily in answering her AQs. The assessor recommended further psychotherapy, believing it would greatly benefit her.

Time Series Analyses

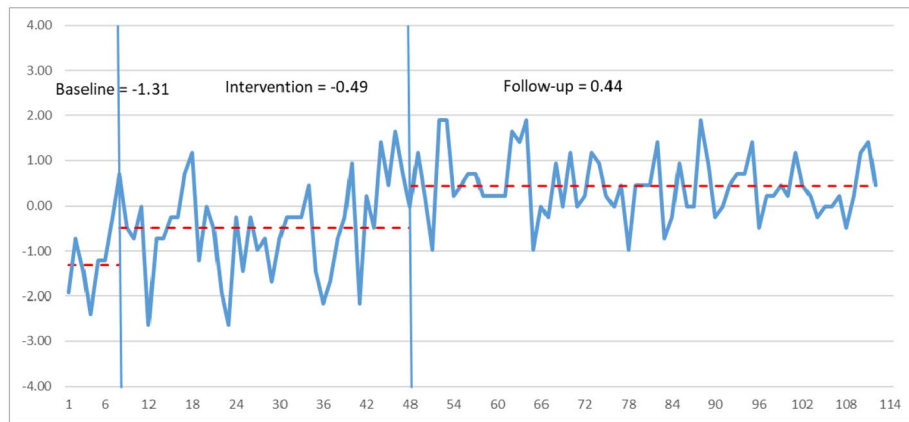
For Su-Min, there were four sessions spanning 112 total days with 40 days of intervention (baseline $n=8$, intervention $n=40$; follow-up $n=64$, Figure 1) that amounted to 9 direct contact hours. The comparison between the baseline (B) and intervention (I) periods (Analysis 1; see Table 1) did not result in a statistically significant effect ($r=-0.24$; Bonferroni correction $p = .37$), indicating that reported symptom scores during the baseline did not improve significantly after the intervention phase. The comparison of the baseline (B) symptom scores with those reported during the combined intervention and follow-up periods (I+F) (Analysis 2) also did not show a significant effect ($r=-0.03$; Bonferroni correction $p = .85$), suggesting that ceasing treatment had not yet yielded therapeutic change. However, the comparison of symptom scores from the combined baseline and intervention periods (B+I) with those from the follow-up period (F) (Analysis 3) revealed a significant effect ($r = .38$, 95% Confidence Intervals (CI) [.62, .81]; Bonferroni correction $p = .01$), indicating a delayed therapeutic effect. The OQ45 results for Su-Min were consistent with the daily measures (see Table 2).

The symptoms as indicated by OQ45 showed two standard deviation deteriorations (a reliable change; see Jacobson & Truax, 1991) of the total score, while the RSES slightly decreased, even though the alliance was moderately strong. A closer examination of the OQ45 revealed that both Subjective Discomfort and Social Role Performance deteriorated during the intervention phase. This is a pattern that has been noted in other TA time series, where clients sometimes become more distressed as they discuss negative emotions and events during a TA, but eventually feel better and have less distress after the TA (e.g., Durosini et al., 2017). It is presumed that this pattern can occur when the TA helps clients with dissociated memories of trauma and loss to access negative emotions they have successfully warded off; but with further support from the assessor, they are then able to integrate these segregated states and move forward with more resilience.

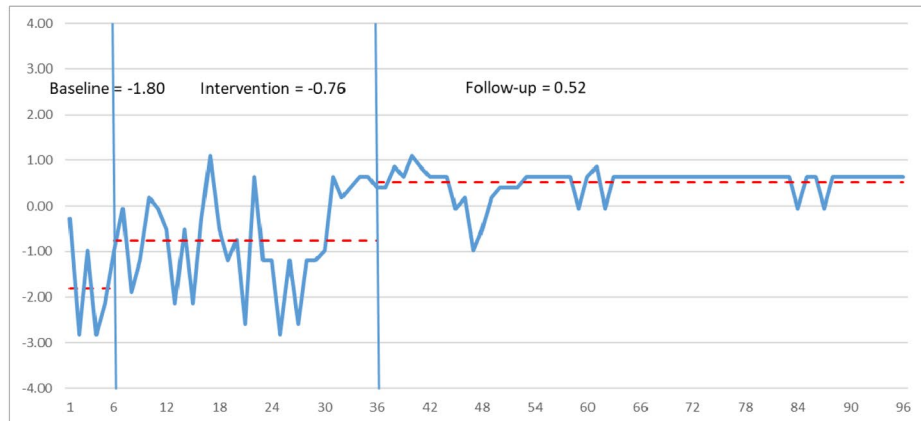
Case #1 Su-Min



Case #2 Gao-Qiang



Case #3 Mei-Fang

**Figure 1.** Client data streams.

Note. The y-axis represents an aggregate measure of each client's individualized daily rating scales, with the higher scores representing better results. Individual ratings reported by the client on a 1-10 scale were transformed into z-scores to provide a uniform scale for aggregation purposes. Data streams for each client are divided by baseline and follow-up ratings. The three cases in the Figure are as follows: Su-Min (top), Gao-Qiang (middle), and Mei-Fang (bottom). Vertical lines represent the baseline, intervention, and follow-up phases, while horizontal lines represent the average value for each phase.

Table 1. Results of time-series phase-effect analyses: combined dependent variable scores.

Case	B			I			F			ANALYSIS 1 (B VS. I)		ANALYSIS 2 (B VS. I + F)		ANALYSIS 2 (B + I VS. F)	
	N	M	SD	N	M	SD	N	M	SD	Level change	Effect Size†	Level change	Effect Size	Level change	Effect Size
1.Su-Min	8	19.13	.93	40	17.23	3.18	64	19.80	2.44	−0.24(.37)	–	−0.03(.85)	–	.38(.014)*	.72
2.Gao-Qiang	7	13.57	2.77	40	17.03	4.36	65	20.92	2.92	.28(.13)	–	.34(.01)*	.81	.52(<.001)*	.80
3.Mei-Fang	5	13.40	4.41	30	17.93	4.57	61	23.49	1.42	.33(.09)	–	.43(.005)*	.89	.69(<.001)*	.81

Note. B: baseline; I: intervention; F: follow-up; the specific affective or behavioral dependent variables measured daily in each case are presented in the text; higher scores indicate better results. †Effect size was calculated if the level change was statistically significant, * significant p value using the Bonferroni correction, the number in the parentheses represents p value.

Table 2. Self-reported scores on OQ45, SES and WAI-SR.

Measures	Time1	Time2	Time3	Time4	Effect size
	Sum1	Sum2	Sum3	Sum4	
Case #1: Su-Min					
OQ-45 total score	120	127	125	149	1.22
Subjective discomfort (SD)	69	75	69	82	0.96
Interpersonal relations (IR)	29	28	30	36	1.17
Social role performance (SR)	22	24	26	31	1.54
RSES	27	25	26	24	–
WAI-S	37	43	43	41	–
Case #2: Gao-Qiang					
OQ-45 total score	130	115	102		–1.17
Subjective discomfort (SD)	69	62	52		–1.26
Interpersonal relations (IR)	30	25	25		–0.84
Social role performance (SR)	31	28	25		–1.03
RSES	28	35	37		–
WAI-S	59	60	60		–
Case #3: Mei-Fang					
OQ-45 total score	176	136			–1.68
Subjective discomfort (SD)	101	76			–1.85
Interpersonal relations (IR)	43	30			–2.16
Social role performance (SR)	32	30			–0.34
RSES	30	30			–
WAI-S	47	57			–

Note. OQ45: Outcome Questionnaire 45, higher scores indicate worse results; RSES: Rosenberg Self-esteem Scale, higher scores indicate better results; WAI-S: Working Alliance Inventory-Short, higher scores indicate better results; Cohen's *d* is calculated for the first time (*d*₁) and the last time (*d*₂), and then for the treatment effect size = *d*₂–*d*₁ for the single case using the following calculator: M_{sample} is the score for the case, Cohen's $d = (M_{\text{sample}} - \mu_{\text{population}}) / \sigma$, where $\mu_{\text{population}}$ and σ were reported in Qin and Hu (2008). Case #1 Su-Min.

Case II: Gao-Qiang – struggling with unstable emotions and conflicts over intimacy

Therapeutic assessment sessions

Gao-Qiang, a 19-year-old man, sought professional guidance for career indecision. In his registration form, he expressed concerns about his sexual orientation but seemed hesitant to discuss this topic with the assessor. He also reported sleep issues. At the start of the Initial Session, Gao-Qiang was reluctant to delve directly into his problems, preferring a more casual conversation. Over roughly ten minutes of free discussion, the assessor engaged with Gao-Qiang's topics, intermittently clarifying thoughts and emotions and summarizing to ensure accurate understanding. Gao-Qiang's anxiety notably decreased during this period of conversation. As he became more talkative, the assessor steered the discussion toward Gao-Qiang's present concerns.

Gao-Qiang's main concerns were about his unstable feelings and emotions. He tried to discipline himself by learning, neglecting his emotional reactions, and trying to have some leisure time, but often failed. He mentioned that close relationships were not important to him because he needed to work hard for a better career. During the Initial Session, Gao-Qiang and the assessor defined three AQs: (a) How can I stabilize my emotions to better focus on learning? (b) How can I return to a balanced life where studies, personal life, and part-time work coexist harmoniously? (c) How can I cultivate self-discipline to ensure I do the right things at the right times?

A week after the Initial Session, Gao-Qiang preferred to answer the MMPI items in the presence of the assessor. The assessor observed that Gao-Qiang was indecisive while rating the MMPI items. As a result, he left sixty-three items unanswered. After reviewing the results, the assessor asked

him to answer the unanswered items a week later, using a procedure similar to Su-Min's. While answering, Gao-Qiang explained each of the previously unanswered items to the assessor and then was able to choose between "True" and "False." It seemed that for most of the omitted items he was anxious about deciding because he saw contradictions when he considered specific situations. As the assessor helped him think more generally about the items, he was able to choose an answer.

The Welsh code for Gao-Qiang's MMPI profile was 7⁸⁴9³+26-150/F/LK:. The Validity Scales indicated an open, non-defensive protocol (*L*=49 T, *K*=53 T). His highest score on Scale 7 (80 T) fit well with the rumination that had shown up as he tried to answer the MMPI items and also with his difficulties getting his work done. His other scores on Scales 8 (78 T), 4 (77 T), and 9 (73 T) suggested considerable turmoil. Scale 4 involves emotional detachment and impulsiveness, while Scale 8 is associated with alienation and cognitive disturbance, and Scale 9 with longing, high levels of activation, and impulsiveness. The over profile suggested that Gao-Qiang was full of anxiety and conflicting emotions, which he tried to control with a variety of obsessive and dismissing defenses. It also was likely that Gao-Qiang was experiencing a conflict between seeking autonomy and longing to be in contact with others, leading to cycles of impulsive behavior followed by guilt and anxiety (Levak et al., 2011, p. 241).

Gao-Qiang completed the EMP a week later (Bruhn, 1992). He finished the EMP rather quickly without any evident emotional arousal. Two of the memories concerned frustrating experiences with boys he liked (ages 12 and 18); others were incidents in schools involving punishment, accompanied by failed protection from his parents

(ages 6-12). He classified six out of the six early memories as “most negative” and “moderately clear.” Below are two of those memories:

I remember... I was called to the office by a male teacher because I was playing card games in class. He beat me up and left me with a great psychological burden that I carried forever after (he was a very bad teacher).

I remember... The first boy I liked in Grade 6 of primary school, I felt we were not close to each other. Once when we went to a school together, I made a joke with him. As a result, he was very angry, and I felt very embarrassed.

In response to the standard test query for the first memory, “If you could change the memory in any way, what would that be?” Gao-Qiang wrote, “...to fight back, then make things worse, tell the principal to let him dismiss the teacher, because of all his evil behavior.” These and other responses in his EMP provided evidence of narcissistic vulnerability in addition to inhibited anger, followed by shame and anxiety. It was apparent that Gao-Qiang was struggling between a desire to be autonomous and not need others and a longing to be in connection with peers. The desire to be wholly independent appeared related to failures by attachment figures at a number of points in his development. Several of his memories could be summarized by the following précis: “I am severely punished for a minor mistake. But my attachment figures are not there to help. Therefore, I should handle these things by myself.”

An EI session was conducted with Gao-Qiang focusing on his EMP. The assessor showed empathy for the difficult experiences Gao-Qiang had experienced as a child, and how the situations might have been different if someone had been there to assist, protect, or comfort him, or if the boy he liked had playfully responded to his joke. Gao-Qiang had several ‘aha’ moments during the EI session, appeared to be relieved of heavy shame, and experienced positive emotions of relief and hope, which showed up in sparkling eyes. He seemed to gain an insightful and compassionate understanding of his AQs, which prepared him and the assessor well for the Summary/Discussion session.

During the Summary/Discussion Session, the assessor discussed his tentative case conceptualization with Gao-Qiang, highlighting the following points: (a) Having grown up in an environment where he felt insecure, either being neglected or bothered, Gao-Qiang often felt inadequate and lonely, believing he could only rely on himself to regulate his inner turmoil; (b) He was eager for attention and emotional support, but he tried to deny these needs by disciplining himself to study hard; (c) He experienced cycles of turmoil, indulgence, and self-discipline, which were frequently followed by self-condemnation; (d) Gao-Qiang felt ashamed and denied his own desires in romantic relationships.

Gao-Qiang seemed delighted that the assessment information closely aligned with his experiences and helped him know himself better. The assessor expressed a friendly attitude toward his sexual orientation and discussed the value and potential of forming a romantic relationship, while acknowledging that it could be difficult for Gao-Qiang to be close to others after all the disappointments he had faced in

his life. The assessor also encouraged him to connect with his emotions and seek support from peers. Gao-Qiang reported that the TA sessions shifted his narrative from “multiple personality” to “understanding where the negative emotions come from”, realizing he “was actually a very positive person.”

Time series analyses

There were 3 sessions (6 direct contact hours) spanning 112 total days with 40 days of intervention (baseline $n=7$, intervention $n=40$; follow-up $n=65$, Figure 1) for Gao-Qiang. The comparison between the baseline (B) and intervention (I) periods (Analysis 1; see Table 1) did not result in a statistically significant effect ($r = .28$; Bonferroni correction $p = .13$), indicating that reported symptom scores during the baseline did not improve significantly after the intervention phase. The comparison between the baseline symptom scores (B) and those reported during the combined intervention and follow-up periods (I+F) (Analysis 2) showed a significant effect ($r = .34$; Bonferroni correction $p = .01$). The comparison between the baseline and intervention period symptom scores (B+I) with those reported during the follow-up period (F) (Analysis 3) also showed a significant effect ($r = .52$, 95% CI [.71, .87]; Bonferroni correction $p < .001$), indicating that the therapeutic effect persisted during the follow-up period.

Results of the OQ45 for Gao-Qiang aligned with the daily measures (see Table 2). The symptoms indicated by OQ45 showed two SD improvements (a reliable change) in the total score; the RSES improved, and the alliance was quite strong. A closer look at the OQ45 revealed that Subjective Discomfort decreased significantly (by two SD reliable improvements) during the intervention phase.

Case III: Mei-Fang –my pain is quickly relieved only by a man

Therapeutic assessment sessions

Mei-Fang was a 24-year-old female master-level student majoring in engineering who was referred to the counseling center for crisis intervention. She had broken down emotionally during a conflict with her professor, a man leading a research group, and reportedly had threatened suicide. In the registration form, Mei-Fang mentioned having a “split personality.” In the initial session Mei-Fang consistently smiled, and it was clear that she always anticipated and tried meet the needs of others, including the research assistant and the assessor, for example asking whether they needed water when they stepped into the assessment room. She was sharp-witted and responded promptly to the assessor’s inquiries.

Mei-Fang’s primary concerns revolved around her intimate relationships. She was trying to date several young men one after another and reported that her emotional state fluctuated dramatically, akin to a roller coaster, depending on the quality of her communication with these individuals. It appeared that she was actively seeking a dependable, close relationship. She discovered that during periods of psychological distress or anxiety, initiating contact with these men significantly

alleviated her discomfort immediately, a state she and her roommate referred to as being “lovestruck.” During the Initial Session, Mei-Fang and the assessor defined four AQs: (a) Why do I experience stronger impulses and dependencies related to love than do other people? (b) Why can’t I comfort myself and find solutions, instead of always seeking someone who offers emotional support? (c) Why can only encouragement and assurance from a man quickly alleviate my pain and anxiety? (d) Why do I feel the need to care for others to gain a sense of self-worth, yet also desire more care from them, instead of pursuing an equal relationship?

A week after the initial session, Mei-Fang chose to complete the MMPI alone in the assessment room, answering all the items. The Welsh code for her MMPI profile was $71^{+}859^{+}3+2460/F-L\#K$. The validity scales suggest an open, non-defensive protocol ($L=42T$, $K=28T$). The profile suggested that Mei-Fang used manic defenses (Scale 9=73T) to manage dependency needs she found frightening ($Dy=76T$); she also exhibited significant internal turmoil (Scale 7=82T; Scale 8=78T).

Mei-Fang also completed the EMP a week later (Bruhn, 1992) without any noticeable distress during the test. Many memories came from when she was 8 to 12 years old, and concerned incidents of attention seeking, physical abuse, and threats from peers without protection from other family members. She classified five out of the six early memories as both “most negative” and “most vivid.” Below is an excerpt from one of the most vivid and negative memories:

I remember once, my Grandma and I were cleaning our room at home. We were very happy. Then I took my Grandma to dance. She suddenly slipped and had a large fracture. At that time, my family was not rich. My parents and the whole family were very angry. They even misunderstood that I deliberately pushed my Grandma down (mainly because my Grandma thought so!!!). After it happened, my father beat and kicked me with hate. Even though I cried he showed no mercy. Finally, I knelt down to apologize in front of my grandma. I don’t remember what happened later.

To the query about how she would change the memory if she could, Mei-Fang wrote, “*Maybe write a long letter and run away from home.*” These memories and responses suggested that Mei-Fang was struggling with having been misunderstood by her parents, and that she harbored deep desires to be protected, supported, and praised by them. It was also evident that she adopted a hypervigilant strategy, seeking mercy from or fighting with others, while successfully compartmentalizing the negative aspects of such experiences. This inner “compartmentalization” of different aspects of herself seemed tied to Mei-Fang’s fear of having a “split personality.” This is consistent with the results from MMPI. Mei-Fang was extroverted and assertive (Scale 5=76T), yet she was also quite dependent and in need of a great deal of attention and approval (Friedman et al., 2015, p. 262), suggesting a “vertical split” in her personality (Goldberg, 2013), i.e., unintegrated ego states that could be quite confusing to her and others.

In order to integrate these different aspects of herself, she would need to engage in a grieving process where she confronted her traumatic childhood and was supported in

experiencing the painful emotions she currently held at bay through her almost manic pursuit of multiple relationships. It seemed unlikely that she could do this work at that time, given her age and dependence on her family. Given these considerations, the assessor chose not to conduct a separate EI session with Mei-Fang focused on her EMP. Instead, he integrated the EMP discussion into the Summary/Discussion Session, treating her trauma and resulting internal conflicts as level 3 information that fundamentally conflicted with Mei-Fang’s self-perception.

During the Summary/Discussion Session, the assessor discussed his tentative case conceptualization with Mei-Fang, highlighting the following points: (a) Mei-Fang yearned for affirmation from nurturing others, as her family had not been able to provide this while she grew up; (b) Mei-Fang’s desire for such a parent became intertwined with her expectations of a man she was fond of, as if that man could fulfill the role of a warm parent; (c) Mei-Fang might have two distinct emotional states, where she alternately felt strong and assertive and in extreme pain when she felt disconnected or denied. The assessor and Mei-Fang tied these insights to her AQs and current life experiences. Mei-Fang felt that the Summary/Discussion Session brought everything together clearly, which helped her better understand her AQs and provided relief.

Time series analyses

Mei-Fang had 2 sessions totaling 3.5 direct contact hours over a span of 96 days with 30 days of intervention (baseline $n=5$, intervention $n=30$; follow-up $n=61$, Figure 1). The comparison between the baseline (B) and intervention (I) periods (Analysis 1; see Table 1) did not result in a statistically significant effect ($r=.33$; Bonferroni correction $p=.09$), indicating that the reported symptom scores during the baseline did not change after the intervention phase. The comparison of the baseline symptom scores (B) with those reported during the combined intervention and follow-up periods (I+F) (Analysis 2) showed a significant effect ($r=.43$; Bonferroni correction $p=.01$), indicating that therapeutic change was evident in the period between the intervention and the follow-up. The comparison of symptom scores from the baseline and intervention periods (B+I) with those from the follow-up period (F) (Analysis 3) demonstrated a significant effect ($r=.69$, 95% CI [.67, .85]; Bonferroni correction $p<.001$), suggesting the therapeutic effect persisted during the follow-up. The OQ45 results for Mei-Fang aligned with the daily measures (see Table 2). The symptoms indicated by OQ45 showed a 2.5 SD improvement (a reliable change) in the total score, and the alliance improved by the second session. Closer examination of the OQ45 revealed that both Subjective Discomfort and Interpersonal Relations decreased significantly and reliably during the intervention phase.

Discussion

The primary goal of this study was to observe the outcome of Ultra-brief TA for three Chinese adults. The results of the clients’ daily measures indicated a positive effect of Ultra-brief

TA on relieving the clients' distress. These findings are consistent with the literature on the promising effects of ultra-brief therapy modalities in various settings (e.g., Bisby et al., 2024; Corpas et al., 2021; Tyrberg & Klintwall, 2022) and with the literature on TA (e.g., Aschieri et al., 2023).

The replicated single-case research design also allowed us to examine the process of change for each client. For Cases 2 (Gao-Qiang) and Case 3 (Mei-Fang), the symptoms measured by OQ45 decreased after the intervention, consistent with the change process observed in their daily measures with a large effect size in the follow-up phase. Case 1 (Su-Min) showed a deterioration in distress by standard measures. In terms of daily measures, Case 1 did not show significant change at the intervention phase but did show significant improvement during the follow-up phase with a medium effect size. The daily time-series data allow for an analysis of the change process (Aschieri et al., 2023; Fantini & Smith, 2018; Smith et al., 2009; 2010; 2011). All three clients changed in the follow-up period after the Summary/Discussion, indicating the importance of the Summary/Discussion session, particularly for Ultra-brief TA.

It is promising to see the positive outcomes of Ultra-brief TA conducted by a novice TA assessor. One possible reason is that psychological tests serve as an "empathic amplifier" (Finn, 2005) that enables the assessor to quickly understand the change dilemma of the client. Particularly for Su-Min, the inferred complex post-traumatic stress disorder (C-PTSD) contributed to a negative self-image. This deeply ingrained system proved challenging to change, as she was prone to focusing on negativity, particularly in close relationships. Her increased symptoms appeared linked to current relationship quality and the re-activation of early traumatic experiences during testing and feedback. Notably, avoiding criticism of her family and respecting filial piety seemed helpful, and she began integrating positive information into her self-image in the follow-up phase. For Gao-Qiang, TA's strength lay in the empathic understanding that was facilitated by the test results, and collaborative feedback provided insights into his conflicts, frustrations and desires, fostering his assertiveness. For Mei-Fang, differentiating among the three levels of information proved helpful. While a vertical split in her personality compartmentalized her traumatic experiences, the impacts of these experiences were deemed to be Level-3 information and were not explicitly addressed. Instead, focusing on her acceptable concerns and linking early experiences to current relationship difficulties helped establish short-term goals and a robust working alliance.

All three cases involved conflicts with parents or authority figures. From a Confucian perspective prominent in many Asian cultures, higher-status individuals offer care and concern, earning respect, filial piety, or loyalty. However, if these authority figures fail to meet these expectations, it can be hard for individuals to start a healthy process of grieving and self-consolidation if they are identified with submission, filial piety, and the need to restrict their individual needs. These are cultural specific issues that TA has to deal with for clients in China. The advantages of TA with these 3 clients lay in not using the word "trauma" to describe hurtful and overwhelming experiences with family members and

teachers, but in addressing underlying shame, validating their experiences of being hurt, and helping the clients to mentalize these experiences through discussion of their responses to the EMP. Unanswered questions remain regarding how TA can balance the assertion of personal needs with submission and tolerance for familism and collectivism (e.g., Hwang, 2000), particularly concerning how to assist Chinese clients in coping with their parents' inadequacies, and how to integrate such experiences into healthy self-narratives in a rapidly changing society.

Another characteristic of all three clients is that they felt pushed to achieve higher academic performance. This appeared to be an individual goal for each client, so they were simultaneously trying to reconcile this with loyalty to their families and cultural values. This type of value conflict for Chinese clients arises not only from the difference between collectivist and individualistic values but also from the impact of China's modernization on the understanding of achievement and social adaptation. For example, personal competence or performance can be used to achieve individual goals, but it may also be directed toward collective goals. The necessity to reconcile these competing demands suggests that further TA studies in China should incorporate elements that reflect both collectivist and individualistic values. Given this, TA's core values seem beneficial for clarifying and accommodating clients' individualized values (e.g., Fantini, 2016).

It is notable that two out of the three clients belong to the LGBTQ+ group. The positive outcome for these two clients may also be explained by the accepting attitude of the authoritative and kind assessor, as LGBTQ+ individuals consistently experience discrimination, particularly in relation to the economic development of the community (Wang et al., 2020). This is consistent with TA's humanistic core values, which indicate that TA can work with a wide range of clients.

There are also limitations to this study. The adherence to the TA protocol was not independently examined apart from the supervisor, and the assessor had limited experience with TA. However, this could be seen as an advantage of TA. If the core values of TA (e.g., collaboration, respect, humility, compassion, openness, and curiosity) are adhered to, trainees might effectively use TA in their practice under supervision or consultation (e.g., Smith et al., 2010) with less intensive training. Both the assessor and the research assistant were aware of the study's hypothesis (i.e., that the clients would benefit from treatment), and the clients also expected to benefit because the assessor was an experienced therapist. We developed idiographic dependent variables to be measured daily, aiming to capture each client's specific problems. While this approach aligns closely with clinical practice, it renders the outcome of TA incomparable between clients. Nonetheless, the use of standard outcome measures somewhat mitigated this limitation. The results of this study cannot be generalized to other Chinese clients because all three clients have traumatic experiences, and two of them are LGBTQ+. Future studies might employ randomized controlled trials to evaluate the effectiveness of TA at the group level. Additionally, we had limited access to tests validated for the Chinese population. We used only two tests to capture the personality process, and the MMPI was translated

into Chinese forty years ago, meaning the norms are outdated. If updated and more comprehensive tests were available, we believe our case conceptualization could have been enhanced by converging evidence from various sources. The measure of self-esteem might also be questionable since the 'self' is defined in different ways (e.g., family-esteem, collective esteem), which need further investigation.

Conclusions

This study was the first to examine the process and outcome of Ultra-brief TA for three Chinese adults with various psychological concerns in a natural setting. Strengthened by a case-based time-series design with a follow-up period and standard outcome measures, this study expands the body of empirical research on the utility of TA. As a short-term, evidence-based intervention, TA merits further investigation in China, where there is a significant demand for qualified psychological services.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Qi-Wu Sun  <http://orcid.org/0000-0002-9388-548X>

Ming Wang  <http://orcid.org/0000-0003-2661-6359>

References

- Asai, K., & Asai, K. (2023). Therapeutic assessment with brief therapy: A single case study of an elementary student's school refusal. *International Journal of Brief Therapy and Family Science*, 13(1), 43–49. https://doi.org/10.35783/ijbf.13.1_43
- Aschieri, F., Cera, G., Fiorelli, E., & Brasili, S. (2023). A retrospective study exploring parents' perceptions of their child's assessment. *Frontiers in Psychology*, 14, 1271746. <https://doi.org/10.3389/fpsyg.2023.1271746>
- Aschieri, F., van Emmerik, A. A. P., Wibbelink, C. J. M., & Kamphuis, J. H. (2023). Collaborative assessment methods. In C. E. Hill & J. C. Norcross (Eds.), *Psychotherapy skills and methods that work* (pp. 399–428). Oxford University Press. <https://doi.org/10.1093/oso/9780197611012.003.0014>
- Bisby, M. A., Balakumar, T., Scott, A. J., Titov, N., & Dear, B. F. (2024). An online therapist-guided ultra-brief treatment for depression and anxiety: A randomized controlled trial. *Psychological Medicine*, 54(5), 902–913. <https://doi.org/10.1017/S003329172300260X>
- Bonferroni, C. E. (1935). *Il calcolo delle assicurazioni su gruppi di teste [The calculation of significance with multiple tests]*. Studi in onore del professore salvatore ortu carboni (pp. 13–60).
- Borckardt, J. J. (2006). Simulation modeling analysis: Time series analysis program for short time series data streams (Version 8.3.3). Medical University of South Carolina.
- Borckardt, J. J., Nash, M. R., Murphy, M. D., Moore, M., Shaw, D., & O'Neil, P. (2008). Clinical practice as natural laboratory for psychotherapy research: A guide to case-based time-series analysis. *The American Psychologist*, 63(2), 77–95. <https://doi.org/10.1037/0003-066X.63.2.77>
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice*, 16(3), 252–260. <https://doi.org/10.1037/h0085885>
- Bruhn, A. R. (1990). Cognitive-perceptual theory and the projective use of autobiographical memory. *Journal of Personality Assessment*, 55(1-2), 95–114. <https://doi.org/10.1080/00223891.1990.9674050>
- Bruhn, A. R. (1992). The early memories procedure: A projective test of autobiographical memory, part 1. *Journal of Personality Assessment*, 58(1), 1–15. https://doi.org/10.1207/s15327752jpa5801_1
- Corpas, J., Moriana, J. A., Venceslá, J. F., & Gálvez-Lara, M. (2021). Brief psychological therapies for emotional disorders in primary care: A systematic review and meta-analysis. *Clinical Psychology: Science and Practice*, 28(4), 363–376. <https://doi.org/10.1037/cps0000009>
- Dempster, A. P., Laird, N. M., & Rubin, D. B. (1977). Maximum likelihood from incomplete data via the EM algorithm. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, 39(1), 1–22. <https://doi.org/10.1111/j.2517-6161.1977.tb01600.x>
- Durosini, I., & Aschieri, F. (2021). Therapeutic assessment efficacy: A meta-analysis. *Psychological Assessment*, 33(10), 962–972. <https://doi.org/10.1037/pas0001038>
- Durosini, I., Tarocchi, A., & Aschieri, F. (2017). Therapeutic assessment with a client with persistent complex bereavement disorder: A single-case time-series design. *Clinical Case Studies*, 16(4), 295–312. <https://doi.org/10.1177/153465011769394>
- Fantini, F. (2016). Family traditions, cultural values, and the clinician's countertransference: Therapeutic Assessment of a young Sicilian woman. *Journal of Personality Assessment*, 98(6), 576–584. <https://doi.org/10.1080/00223891.2016.1178128>
- Fantini, F., & Smith, J. D. (2018). Using R-PAS in the therapeutic assessment of a university student with emotional disconnection. In J. L. Mihura & G. J. Meyer (Eds.), *Using the rorschach performance assessment system* (R-PAS*)* (pp. 138–157). The Guilford Press.
- Fantini, F., Aschieri, F., David, R. M., Martin, H., & Finn, S. E. (2022). *Therapeutic Assessment with adults: Using psychological testing to help clients change*. Routledge.
- Finn, S. E. (2003). Therapeutic Assessment of a man with "ADD. *Journal of Personality Assessment*, 80(2), 115–129. https://doi.org/10.1207/S15327752JPA8002_01
- Finn, S. E. (2005). How psychological assessment taught me compassion and firmness. *Journal of Personality Assessment*, 84(1), 29–32. https://doi.org/10.1207/s15327752jpa8401_07
- Finn, S. E. (2007). *In our client's shoes: Theory and techniques of Therapeutic Assessment*. Erlbaum.
- Finn, S. E. (2009). The many faces of empathy in experiential, person-centered, collaborative assessment. *Journal of Personality Assessment*, 91(1), 20–23. <https://doi.org/10.1080/00223890802483391>
- Finn, S. E., & Tonsager, M. E. (1992). Therapeutic effects of providing MMPI-2 test feedback to college students awaiting therapy. *Psychological Assessment*, 4(3), 278–287. <https://doi.org/10.1037/1040-3590.4.3.278>
- Finn, S. E., De Saeger, H., & Kamphuis, J. H. (2017). An ultra-brief model of Therapeutic Assessment with adults [Paper presentation]. Workshop Presented at the Annual Meeting of the Society for Personality Assessment, San Francisco, CA. March.
- Friedman, A. F., Bolinsky, P. K., Levak, R. W., & Nichols, D. S. (2015). *Psychological assessment with the MMPI-2/MMPI-2-RF*. Routledge.
- Friedman, A. F., Webb, J. T., & Lewak, R. (1989). Psychological assessment with the MMPI. Erlbaum.
- Goldberg, A. I. (2013). *Being of two minds: The vertical split in psychoanalysis and psychotherapy*. Routledge.
- Graham, J. R. (1987). *The MMPI: A practical guide* (2nd ed.). Oxford University Press.
- Han, X., Jiang, B., Tang, J., & Wang, Y. (2005). Zizun liangbiao shiyong guocheng zhong de wenti ji jianyi [Problems and suggestions for using Rosenberg self-esteem scale]. *Chinese Journal of Behavioral Medicine and Brain Science*, 14(8), 763–763.
- Herman, J. L. (2022). *Trauma and recovery: The aftermath of violence—from domestic abuse to political terror*. Basic Books.
- Hwang, K. (2000). Chinese relationalism: Theoretical construction and methodological considerations. *Journal for the Theory of Social Behaviour*, 30(2), 155–178. <https://doi.org/10.1111/1468-5914.00124>

- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, 59(1), 12–19. <https://doi.org/10.1037/0022-006X.59.1.12>
- Lambert, M. J., Gao-Qiangsen, A. T., & Burlingame, G. M. (2004). The Outcome Questionnaire-45. In M. E. Maruish (Ed.), *The use of psychological testing for treatment planning and outcomes assessment: Instruments for adults* (pp. 191–234). Lawrence Erlbaum Associates Publishers.
- Levak, R. W., Siegel, L., & Nichols, D. S. (2011). *Therapeutic feedback with the MMPI-2: A positive psychology approach*. Routledge.
- Li, X.-P., Shi, B.-B., Wu, Z.-G., Zhang, F., Shen, H., Zhang, C.-J., ... Song, L.-S. (2021). Linchuang xinli pinggu zhong de zhiliao xing pinggu [Therapeutic assessment in clinical psychological assessment]. *Chinese Mental Health Journal*, 35(2), 102–107. <https://doi.org/10.3969/j.issn.1000-6729.2021.02.003>
- Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide* (8th ed.). Muthén & Muthén.
- Ogura, N., Nishida, Y., Mizuno, S., Noda, M., & Nakamura, N. (2021). What is it that brings Japanese attendees at the TA workshops back for more? *The TA Connection*, 9(1), 4–6.
- Poston, J. M., & Hanson, W. E. (2010). Meta-analysis of psychological assessment as a therapeutic intervention. *Psychological Assessment*, 22(2), 203–212. <https://doi.org/10.1037/a0018679>
- Qin, Y.-F., & Hu, S.-J. (2008). Xinli zixun xiaoguo wenjuan(OQ-45) zai Zhongguo bufen renqun de shiyong baogao [Usability report of Outcome Questionnaire-45 in part of Chinese sample]. *Chinese Journal of Clinical Psychology*, 16(2), 138–140. <https://doi.org/10.3969/j.issn.1005-3611.2008.02.009>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Smith, J. D., Handler, L., & Nash, M. R. (2010). Therapeutic assessment for preadolescent boys with oppositional defiant disorder: A replicated single-case time-series design. *Psychological Assessment*, 22(3), 593–602. <https://doi.org/10.1037/a0019697>
- Smith, J. D., Nicholas, C. R., Handler, L., & Nash, M. R. (2011). Examining the potential impact of a family session in Therapeutic Assessment: A single-case experiment. *Journal of Personality Assessment*, 93(3), 204–212. <https://doi.org/10.1080/00223891.2011.559497>
- Smith, J. D., Wolf, N. J., Handler, L., & Nash, M. R. (2009). Testing the effectiveness of family therapeutic assessment: A case study using a time-series design. *Journal of Personality Assessment*, 91(6), 518–536. <https://doi.org/10.1080/00223890903228331>
- Song, W.-Z. (1989). *Ming ni su da duoxiang gexing cecha biao shiyong zhidao shu* [Minnesota Multiphasic Personality Inventory use guide]. Institute of Psychology of the Chinese Academy of Sciences.
- Sun, Q.-W. (2022). Cujin dang shi ren gaibian de xinli pinggu, laizi dan ge an zhun shiyan sheji de zhengju [Psychological assessments that promote change in clients, evidence from a single case quasi-experimental design] [Paper presentation]. 4th International Conference of Chinese Applied Psychology, Wuhan.
- Swan, D. M., Pustejovsky, J. E. (2016). *gem_scd: A web-based calculator for the Gradual Effects Model (Version 0.1.1)* [Web application]. <https://jepusto.shinyapps.io/gem-scd>
- Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the Working Alliance Inventory. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1(3), 207–210. <https://doi.org/10.1037/1040-3590.1.3.207>
- Tyrberg, M. J., & Klintwall, L. (2022). Transdiagnostic Ultra-brief Behaviour Therapy for psychiatric inpatients: A multiple-baseline single-case design. *Journal of Psychiatric Intensive Care*, 18(2), 83–94. <https://doi.org/10.1080/16506073.2023.2300369>
- Velicer, W. F., & Colby, S. M. (2005). A comparison of missing-data procedures for ARIMA time-series analysis. *Educational and Psychological Measurement*, 65(4), 596–615. <https://doi.org/10.1177/0013164404272502>
- Wang, Y., Hu, Z., Peng, K., Rechdan, J., Yang, Y., Wu, L., Xin, Y., Lin, J., Duan, Z., Zhu, X., Feng, Y., Chen, S., Ou, J., & Chen, R. (2020). Mapping out a spectrum of the Chinese public's discrimination toward the LGBT community: Results from a national survey. *BMC Public Health*, 20(1), 669. <https://doi.org/10.1186/s12889-020-08834-y>
- Yan, W.-H., Shen, Z.-Y., Yue, B.-J., Sun, Q.-W., & Wang, M. (2023). Zhiliao xing pinggu de xiaoguo he jizhi ji qi zai Zhongguo wenhua qing jing zhong de fazhan [Effects and mechanism of Therapeutic Assessment and its development in Chinese culture]. *Advances in Psychological Science*, 31(10), 1952–1965. <https://doi.org/10.3724/SPJ.1042.2023.01952>
- Yeh, K. H., & Bedford, O. (2003). A test of the dual filial piety model. *Asian Journal of Social Psychology*, 6(3), 215–228. <https://doi.org/10.1046/j.1467-839X.2003.00122.x>
- Zhu, X., & Jiang, G.-R. (2011). Gongzuo tongmeng wenjuan de bian zhi [Development of the working alliance questionnaire]. *Chinese Journal of Clinical Psychology*, 19(4), 449–453.