

Original Manuscript

transcultural psychiatry

Transcultural Psychiatry

1–17

© The Author(s) 2024

© ① ⑤

Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/13634615231225158 journals.sagepub.com/home/tps



A qualitative study exploring the epistemology of suffering within a Malaysian Indigenous tribe

Justine Jian-Ai Thong^{1,2}, Rachel Sing-Kiat Ting¹, Tomomi Takeuchi³, Laura Jobson⁴ and Maude Elvira Phipps⁵

Abstract

Despite the universal nature of suffering, few studies have examined how Indigenous ethnic minorities in non-western regions understand and respond to adversity. This study explored the epistemology of suffering among the Temiar ethnic group of Peninsular Malaysia using participant observation and semi-structured interviews. Interview transcripts of 43 participants were coded through inductive thematic analysis and a consensual qualitative approach. Three-tier themes were defined and named after subsequent analysis of core ideas and domains in the data. Major adversities reported included a lack of basic needs, lack of land-rights and unjust treatment from authorities, destruction of the forest environment and livelihood, and lack of accessibility and facilities, which were attributed to authorities' negligence of responsibilities, increasing human—animal conflict, environmental threats and imposed lifestyle changes. Faced with adversity, the Temiar endeavoured to survive by working crops and gathering forest resources. They utilized resources from family, fellow villagers, external agencies and spiritual—religious traditions. Theoretical mapping of attribution styles into the Ecological Rationality Framework revealed predominantly external-focused and concrete—perceptual rationalities privileged by strong-ties societies. These findings pointed to the resilience of a strong-ties community while adapting to the systemic suffering and risk factors stemming from a rationality mismatch with modernization and globalization trends. To conclude, we advocate for culture-sensitive mental health and psychiatric practices, as well as sustainable development for the well-being of Indigenous communities locally and globally.

Keywords

Indigenous peoples, suffering, worldview, help-seeking, Indigenous psychology

Introduction

Globally, Indigenous minority groups experience unique challenges, such as land dispossession and displacement, as well as higher infant mortality and health risks compared with the general population (Arnold et al., 2014, Bailie & Wayte, 2006; Khor & Shariff, 2019). Given their culturally distinct and unique experiences, Indigenous worldviews and knowledge related to suffering may differ significantly from mainstream populations (Hart, 2010). Thus, exploring the cultural worldviews and knowledge of suffering of Indigenous peoples remains a fundamental aspect of effective mental health intervention design, implementation and psychological research (Kirmayer et al., 2016; Ting & Sundararajan, 2018).

As an intersubjective experience, suffering is a defining characteristic of the human condition in which individuals or groups endure or undergo burdens, troubles and wounds to body and spirit. However, the cultural meanings of suffering and how it is experienced differ across cultures and societies (Kleinman & Kleinman, 1991). Kleinman et al.'s (1978) explanatory model approach proposed that individuals hold culturally mediated beliefs regarding

Corresponding author:

Rachel Sing-Kiat Ting, Department of Psychology, Jeffrey Cheah School of Medicine and Health Sciences, Monash University Malaysia, Bandar Sunway, 47500, Selangor, Malaysia.

Email: ting.singkiat@Monash.edu

¹Department of Psychology, Monash University Malaysia

²Department of Psychology, HELP University, Malaysia

³Orality and Community Development, Malaysia

 $^{^4\}mathrm{Turner}$ Institute for Brain and Mental Health and School of Psychological Sciences, Monash University, Australia

⁵Jeffrey Cheah School of Medicine and Health Sciences, Monash University Malaysia

misfortune, illness and health. Although some mental health literature (Armenta et al., 2016; Brown et al., 2012) has studied the hardships experienced by Indigenous peoples in terms of the western framework of the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; American Psychiatric Association, 2013), fewer studies have explored Indigenous worldviews related to suffering on their own terms (Vukic et al., 2011). Most studies of Indigenous worldviews have taken place with Canadian, American, Australian and New Zealand populations, and there is a paucity of research with Indigenous minorities in South East Asia. (Stephens et al., 2005; Thong et al., 2021). This is problematic because Indigenous cultural understandings of suffering are essential to inform current psychiatric understandings and the development and implementation of culturally safe and tailored psychiatric programmes and services.

Culture, worldview and mental health

Mental health is more than the absence of 'mental illness' or psychiatric disorder, and includes holistic well-being and the ability to cope with life stressors, work productively, realize one's abilities and contribute to one's community (World Health Organization, 2018). Given that culture is inextricably linked to mental health and well-being (American Psychiatric Association, 2013), it is vital to understand the distinctive experiences of mental health and illnesses of different ethnocultural groups (Marsella & Yamada, 2000). For instance, some studies have documented Chinese associations of 'well-being' with multisystem harmony and 'disorders' with relationship dysfunctions (Lam et al., 2012; Marsella & Higginbotham, 1984). Furthermore, culturespecific syndromes, such as Hikikomori in Japan (extreme social withdrawal) (Takenaka, 2020), highlight the importance of local categories, and concepts in the experience and expression of mental well-being.

To capture this diversity of experience, researchers have proposed the use of protocols involving semi-structured interviews and open-ended questions to eliciting of stories/narratives. Tools like the Cultural Formulation (Mezzich et al., 2009) and the McGill Illness Narrative Interview (Groleau et al., 2006) have emerged as methods to capture the language of suffering beyond the symptoms focused models of psychiatric diagnosis.

Worldview, which can be described as a collection of attitudes, expectations, values and stories concerning the world around us (Gray, 2011), plays a crucial role as a key mediator between cultural narratives and mental illness. Johnson et al. (2011) proposed six components of worldview, each influenced by culture: epistemology (what is known and how one may reason); axiology (values, morals); teleology (purpose/goals and the afterlife consequences of action); praxeology (social norms and sanctions of behaviour); ontology (existential beliefs); and

semiotics (language and symbols utilized in describing the world).

Although past literature has explored Indigenous epistemological perspectives (Gélinas & Bouchard, 2014; Hart, 2010), few authors to our knowledge have discussed Indigenous praxeological concepts as represented in culture-normative, sanctioned actions and practices. This remains a gap in existing research, especially on the behavioural displays and embodiment of mental illnesses evident among many Indigenous groups (Kirmayer & Sartorius, 2007). In light of this gap, this study looked at the epistemology and praxeology of suffering within a particular hunter-gatherer Indigenous group in Peninsular Malaysia. We aimed to offer a starting point to systematically analyse their distressing experiences through a holistic biopsychosocial approach (Santos et al., 2018).

All cultures have an epistemology and corresponding knowledge systems (Okere, 2005). In the current study, epistemology was examined through the ways in which suffering is perceived and explained in the context of local knowledge systems. Praxeology (the typical practices, norms and sanctioned behaviours in a community; Fiske et al., 2002; Johnson et al., 2011) was explored by examining how help was sought in response to suffering. Previous literature has suggested that hunter-gatherer groups hold worldviews, including views about mental health and well-being, that may differ widely from dominant cultural worldviews held among western societies (Little Bear, 2000; Pichette et al., 1999; Walker, 2004). For instance, Little Bear (2000) pointed out that many Indigenous knowledge systems are holistic with an emphasis on action and process-oriented language. Meanwhile, from a praxeological standpoint, studies have suggested that Indigenous groups may maintain traditional cultural practices and philosophies that continue to guide their understanding and behaviour when faced with suffering (Poonwassie & Charter, 2001). The study of Indigenous perspectives of suffering, therefore, contributes to the documentation of varied ways of knowing and modes of wisdom in healing traditions. Exploring the diversity of worldviews around illness and suffering remains an unfinished task, particularly among Indigenous groups in South East Asia (Thong et al., 2021). Hence, the current research engaged in an emic study of the understanding of suffering in a hunter-gatherer group in Malaysia, with considerations of implications for global psychology and mental health practice.

Context of this study: The Orang Asli of Peninsular Malaysia

The Indigenous populations of Peninsular Malaysia are referred to as 'Orang Asli' (Indigenous people) and are considered the earliest dwellers of Peninsular Malaysia (Masron et al., 2013). With a population estimate of

146,412, the Orang Asli constitute three primary tribal groups – the Semang (Negrito), Senoi and Proto Malay (Aboriginal Malay) – and include 18 ethnic groups with varied ways of life and occupations (JHEOA, 2002; Rambo et al., 1988). Whereas most continue to practice their *Adat* (the local term used to collectively describe their traditions and spiritual beliefs), in which familial spirits are channelled through *Sewang* (song and dance ceremonies) for healing and blessing purposes (Roseman, 1993), some communities have embraced world religions, with approximately 20% converting to Islam and 10% to Christianity (JAKOA, 2018).

According to available statistics, approximately 76.9% of Orang Asli remain below the poverty line despite government poverty-reduction attempts, with 35.2% categorized as 'hardcore poor' (Department of Statistics Malaysia, 2010). Typical health issues include being underweight and stunting among children, with obesity and weight issues increasingly prevalent among adults (Khor & Shariff, 2019). Resettlement schemes and development have also led to lifestyle changes for the Orang Asli, affecting their livelihood, diet and culture (J. Abdullah et al., 2015). Thus, the Orang Asli of Peninsular Malaysia, similar to Indigenous peoples worldwide, endure an accumulation of problems with legal, health, religious, moral and welfare issues inflicted upon them by social, political, institutional and economic forces.

Although various health problems prevalent among Orang Asli have been documented in the medical literature (M. F. Abdullah et al., 2021; Chandren et al., 2015; Mohd Rosman et al., 2020), there remains a paucity of information regarding Orang Asli mental health and well-being. Although epidemiological data noted a national prevalence of depression at 2.3%, an equivalent of about half a million Malaysian adults (Malaysian Institute for Public Health, 2019), there is no mental health information specific to Orang Asli. Nevertheless, it is likely that the underutilization of various mainstream health-related services documented in other Indigenous populations (Alford, 2015; Wong et al., 2018) and issues of the cultural relevancy of mainstream mental health interventions are important issues (Vigil-Hayes et al., 2021).

Research aims and questions

This study aimed to explore illness experience among the Temiar (Masron et al., 2013). We addressed the following research questions:

- 1. What are the common 'suffering events' (as understood by participants) among Temiar people in this region?
- 2. How do they explain their suffering events?
- 3. What do they do to help themselves during suffering events?

Given that participant narratives of their suffering events were of primary interest in this study, consultations were held with Temiar cultural informants in the development and translation of interview questions; particularly in translation of the term 'suffering' to Bahasa Melayu, the local and common language of Malaysia. After initial consultations, the term *kesusahan* (suffering, hardships, difficulties) was deemed closest in terms of semantic and conceptual equivalence. Bahasa Melayu was used primarily as the common language between the research team and interviewees for engagement. The use of a shared language in the interviews enabled effective rapport-building and communication in the data collection process. However, for interviewees who preferred to speak in the traditional Temiar language, a local Temiar interpreter assisted interviewers with translation.

Method

Researcher's reflexivity and epistemology

I (the first author) initially acquainted myself with this study as a research assistant and subsequently as a doctoral candidate with research funding from a grant. As a female Malaysian of Chinese ethnicity, I started this research project feeling like an 'outsider' in initial interactions with the Temiar. This was also reflected in the pronouns that the Temiar used in our conversations in the first few field trips, such as the frequent use of 'kamu semua' (all of you people) to refer to 'outsiders' and 'kami' (us) to refer to themselves. Being a fully female interviewer team (consisting of the first, second, third authors and a research assistant) in a traditionally patriarchal society was helpful in giving the interviewers access to the women in the village who were typically very shy toward outsiders. Being Christian increased rapport with Christian Orang Asli. However, more typically I made repeated recordings in my journal describing the way in which many local people (particularly among the Traditional villages) looked upon our group somewhat warily, only venturing to speak if one of us initiated a conversation. These dynamics, however, improved over the duration of the study as our team became aware of a shift in relationship. The gap between us, as 'outsiders' slowly reduced. We were welcomed into houses to share meals during which villagers would initiate conversations on their own. Further on, during member checking sessions, we noticed that interviewees expressed themselves more openly and with less reservations, while other community members gave us gifts.

Listening to their stories, I (the first author) found myself looking for tangible means of helping through action and advocacy. This sentiment was shared by my research team. Realizing that Orang Asli parents struggled to purchase basic need items such as diapers and food for their children upon hospital admission, we partnered with a local

organization to supply diapers for Orang Asli children at the local government hospital. The second author and I also connected food relief, hygienic kits and donations to these villages and families affected by the government-enforced COVID-19 lockdowns. We thus came to notice signs of mutuality in being accepted and began to gain access to the 'insider' perspectives of this community.

Ethical considerations

Ethics approval for this research project was obtained from Monash University Malaysia's Human Research Ethics Committee. Permission was also received from the Department of Orang Asli Development (JAKOA), the local Malaysian government agency entrusted to oversee the affairs of the Orang Asli. Given that most interviewees were unable to read or understand English, the explanatory statement regarding the research project was translated to the common Malay language and verbally presented by interviewers. Verbal permission was obtained for participation as well as for audio or visual recording. Permission to display interviewees' faces in video recording was sought, with some faces being obscured to protect privacy and ensure confidentiality. These recordings were used for transcription of the interviews and for the purpose of member checking (Busetto et al., 2020) with the local community during the debriefing session. We created a brief 10-minute debriefing video to summarize the findings in concrete language and shown to the interviewees, featuring their voices. Then, to increase the trustworthiness of the qualitative coding, we invited them for input by asking questions: 'Which part of this is most interesting to you? Why?'; 'Any part of the video surprises you? Why?'; 'Do you agree with our themes for your stories?'; or 'Is there any part of the result you would like to change/add/ remove?'. Their answers were then recorded in focus group. to help us reflect on the findings and amend them.

Setting and participants

The study took place between 2018 and 2020 over seven field trips in the Pos Kemar Resettlement area in Ulu Perak (Figure 1). Participants were from the Temiar subethnic group, one of the largest of the Orang Asli ethnic groups in Peninsular Malaysia who reside in the remote interiors of the Perak, Pahang and Kelantan states (JAKOA, 2018).

Procedure. We adopted a qualitative anthropological and psychological methodology, emphasizing first-person viewpoints and narratives in the exploration of local suffering experience (Kral, 2014; Ting & Sundararajan, 2018). We also used participant observation, maintaining a journal of personal experiences during and immediately after fieldwork. Initial field visits and cultural immersion enabled researchers to identify cultural informants (three

local Temiar individuals) and provided researchers with avenues for rapport-building. Following initial field visits, three main religious communities (Traditional spirituality, Christian and Muslim) were identified among the villages in Pos Kemar. Hence, these religious populations were taken into account during the recruitment of representative participants for this study.

Semi-structured interviews were conducted with 43 individuals (for demographic information, see Table 1 below) recruited through snowball-sampling or introduced to us by our local cultural informants who were identified during our initial visits to the field. To build rapport and trust, we approached interviewees through first sharing a summary of the research project and our interest in their viewpoints in the local language. Interviewees who were Temiar, 18 years old and above, and were able to tell a story of personal suffering (past or present) were recruited. The following interviewer guide with open-ended questions was developed based on consultations with cultural informants:

1. Could you share a story of suffering or adversity that you have gone through (or are going through right now)?

Prompts: What happened then? What happened next? What other events did you experience? How long ago was this? Anything else you can think of?

2. What might be an explanation for this suffering/adversity? (What other explanations/reasons?)

Prompts: Why did this happen? What might have caused it? Anything else you can think of?

3. What did you do to help yourself?

Prompts: Who was helpful for you? What else helped? How was that helpful to you? What else did you do at the time?

Interviews were administered by the first and third authors (assisted by a research assistant) who were fluent in Malay, the common national language. Interviewers were trained in semi-structured interview techniques. Interviews were 20–60 minutes in duration and conducted in locations according to the interviewee's requests. In the interest of being led by the interviewee's narratives, interviewers also allowed for extra time to listen to interviewee's elaborations of their narratives.

Table 1 shows that the average household income was RM478.49 per month (equivalent to roughly 110 USD) and hence categorizable under 'hardcore poor' according to Malaysia's national poverty standard (below RM 1,169 per month, equivalent to roughly 263 USD) (Department of Statistics Malaysia, 2019). The average education was less than 7 years, with most interviewees having left school before secondary education. Interviewees were selected from the three primary religious communities in the resettlement area, representing Christianity, Islam and Traditional spirituality.

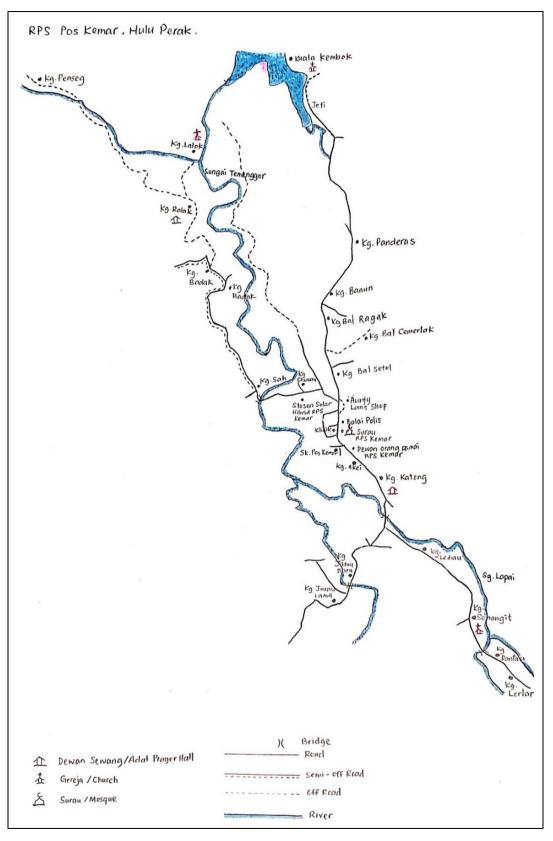


Figure 1. Authors' hand-drawn map of the fieldwork community.

Table 1. Participant demographics (N = 43).

	n (%)
Gender	
Male	16 (37.21)
Female	27 (62.79)
Religion	
Traditional spirituality	14 (32.56)
Christian	13 (30.23)
Muslim	16 (37.21)
Occupation	
Fishermen	I (2.33)
Unemployed	19 (44.19)
Clergy	2 (4.65)
Rubber tapper	8 (18.60)
Self-employed business	6 (13.95)
Village head	2 (4.65)
NGO employees	I (2.33)
Public-sector employees	3 (6.98)
M (SD)	
Age (years)	37.16 (13.28)
Income (Ringgit)	478.49 (472.10)
Education (years)	6.79 (4.92)

Data analysis

The same interviewers also acted as coders for the transcripts (first and third authors with help from a research assistant). We followed a consensus coding process with further evaluation by an auditor (RTSK, second author) for internal consistency. Interview transcripts were coded through inductive thematic analysis (Braun & Clarke, 2022) and consensual qualitative approach (CQR) (Hill et al., 1997) as represented in the phases of qualitative coding as follows:

- 1. Familiarization of data: data was read several times by the three independent coders (repeated reading technique; Braun & Clarke, 2022).
- 2. Initial coding: generation of multiple viewpoints from the three independent coders.
- 3. Search for themes: consensus among the three judges in reaching unified judgements on the meaning of the data. Any disagreements were resolved through further discussion and evaluation between the three coders and the auditor.
- 4. Review of themes: evaluation by an auditor for the purpose of internal consistency.
- Definition and naming of themes: cross-analysis of domains and core ideas in the data (Braun & Clarke, 2022).
- Reporting: development of thematic tables and analytic report.

Member checking was used to confirm our findings' credibility regarding interviewee narratives (Creswell & Miller,

2000). Considering the low literacy of our interviewees, member checks were done via the presentation of debriefing videos, produced by the research team, based on themes generated (with interviewee excerpts) from each of the religious groups. After showing the video, additional information was solicited from the interviewees (e.g. agreement with themes, which themes should be emphasized, and any further comments). The following findings were confirmed based on their feedback.

Findings

According to thematic analysis, personal events associated with suffering were summarized in seven categories: (a) lack of money for basic needs; (b) a lack of land-rights with unmet government welfare promises; (c) destruction of their forest environment and livelihoods; (d) lack of accessibility and facilities; (e) death and physical illnesses; (f) family and marital issues; and (g) interpersonal difficulties (Table 2).

Explanations of suffering

Explanations of suffering included: destruction of forests leading to environmental threats; human–animal conflict and lack of resources; authorities' neglect of Orang Asli land-rights; development and welfare; lifestyle and value changes; insufficient work and economic opportunities; spiritual reasons; and personal weaknesses (Table 3). The top ranked themes that were reported by more than 50% of participants are described in subsequent sections.

Destruction of forests leading to environmental threats, human—animal conflict and loss of resources

Participants explained their suffering through the destruction of their forests, which in turn led to environmental threats, human-animal conflict and the loss of their traditional forest resources, 'Because our vegetables are from the forest ... and our medicines are also from the forest ... medications for illness' (INT01). Many described how their livelihoods were deeply impacted by environmental pollution: 'Ah we love our customary land. We love the rivers and fishes. The fish cannot survive in the murky water now. So, it is hard for us to find fishes now' (INT15). This included problems with pollution of drinking water, 'Murky, the water is now all murky. This is the river that we drink from, it flows from the top of the hills' (INT15). Participants also described a vulnerability to environmental threats such as flooding and extended rainy seasons, 'When it floods, we cannot cross over (stranded in their village beside the river), so we cannot find food' (INTC04). Daily hardships were also explained by the increasing human-elephant conflict, 'The "big guys" (elephants) pull all our crops out, even durian trees are pulled

Table 2. Themes of suffering events (N = 43).

Theme	Subtheme	Example
Lack of money for basic needs	Lack of basic needs	The suffering is where there isn't enough food. (INTC09)
	High cost of living and transportation	It's difficult as I am not working, it's difficult to go back and forth (to the city for supplies), and going to the city is not cheap nowadays, the fares are expensive. (INTII6)
Lack of land-rights and unjust treatment from authorities	Unjust treatment from authorities	They promised to build tar roads but we don't see any of these promises come to pass. (INTI3)
	Traditional religion threatened from Islamization	The Malays (majority race in Malaysia), say we Orang Asli do not have any religion! We do!! These people say we Orang Asl do not have any religion. We do The same as others. (INT01)
	Lack of land-rights	[T]he land we love, should not be taken away from us We're born here, lived here since our ancestors. Now we stil live here. We have children and even grandchildren here. (INT15)
	Lack and unequal distribution government aid	That aid was not enough (from government) \dots not enough. (INT01)
Lack of accessibility and facilities	Lack of proper housing facilities	[T]his house is not good, we live in this old house ohhh the house of our ancestors We don't even have a toilet, we have to walk so far to do our business. (INT15)
	Difficult to bring children to school	It is far to take the children to school, especially during rainy days. (INTC02)
	Difficulty accessing quality medical aid nearby	I went to the clinic nearby to ask for medicine, for high blood pressure medicine. I did not see any effect after taking it, instead it got worse. (INT15)
	Poor road and transport conditions	If I need to travel to the city to buy things, it is very difficult because of these bad roads. (INTC03)
Destruction to forest environment and livelihood	Environmental degradation	Ahh, now, the hills are broken, the land is broken. Broken all along the logging paths. (INTI3)
	Natural disasters	Last year the floods were very bad. (INTC04)
Death and physical illnesses	Physical ailments	I have high blood pressure, sometimes like that day I was sick, am unable to work. (INTI5)
	Death of family members	For me, I do not have a mother or father. Both passed away. My younger sibling passed away too, leaving my elder brother and I alone.'(INT15)
Family and marital issues	Women's struggles with divorce	Everyday, he would go and see her (his girlfriend) till the mother of that girl asked my husband to just marry her as well. (INTII6)
	Family problems Lack of family support	That time we had some problems within our family. (INTC08) Usually, we women will feel heartache when the husband does not take care of us wives. (INTC01)
	Drinking problems among men	The men like to do so to drink. (INTC01)
Interpersonal difficulties	Difficulties in Christian ministry work among Orang Asli	The challenge is, it is so difficult to minister about Jesus among the Orang Asli because they serve their traditional beliefs (INTC01)
	Disapproving of youth culture	Ha! Young people didn't used to have these unnecessary things (alcohol) but now many do. (INTI12)
	Difficulty getting along well with	We're seen as different from others. (INTC10)
	other Orang Asli after conversion Loneliness and lack of social support	One cannot be alone, aahh now I don't have any assistant, don't have a partner supporting me. (INTII0)

Table 3. Themes of explanations of suffering (N=43).

Themes	Subthemes	Examples
Destruction of forests leading to environmental threats, human—animal conflict and loss of resources	Flood and rainy seasons	When it floods, we cannot cross over (stranded in their village beside the river), so we cannot find food. (INTC04)
	Polluted environment	Ah we love this customary land. We love the rivers, and fishes. The fish cannot survive in the murky water now. Hard to find fishes. (INT15)
	Destruction of food crops and rubber tree seedlings by elephants	The 'big guys' (elephants) pull our crops out, durian trees are also pulled out and corn, tapioca and banana. (INT04)
	Elephants are an obstacle for travelling	Because of the risk of elephants just now, we can't travel far or long distances. (INT12)
	Our resources are in the forest	Because our vegetables are from the forest our medicine is also from the forest Medication for illness. (INT01)
Authority's neglect of Orang Asli land-rights, development and welfare	Trespassing of customary lands by loggers	[I]t's the logging that trespasses our lands, so now we have to drink polluted and murky water. (INTC02)
	Problems with education system	Though many went to the school here, but our children still do not know how to read. Perhaps there is a problem in learning and their education. (INTC03)
	Mismanagement of elephant populations by authorities	But now it is hard they released elephants at Banding (a nearby forest reserve) and they are becoming an issue here as well (INT07)
	Reports of elephant issues unattended by authorities	We've reported to authorities, but these animals (elephants) are still here. (INTI3)
	Lack of accessibility	Sometimes although we want to sell things (for money), it is hard because here in the interior, taukes (local traders) do not come in as it is difficult to access. (INTI05)
	Unfulfilled government responsibilities	Two government parties promised to give us wooden houses but there were none promises of brick houses were not fulfilled roads as well water pipes too. (INT07)
Lifestyle and value changes	Lifestyle changes in diet and living conditions	Back then, it was easier living on our own food sources. (INT06)
	Differences in religious beliefs and practices resulting in interpersonal conflict	That is the problem, because here, they (family) still follow the traditional beliefs. It's as if we are viewed as different from the others. (INTC10)
	Changes to marital norms	He got married to a second wife. (INTI16)
Insufficient work and economic opportunities	Cannot afford living costs	It's (money) not enough. Our needs at this household are not cheap, we need to buy food, how about the soap and detergent at the toilet. Ahh there is a lot we need to buy. (INTIIO)
	Lack of means of income	Not everyone can own a rubber field (to tap rubber) and earn money. (INTII0)
Spiritual reasons	Gods' command Sinful nature	God called me to serve in my village. (INTC03) God knows the sin that is in my family. (INTC03)
	Punishment from elemental deities	Because there is thunder behind the mountains and the hills. He (thunder deity) will disturb us if there is logging Boom! And we will all be doomed. (INTI3)

Table 3. Continued

Themes	Subthemes	Examples
Personal weaknesses	Physical weakness	We want to work but we are not able to work because of the pain (knee pain). (INTC09)
	Lack of legal knowledge	We don't understand the law and ways of land grants. (INT04)
	Lack of financial literacy	We Orang Asli are like that we don't know how to save money, for example in banks (INT01)
	Stress leading to alcohol consumption	When we advised him, he misunderstood, and the stress led him to drink. (INTCII)

Note: Interviewee codes 'INT' refers to Traditional spirituality interviewees, 'INTC' refers to Christian interviewees, and 'INTI' refers to Muslim interviewees.

out ... and corn, tapioca, and banana' (INT04). Elephants in particular, often invaded villages for food, 'The thing is, these elephants, these elephants take everything, how then can we eat? (INT06). Another referred to his loss of 20 precious rubber seedlings to elephants, 'Yes, we work. Plant and sow! But no, it is all eaten up ... Then we replanted everything ... And yet again nothing is left, everything gets eaten up ... This is a true story. Back then, we were able to eat ... but now, it is all just useless labour' (INTI11).

Authority's neglect of Orang Asli land-rights, development and welfare

Among participants, suffering was mainly explained through government and local authorities' neglect of responsibilities and unfulfilled promises regarding the development and welfare of the Orang Asli. 'We are not satisfied with the promises about the development of us Orang Asli ... they promised us wooden houses, brick houses and water pipes, all these promises were not met with' (INT09). The lack of proper housing, roads and other basic facilities were also linked to a dereliction of government responsibilities and incomplete projects, 'About these promises [from the government] we feel dissatisfied. It is difficult for us to progress. Two government parties promised us wooden houses ... but there were none ... promises of brick houses were not fulfilled ... roads as well ... water pipes too' (INT07) and 'Here we were supposedly allocated 30 houses, but these 30 houses were never built, so it was our loss' (INT09). Many others shared similar sentiments, particularly those who recollected government-initiated resettlement plans, which had been enforced with promises of development and welfare aid for the involved Orang Asli communities.

Explanations for the sharp increase in human-elephant conflict included mismanagement of elephant populations by local authorities with an influx of 'newcomer' and 'foreign' elephants believed to have been released by wildlife agencies in nearby forests. 'But now it is hard ... they've been releasing elephants at Banding (a forest reserve close by to the Orang Asli resettlement area) and it is becoming an issue....' (INT07). Others referred to unattended reports and complains, 'In the past, during our ancestors' time there were none of such elephants. There were only a few (elephants), but those were local and lived in the hilly areas. However, now the animals have run out and are all over the hills and mountains... We have already reported this to authorities, but these animals are still here' (INT13).

Participants also described obstacles for education including the lack of geographic accessibility to schools. For instance, many Orang Asli have to walk or take motorcycles with their children to school early in the morning. Interviewees reported the additional challenge of fearing to leave their houses too early in the morning due to the risk of encountering elephants. 'If close to 4, 5, 6, 7 in the morning, sure we are afraid that these beasts will still be out and about; at the roads there are many' (INT13). The poor condition of existing roads also often makes it dangerous to attempt the route to school during rainy days. Others noted that education at schools tended to be ineffective for their children as many children were still unable to read and write, 'Many went to school here, but our children still do not know how to read, maybe there are problems in learning and education' (INTC03).

Lifestyle and value changes

Temiar have experienced notable shifts to their lifestyle and values such as changes in their marital norms and religious practices. Participants also attributed their *kesusahan* to changes in diet and living conditions. In narrating his struggle with lack of money for basic food needs, an interviewee explained:

Back then, we didn't eat this white rice, no we ate tapioca ... jungle tapioca, that is what we ate. Then now as we

develop ... now we eat rice ... this is difficult ... the government, if they left us to live like we did in the past, it would've been easier, wouldn't have been as hard for us ... we could plant tapioca, sweet potato, that is what we ate. Nothing more, that was our life, no salt, no sauce, no onions ... just like that we ate just about anything.... Back [in that] time we didn't even eat oil. (INT06)

Changes from a nomadic lifestyle to a sedentary one were also linked with physical illnesses and death through vulnerability to the spread of illnesses. For example, if one family in a particular village fell ill, many others in the same village would also later experience similar symptoms.

Back then when any of us fell sick, we would just move to a new location to live. There we would stay for a year or two perhaps, before moving back to our old location. If we fell sick, then we'd leave the old village to a new one. This was our past, but now we just live here permanently. That is why the illness stays with us ... it remains with us here. (INT13)

In line with the above, interviewees also raised a perceived lack of ability in terms of education and knowledge. For example, many participants were not able to read and because of this limitation encountered difficulties adapting in urban settings, 'It is hard for us Orang Asli from the aspect of education ... we do not have' (INTO9).

Help-seeking behaviours

Interviewees survived and thrived during their suffering through being self-reliant and hardworking, seeking help from family, community, external agencies such as non-governmental organizations (NGOs) and government agencies, and spiritual–religious resources (Table 4). Top ranked themes reported by more than 50% of interviewees are elaborated upon in subsequent sections.

Putting in effort to survive. As reflected in Table 4, the majority of interviewees made efforts to cope with adversities and strive for survival by working on crops and gathering resources from the forests. Their persistence in subsistence activities reflected ancient practices and worldviews, as illustrated by the following interviewee excerpt: 'We just think about surviving ... When we are in lack, we go (to the forest). Our knowledge is there, we take what we need from the forests. That is all' (INT12). Others planted crops for food (e.g. yams) or cash crops such as rubber trees, 'There ... I went there, a little corn was left. I went and planted it myself. The beans are in the backyard, I planted them myself. I work, on this place' (INT15). Some also found ways to adapt to their situations through adapting by eating moderately and relying on available

food such as tapioca when they ran out of rice, 'Rice, we try to not eat so much of it, just eat moderately. People say, not until you are so full' (INTI08).

Seeking help from family and fellow villagers. Seeking help from family and other villagers was also mentioned by more than half of participants. One woman who had recently returned to her village following two years of factory employment in the city said: 'I returned to this village where my parents live, because they always encourage and support me' (INTI14). Others reported receiving financial aid from their parents: 'If he has some extra, my father will give some (money)' (INTI16). Interviewees also described community support through the sharing of food resources and crops: 'Ah we just give to each other as such, because when we are suffering, sometimes they help ... when they are at ease they buy things for us, in turn when they are in trouble, we help as well. It is as such' (INTI05); 'Yes, it is our customary ways of the Orang Asli ... when we cut down a field, even if it's just one person who cuts, you share with everyone ... It is as such' (INT04).

Relying on government agencies for available support. A majority of interviewees (more than 60%) also sought help from government authorities as a way of alleviating suffering. Because the killing and hunting of elephants is prohibited by law (Wildlife Conservation Act, 2010), locals cannot defend themselves from elephant attacks and lack resources to protect themselves in other wats. Thus, they turn to governing bodies to manage elephant populations. Many hoped for help from their stipulated government welfare organization, the Department of Orang Asli Development (JAKOA): 'We only have JAKOA. JAKOA is our department, they manage our welfare. JAKOA manages Orang Asli rights. So JAKOA, they manage all our matters. Who else will help us? Therefore, we too, rely on this department' (INT04). Interviewees also described communal protests to authorities particularly regarding logging and their land-rights issues: 'We continue to fight against these logging activities because we want them to stop' (INT13).

Discussion

The themes identified in this study resonated with previous research on South East Asian Indigenous peoples' ongoing struggle with deforestation, displacement and logging, contextualized by a deep-rooted connection with and reliance on their customary lands (Singer et al., 2015; Tacey, 2013). In terms of seeking help to respond to suffering, interviewees utilized strong-ties networks (e.g. family and local villagers) as well as weak-ties networks (e.g. government authorities and NGO aid). The importance of tapping into strong-ties networks and community resources was

Table 4. Themes of help-seeking (N=43).

Themes	Subthemes	Examples
Putting in effort to survive	Working on the crops	I went and planted them myself. The beans are in the backyard, I planted them myself. I work, on this place. (INT15)
	Gathering resources from forest	When we are in lack, we go (to the forest). Our knowledge is there, we take what we need from the forests. That is all. (INT12)
	Working on own/ family's rubber plantations	Ahh the rubber seeds we planted. Just newly planted. Not a lot, just one acre. Enough for ourselves (family). (INT15)
	Personal adaptation	I have high blood pressure, when I feel sick, then I don't go to work. When I felt better, then only I go to work. I go to this field near here, I cannot go further. (INTI5)
	Personal efforts in persisting	How we survive is to put in self-effort, persistence and hard work. (INTC03)
Seeking help from family and fellow villagers	Relying on immediate family members	If he has extra, my father will give me some (money). (INTI16)
Č	Receiving community support	When we cut (crops) anything of our own, we will need to share it with everyone. (INT04)
Relying on government agencies for any available support	Receiving limited help from government welfare	But once in a while, they (government) think of helping us a little. (INT13)
	Relying on authoritative figures	We only have JAKOA (government Orang Asli welfare organization). JAKOA is our welfare department, they manage our welfare. JAKOA manages our Orang Asli rights. So JAKOA, they manage whatever that is ours. Who else will help us? Therefore, we too, rely on this department. (INT04)
	Community protesting to authorities	Then continuously we protest against logging activities because indeed we want them to stop it. (INTI3)
Appreciating NGO partnerships and aid	Receiving NGO relief aid	NGOs, they give us some help like clothing and rice. (INT09)
	Receiving help from NGO volunteer teachers	Ah the teacher helped find me two jobs because they wanted to give us confidence so they found us jobs. (INT10)
	Receiving NGO medical aid	We partner together with NGO doctors. (INT06)
	Partnering (NGO) for land advocacy	That NGO helped us to fight (for their land-rights). If not, for the NGO, this land would have been doomed by now. (INT01)
Relying on religious—spiritual networks and resources	Seeking Islamic religious leaders	Yes. We went and looked for the cleric. (INTI14)
	Seeking support from outsider Christians	For example, we also ask for your (a Christian interviewer's) prayer to pray for us. You pray for our tribe, so that it will continually flourish in the Lord. (INTC01)
	Seeking support from local Christians	During the hard times, we will ask help from churches. (INTC04)
	Receiving mentorship from religious leader	I followed and learnt from Pastor F (a pastor from a nearby city church), we studied for a month as an assistant. (INTC03)
	Praying to God for help	As the government does not help, so (I) just pray every day to find peace in myself, who knows, it (prayer) might cause the government to help the Orang Asli. (INTC02)
	Receiving God's help	After that prayer, it healed certainly. Glad that God helped us. (INTC09)
	Praying to Temiar Orang Asli deity	Like the Malays say, they pray our prayer is Sewang (ceremonial trances) like the Malays said Tuhan (God), we say Aluin Aluin (local deity). (INT01)
	Traditional healers	Whoever has back pain, anyone who has dizziness, dizzy eyes should be taken for traditional healing. (INTI3)
	Traditional medicine	No doctors for ladies who give birth, there is medicine to massage them. That (medicine) is in the forest. (INT13)

Note: Interviewee codes 'INT' refers to Traditional spirituality interviewees, 'INTC' refers to Christian interviewees, and 'INTI' refers to Muslim interviewees. NGO, non-governmental organization.

also found in past research on community-based resilience among Orang Asli (Chua et al., 2019). Meanwhile, a reliance on weak-ties networks (Granovetter, 1973), such as authorities and NGOs, potentially emerged through resettlement-related ecological changes promoting dependence on government development and other external aids. Participants also appeared to rely heavily on direct efforts to earn their livelihood through working on crops, plantations and gathering resources in the forests. Thus, the Temiar appear to use a praxeological frame of knowledge anchored in daily experience through actively interacting and manipulating their external environments.

The impact of the sociopolitical landscape on Orang Asli

The findings indicated that experiences of kesusahan (the Malay termed chosen to describe suffering, hardships and difficulties in this study) were grounded in a landscape of sociopolitical problems among Temiar communities. This observation aligns with a history of land-rights issues, forced resettlement and current encroachment of commercial interests, such as logging companies (J. Abdullah et al., 2016; Hisham et al., 2015). Legislation, such as the Aboriginal Peoples Act 1954 of Malaysia, leans in favour of the government's right to revoke land (Sections 6(3) and 7(3)) or remove Orang Asli from their forest lands (Section 10(3)). As of 2006, a mere 13.9% of customarily Orang Asli territories have been titled as Orang Asli reserves (Alias et al., 2010). Many participants expressed a sense of respect, reverence and dependence on their customary forest lands. However, their veneration has turned into fear amid environmental degradation and pollution resulting in more natural disasters, such as floods.

Meanwhile, a growing dependence on a cash economy stands in stark contrast to the level of economic opportunities available. As such, our findings highlight tensions associated with lifestyle changes following a rapid transition to neoliberal economies; this poses challenges for Orang Asli populations that have largely retained the livelihood strategies of hunger-gatherers (e.g. capitalizing on strong-ties network in sharing of forest resources and crops). Moreover, increasing urbanization, environmental degradation and encroachment into their customary forest lands have impacted the ecosystem of what was once their primary source of food and livelihood. The increased reports of human-animal conflict among communities that once were self-sustaining since ancient times is alarming. For example, elephants that are unable to find sufficient food in the forests are driven to seek food sources in human villages for survival. The vicious cycle of deforestation has a profound impact on the mental well-being of the Orang Asli which, will be further elaborated from a cultural psychology perspective in the following section.

Conceptualizing Indigenous worldviews through ecological rationality

According to Beal's (2019) hierarchy of moral cognition, worldviews such as beliefs and value systems are considered downstream factors. Thus, exploring upstream ontological framings of cognition that gives rise to downstream variables (e.g. beliefs, tendencies of behaviour, values) are important for the purpose of finding cross-cultural pattern of Indigenous knowledges. In this study, we mapped our findings onto the Ecological Rationality Framework (Sundararajan, 2015, 2020), aiming to expand global psychology's norm of rationality through the Temiar's worldview.

Integrating concepts of ecological rationality (Todd & Gigerenzer, 2012) and Granovetter's (1973) social-network theory, Sundararajan (2015, 2020) developed a culturecognition scheme of strong and weak-ties rationalities to conceptualize cultural differences in mentalities from a relational perspective. Strong-ties societies refers to societies with low mobility, which are founded upon close-knit, intimate relationships with kin and close friends. By contrast, weak-ties societies refers to groups with higher relational mobility (Yuki & Schug, 2020; the degree of flexibility in interpersonal relationship) thus relying on and cooperating with unfamiliar or unrelated others (Sundararajan, 2020). As proposed by Sundararajan (2015), a strong-ties ecology would call for concrete-perceptual type mentalities, orienting individuals toward the navigation of the external environment; by contrast, a weak-ties ecology would call for abstract-conceptual mentalities, orienting individuals toward internal mental processes. Studying the influence of culture on perceptions of suffering, Ting and Sundararajan (2018) found that Yi minorities in China, who followed the traditional Bimo religion, used primarily agencies or events located in the environment (e.g. ghosts) to explain their suffering events. Meanwhile, those who had converted to Christianity used more abstract and existential explanations. Thus, the different mentalities espoused in strong-ties and weak-ties societies (Sundararajan, 2015) may inform the impact of modernization on Indigenous communities in Malaysia.

After mapping the subthemes of suffering explanations into the Ecological Rationality Framework (Ting & Sundararajan, 2018), the Temiar epistemological worldviews appeared to mainly fall into the external–concrete, experiential quadrant of Figure 2 (e.g. polluted environment, elephants mentioned as an obstacle to travelling). These findings align with Thong et al.'s (2021) systematic review, which found that Indigenous peoples in South East Asia capitalized on external-oriented mental strategies and cognitive styles, and supplements the repertoire of evidence of the characteristics of strong-ties rationality found in many Indigenous tribal groups that have been long overlooked by western psychology. Similar to recent research

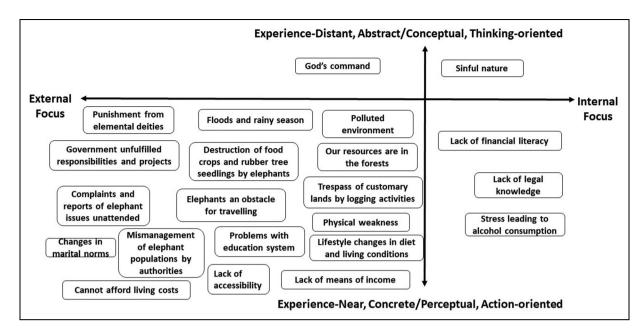


Figure 2. Axes of cognition according to the adapted Ecological Rationality Framework for subthemes of suffering explanations.

on cultural differences in cognitive styles among different religious Indigenous groups (Thong et al., 2023), the mentalities espoused by the Temiar traditional group (*adat*) overall resemble that of holistic thought, with an attentiveness to perceptual and external environmental forces.

In view of the above, our findings support the notion that mental health and well-being among strong-ties Indigenous societies such as the Temiar are closely embedded within the flourishing of their external environment, including that of their traditional forests and environmental resources. This has implications for state policymakers regarding the legalization of land-rights in promoting self-determination and contextualizing development (the extent to which the Temiar exhibit self-determining agency in relation to their development, forest lands and resources). Studies have also identified physical and mental health benefits from engaging in cultural land-care among Aboriginals (Taylor-Bragge et al., 2021). The orientation of well-being and mental health towards external ecological systems prevalent among Indigenous people in Asia and Canada (Kirmayer et al., 2011; Ting et al., 2021) stands in contrast to trait-based or internally oriented psychological models of resilience.

Implications for mental health promotion and services in a hunter-gatherer ecology

The promotion of mental health 'involves actions to create living conditions and environments that support mental wellness across the lifespan and allow people to adopt and maintain healthy lifestyles' (World Health Organization, 2016). In marginalized communities such as the Orang Asli, a model

of effective mental health service would therefore involve advocacy against the various barriers faced with regards to their well-being. This study thus seeks to inform culturally sensitive mental health and healthcare among Orang Asli who have historically encountered barriers in the utilization of modern health services (Wong et al., 2018). For example, the use of strong-ties networks and communityembedded resources in help-seeking among the Temiar indicates the importance of community-based or family-centred mental health promotion (see Kirmayer et al., 2016). This presents another contrast to the individual psychotherapy models dominant in western psychiatric services. Because healing rituals also reflect their externally oriented cognition, partnerships between mental health providers and traditional healers or community elders could be emphasized to promote accessibility and inclusivity of mental health and well-being programmes. The current research also highlights the importance of Indigenous traditional resources and wisdom embedded in the day-to-day lives of the Orang Asli as they navigate suffering and adversity. Furthermore, this underlines the role of the mental health professional in rebuilding and reconciling cultural identity among the Orang Asli who face the erosion of their kinship-based cultural structures from modernization and imposed lifestyle changes.

Given that suffering was often contextualized by disruptions to their ecology, such as elephant intrusion and water pollution from logging activities, our findings also suggest that wellness initiatives could benefit from involving strategies to shelter the community from livelihood and ecological disruptions. For instance, the facilitation of psychological well-being through collaborative multidisciplinary approaches (e.g. the inclusion of medical personnel, social workers and legal practitioners) focused on

protecting the communal resilience embedded in their traditional environments, biodiversity and lands.

Limitations and future research

Because this is an exploratory study among the Temiar within one resettlement area, these findings may not represent narratives across all Orang Asli peoples. Furthermore, there were limitations related to the overrepresentation of female participants, exceeding 60%. Because our interviewers consisted of an all-female team, it is plausible that this may have increased the likelihood of our being accepted by female interviewees during the snow-balling recruitment process. Hence, it is unsurprising that one of the suffering issues - 'family and marital issues' was only reported by female interviewees, which could reflect gender roles and struggles among the Orang Asli who have come in contact with and internalized maledominated cultures over the past few centuries (Endicott et al., 2006). Future researchers may consider delving deeper into potential gender differences in Orang Asli suffering experiences. Further, a number of interviewees spoke in their traditional Temiar language during the interview and some nuances might have been lost in translation, although we tried to minimize this loss by having a native speaking Temiar translator examine our audio-recordings and translations for accuracy. Future studies should also consider prolonged fieldwork and the inclusion of Temiar cultural experts in the research team.

Conclusion

Overall, the exploration of worldviews of suffering among the Temiar reveals social injustice issues stemming from sociopolitical complexity. The reduced viability of the ancestral forest environment and means of subsistence resulting from environmentally damaging economic activities have led to collisions between the Temiar peoples' pre-existing rationalities and an imposed subscription to the 'modern' ways of life. Efforts to alleviate suffering among the Orang Asli need to be cognizant of these conflicts in cultural worldviews.

As discussed above, this study has both theoretical and practical implications for cultural psychiatry and mental health on the topic of human suffering. Recognizing the rationalities that inform local cultural worldviews in populations that have experienced recent modernization, highlights the importance of culturally based values and practices for the survival of communities.

Acknowledgements

We would like to acknowledge the efforts of "our" research assistant Frances Lim, and our NGO partner Hubert Thong for their assistance in the fieldwork. We also want to thank all of our interviewees for their narratives and contribution to our research topic.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Fundamental Research Grant Scheme, Malaysia Ministry of Higher Education, (grant number FRGS/1/2020/SS0/MUSM/02/2).

ORCID iD

Rachel Sing-Kiat Ting https://orcid.org/0000-0002-2932-9593

References

- Abdullah, J., Borhan, M. A., & Ahmad, C. B. (2015). Orang Asli resettlement in urban environment at Bukit Lanjan, Selangor, Malaysia. *Procedia Social and Behavioral Sciences*, 201, 71–79. https://doi.org/10.1016/j.sbspro.2015.08.132
- Abdullah, J., Sayuti, N. M., Arshad, A. A., & Embong, M. R. (2016). Living conditions in orang Asli resettlement project (PROSDET) of pantos, Pahang, Malaysia. *Procedia Social and Behavioral Sciences*, 222, 143–150. https://doi.org/10.1016/j.sbspro.2016.05.204
- Abdullah, M. F., Othman, A., Jani, R., Edo, J., & Abdullah, M. T. (2021). Orang Asli health and mortality in Hulu Terengganu, Malaysia. *Resource Use and Sustainability of Orang Asli*, 189–199. https://doi.org/10.1007/978-3-030-64961-6_12
- Alford, K. A. (2015). Indigenous health expenditure deficits obscured in closing the gap reports. *Medical Journal of Australia*, 203(10), 403–403. https://doi.org/10.5694/mja15. 00349
- Alias, A., Kamaruzzaman, S. N., & Daud, M. N. (2010). Traditional lands acquisition and compensation: The perceptions of the affected aborigine in Malaysia. *International Journal of Physical Sciences*, 5(11), 1696–1705. Retrieved from https://www.researchgate.net/publication/265812615_Traditional_lands_acquisition_and_compensation_The_perceptions_of_the_affected_Aborigin_in_Malaysia
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596
- Armenta, B. E., Whitbeck, L. B., & Habecker, P. N. (2016). The historical loss scale: Longitudinal measurement equivalence and prospective links to anxiety among North American Indigenous adolescents. *Cultural Diversity and Ethnic Minority Psychology*, 22(1), 1–10. https://doi.org/10.1037/cdp0000049
- Arnold, M., Moore, S. P., Hassler, S., Ellison-Loschmann, L., Forman, D., & Bray, F. (2014). The burden of stomach cancer in indigenous populations: A systematic review and global assessment. *Gut*, *63*, 64–71. https://doi.org/10.1136/gutjnl-2013-305033
- Bailie, R. S., & Wayte, K. J. (2006). Housing and health in Indigenous communities: Key issues for housing and health improvement in remote Aboriginal and Torres Strait Islander communities. Australian Journal of Rural Health, 14(5), 178–183. https://doi.org/10.1111/j.1440-1584.2006.00804.x

Beal, B. (2019). What are the irreducible basic elements of morality? A critique of the debate over monism and pluralism in moral psychology. *Perspectives on Psychological Science*, 15(2), 273–290. https://doi.org/10.1177/1745691619867106

- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. Sage.
- Brown, A., Scales, U., Beever, W., & Rickards, B. (2012). Exploring the expression of depression and distress in aboriginal men in central Australia: A qualitative study. *BMC Psychiatry*, 12, Article 97. https://doi.org/10.1186/1471-244X-12-97
- Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research* and *Practice*, 2(14), 1–10. https://doi.org/10.1186/s42466-020-00059-z
- Chandren, J. R., Wong, L. P., & AbuBakar, S. (2015). Practices of dengue fever prevention and the associated factors among the orang Asli in peninsular Malaysia. *PLOS Neglected Tropical Diseases*, 9(8), e0003954. https://doi.org/10.1371/journal. pntd.0003954
- Chua, R. Y., Kadirvelu, A., Yasin, S., Choudhry, F. R., & Park, M. S. (2019). The cultural, family and community factors for resilience in Southeast Asian indigenous communities: A systematic review. *Journal of Community Psychology*, 47(7), 1750–1771. https://doi.org/10.1002/jcop.22224
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124–130. https://doi.org/10.1207/s15430421tip3903_2
- Department of Statistics Malaysia (2010). Population distribution and basic demographic characteristic report 2010. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/ctheme ByCat&cat=117&bul_id=MDMxdHZjWTk1SjFzTzNkRXYzc VZjdz09&menu_id=L0pheU43NWJwRWVSZklWdzQ4Tlh UUT09
- Department of Statistics Malaysia (2019). Household income and basic amenities survey report 2019. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=120&bul_id=TU00TmRhQ1N5TUxHVWN0T2VjbXJYZz09&menu_id=amVoWU54UTl0a21NWmdhMjFMMWcyZz09
- Endicott, K. (2016). *Malaysia's original people: past, present and future of the orang asli*. NUS Press. http://www.jstor.org/stable/j.ctv1qv35n
- Fiske, A. P., Kitayama, S., Markus, H., & Nisbett, R. (2002). The cultural matrix of social psychology. In Gilbert, D., & Fiske, S.,, & Lindzey, G. (Eds.), *Handbook of social psychology* (4th ed, Vol. 2, pp. 915–981). McGraw-Hill.
- Gélinas, C., & Bouchard, Y. (2014). An epistemological framework for Indigenous knowledge. *Revista de Humanidades de Valparaíso*, 4, 47–62. https://doi.org/10.22370/rhv/20144/23
- Granovetter, M. S. (1973). The strength of weak ties. American Journal of Sociology, 78, 1360–1380. https://doi.org/10.1086/225469
- Gray, A. J. (2011). Worldviews. *International Psychiatry*, 8(3), 58–60. https://doi.org/10.1192/s1749367600002563
- Groleau, D., Young, A., & Kirmayer, L. J. (2006). The McGill illness narrative interview (MINI): An interview schedule to elicit meanings and modes of reasoning related to illness experience. *Transcultural Psychiatry*, 43(4), 671–691. https:// doi.org/10.1177/1363461506070796

- Hart, M. A. (2010). Indigenous worldviews, knowledge, and research: The development of an indigenous research paradigm. *Journal of Indigenous Voices in Social Work*, 1(1), 1– 16. http://hdl.handle.net/10125/15117
- Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist*, 25(4), 517–572. https://doi.org/10.1177/001100 0097254001
- Hisham, N., Saman, M., & Ho, P. (2015). The perception of land rights impacts due to the abolition of a native title (NT): Evidence from the Bakun hydroelectric project (BHP) and the Kelau dam project (KDP) in Malaysia. *International Review for Spatial Planning and Sustainable Development*, 3(1), 98–118. https://doi.org/10.14246/irspsd.3.1_98
- Jabatan Kemajuan Orang Asli (JAKOA) (2018). Statistik penduduk masyarakat orang asli mengikut daerah. http://www.data. gov.my/data/ms_MY/dataset/statistik-penduduk-masyarakatorang-asli-mengikut-sub-etnik
- JHEOA (2002). Kehidupan, budaya dan pantang larang Orang Asli. JHEOA.
- Johnson, K. A., Hill, E. D., & Cohen, A. B. (2011). Integrating the study of culture and religion: Toward a psychology of worldview. *Social and Personality Psychology Compass*, 5(3), 137–152. https://doi.org/10.1111/j.1751-9004.2010.00339.x
- Khor, G. L., & Shariff, Z. M. (2019). Do not neglect the indigenous peoples when reporting health and nutrition issues of the socioeconomically disadvantaged populations in Malaysia. BMC Public Health, 19(1), 1–5. https://doi.org/10.1186/s12889-019-8055-8
- Kirmayer, L. J., Dandeneau, S., Marshall, E., Phillips, M. K., & Williamson, K. J. (2011). Toward an ecology of theories: Indigenous perspectives on resilience. In Ungar, M. (Ed.), *The social ecology of resilience: A handbook of theory and practice* (pp. 399–414). Springer Science & Business Media. https://doi.org/10.1007/978-1-4614-0586-3_31
- Kirmayer, L. J., & Sartorius, N. (2007). Cultural models and somatic syndromes. *Psychosomatic Medicine*, 69(9), 832– 840. https://doi.org/10.1097/psy.0b013e31815b002c
- Kirmayer, L. J., Sheiner, E., & Geoffroy, D. (2016). Mental health promotion for indigenous youth. In Hodes, M., & Gau, S. (Eds.), *Positive mental health, fighting stigma and promoting resiliency for children and adolescents* (pp. 111–140). Academic Press.
- Kleinman, A., Eisenberg, L., & Good, B. (1978). Culture, illness, and care: Clinical lessons from anthropologic and cross-cultural research. *Annals of Internal Medicine*, 88(2), 251–258. https://doi.org/10.7326/0003-4819-88-2-251
- Kleinman, A., & Kleinman, J. (1991). Suffering and its professional transformation: Toward an ethnography of interpersonal experience. *Culture, Medicine and Psychiatry*, 15(3), 275–275. https://doi.org/10.1007/bf00046540
- Kral, M. (2014). Anthropological psychology. In Teo, T. (Ed.), Encyclopedia of critical psychology (pp. 103–109). Springer. https://doi.org/10.1007/978-1-4614-5583-7_18
- Lam, W. W., Fielding, R., McDowell, I., Johnston, J., Chan, S., Leung, G. M., & Lam, T. H. (2012). Perspectives on family health, happiness and harmony (3H) among Hong Kong Chinese people: a qualitative study. *Health Education Research*, 27(5), 767–779. https://doi.org/10.1093/her/cys087

- Little Bear, L. (2000). Jagged worldviews colliding. In Battiste, M. (Ed.), *Reclaiming Indigenous voice and vision* (pp. 77–85). UBC Press. https://www.law.utoronto.ca/sites/default/files/documents/hewitt-leroy_little_bear_on_jagged_worldviews.pdf
- Malaysian Institute for Public Health (2019). *National Health and Morbidity Survey 2019*. https://iptk.moh.gov.my/images/technical_report/2020/4_Infographic_Booklet_NHMS_2019_-_English.pdf
- Marsella, A. J., & Higginbotham, H. (1984). Traditional Asian medicine: Applications to psychiatric services in developing nations. In Pedersen, P., & Sartorius, N., & Marsella, A. (Eds.), *Mental health services: The cross-cultural context* (pp. 175–198). Sage Publications.
- Marsella, A. J., & Yamada, A. M. (2000). Culture and mental health: An introduction and overview of foundations, concepts, and issues. In Cuéllar, I., & Paniagua, F. A. (Eds.), *Handbook of multicultural mental health* (pp. 3–24). Academic Press. https://doi.org/10.1016/B978-012199370-2/50002-X
- Masron, T., Masami, F., & Ismail, N. (2013). Orang Asli in peninsular Malaysia: Population, spatial distribution and socioeconomic condition. *Journal of Ritsumeikan Social Sciences and Humanities*, 6, 75–115. https://doi.org/http://www.ritsumei.ac.jp/acd/re/k-rsc/hss/book/pdf/vol06_07.pdf
- Mezzich, J. E., Caracci, G., Fabrega, H., & Kirmayer, L. J. (2009).
 Cultural formulation guidelines. *Transcultural Psychiatry*, 46(3), 383–405. https://doi.org/10.1177/1363461509342942
- Mohd Rosman, M. H., Yong, C. L., Azman, M. U., & Mohd Ishar, M. I. (2020). The health issue in orang Asli community. *Malaysian Journal of Social Sciences and Humanities* (MJSSH), 5(2), 36–41. https://doi.org/10.47405/mjssh.v5i2. 360
- Okere, T. (2005). Is there one science, western science? *African Development*, 30(3), 320–334. https://doi.org/10.4314/ad. v30i3.22227
- Pichette, E. F., Garrett, M. T., Kosciulek, J. F., & Rosenthal, D. A. (1999). Cultural identification of American Indians and it's impact on rehabilitation services. *Journal of Rehabilitation*, 65(3), 3–10.
- Poonwassie, A., & Charter, A. (2001). An aboriginal worldview of helping: Empowering approaches. *Canadian Journal of Counselling*, 35(1), 63–73. https://files.eric.ed.gov/fulltext/ EJ622699.pdf
- Rambo, A. T., Gillogly, K., & Hutterer, K. L. (1988). Ethnic diversity and the control of natural resources in Southeast Asia. University of Michigan Press. http://www.jstor.org/stable/10. 3998/mpub.19481.10
- Roseman, M. (1993). Healing sounds from the Malaysian rainforest: Temiar music and medicine. University of California Press.
- Santos, J. C., Bashaw, M., Mattcham, W., Cutcliffe, J. R., & Giacchero Vedana, K. G. (2018). The biopsychosocial approach: Towards holistic, person-centred psychiatric/mental health nursing practice. *Principles of Specialty Nursing*, 89–101. https://doi.org/10.1007/978-3-319-31772-4_8
- Singer, J., Hoang, H., & Ochiai, C. (2015). Post-displacement community resilience: Considering the contribution of indigenous skills and cultural capital among ethnic minority

- Vietnamese. *Asia Pacific Viewpoint*, 56(2), 208–222. https://doi.org/10.1111/apv.12057
- Stephens, C., Nettleton, C., Porter, J., Willis, R., & Clark, S. (2005). Indigenous peoples' health—why are they behind everyone, everywhere? *Lancet*, 366(9479), 10–13. https://doi.org/10.1016/S0140-6736(05)66801-8
- Sundararajan, L. (2015). International and cultural psychology. Understanding emotion in Chinese culture: Thinking through psychology. Springer International Publishing. https://doi.org/ 10.1007/978-3-319-18221-6
- Sundararajan, L. (2020). Strong-ties and weak-ties rationalities: Toward an expanded network theory. Review of General Psychology, 24(2), 134–143. https://doi.org/10.1177/1089268 020916438
- Tacey, I. (2013). Tropes of fear: The impact of globalization on Batek religious landscapes. *Religions*, 4(2), 240–266. https://doi.org/10.3390/rel4020240
- Takenaka, N. (2020). Voices from nature and withdrawal (Hikikomori) in Japanese culture. *Cultural Complexes in China, Japan, Korea, and Taiwan*, 181-198. https://doi.org/10.4324/9781003007647-12
- Taylor-Bragge, R. L., Whyman, T., & Jobson, L. (2021). People needs country: The symbiotic effects of landcare and wellbeing for Aboriginal peoples and their countries. *Australian Psychologist*, 56(6), 458–471. https://doi.org/10.1080/ 00050067.2021.1983756
- Thong, J. J.-A., Ting, R. S.-K., Jobson, L., & Sundararajan, L. (2023). In the wake of religious conversions: Differences in cognition and emotion across three religious communities of an indigenous tribe in Malaysia. *Psychology of Religion and Spirituality*. Advance online publication. https://doi.org/10.1037/rel0000493
- Thong, J. J.-A., Ting, R. S.-K., & Teoh, S. L. (2021). Causal-attribution and emotion-expression of suffering among Southeast Asian indigenous peoples: A systematic review study. *Journal of Humanistic Psychology*. https://doi. org/10.1177/00221678211036333
- Ting, R. S.-K., & Sundararajan, L. (2018). Culture, cognition, and emotion in China's religious ethnic minorities. Springer International Publishing. https://doi.org/10.1007/978-3-319-66059-2
- Ting, R. S., Sundararajan, L., Luo, Y., Wang, J., & Zhang, K. (2021). Resilience revisited: AIDS and resilience among a Yi ethnic minority in Southwest China. *Theory & Psychology*, 32(1), 38–60. https://doi.org/10.1177/09593543211 001114
- Todd, P. M., & Gigerenzer, G. (eds) (2012). *Evolution and cognition. Ecological rationality: Intelligence in the world.* Oxford University Press.
- Vigil-Hayes, M., Collier, A. F., Hagemann, S., Castillo, G., Mikkelson, K., Dingman, J., Muñoz, A., Luther, J., & McLaughlin, A. (2021). Integrating cultural relevance into a behavioral mHealth intervention for Native American youth. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW1), 1–29. https://doi.org/10.1145/3449239
- Vukic, A., Gregory, D., Martin-Misener, R., & Etowa, J. (2011). Aboriginal and Western conceptions of mental health and illness. *Pimatisiwin: A Journal of Aboriginal and Indigenous* Community Health, 9(1), 65–86.

Walker, P. O. (2004). Decolonizing conflict resolution: Addressing the ontological violence of westernization. *The American Indian Quarterly*, 28(3), 527–549. https://doi.org/10.1353/aiq.2004.0108

- Wildlife Conservation Act (2010). Law of Malaysia. Act 716.National Printing Berhad.
- Wong, Y. S., Allotey, P., & Reidpath, D. D. (2018). Why we run when the doctor comes: Orang Asli responses to health systems in transition in Malaysia. *Critical Public Health*, 29(2), 192–204. https://doi.org/10.1080/09581596.2018.1438588
- World Health Organization (2016). Global monitoring of action on the social determinants of health: A proposed framework and basket of core indicators. |consultation paper|. WHO. https://www.who.int/news-room/events/detail/2016/11/15/default-calendar/global-monitoring-of-action-on-the-social-determinants-of-health-a-proposed-framework-and-basket-of-core-indicators
- World Health Organization (2018, March 30). *Mental health: Strengthening our response*. WHO | World Health Organization. https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response
- Yuki, M., & Schug, J. (2020). Psychological consequences of relational mobility. *Current Opinion in Psychology*, 32, 129–132. https://doi.org/10.1016/j.copsyc.2019.07.029

Justine Jian-Ai Thong, PhD, holds a master's degree in clinical psychology from HELP University, and a PhD in psychology from Monash University-Malaysia campus. She is currently a lecturer for the clinical psychology programme at HELP University, Malaysia. Her research interests include culture, Indigenous psychology and its applications to mental health and well-being.

Rachel Sing-Kiat Ting, PhD, is an associate professor teaching at the Department of Psychology, Monash University-Malaysia campus. She holds both a master's degree and PhD in clinical psychology from the APA accredited programme in the United States and an active psychologist license in California. Her research focuses on Indigenous religion and psychology, ethnic minorities mental health, and Chinese culture. She is currently the principal investigator on 'Healthcare utility among Orang Asli: Developing an ecological healthcare rationality

model'. Her published works focus qualitative research on psychology of religion and spirituality among ethnic minority in China and Malaysia. She is also serving as the founder to Southeast Asian Indigenous Psychology Network.

Tomomi Takeuchi holds a bachelor's degree in educational psychology and counselling (National Taiwan Normal University, Taiwan) and a postgraduate diploma in biomedical science from Monash University-Malaysia campus. Her research interests involve cross-cultural research and cultural phenomena.

Laura Jobson, B Psychology (Hons) (UNSW), PhD (Clinical Psychology) (ANU), is an associate professor at the Turner Institute for Brain and Mental Health, Monash University. Her research focuses on culture, trauma, and mental health, specifically on the influences of culture on the cognitive and emotion processes underpinning post-traumatic stress disorder and depression. She also leads a research group in Iran, Afghanistan, and Iraq, which is focused on understanding culture and mental health and developing novel low-intensity interventions for those in low- and middle-income contexts and humanitarian contexts.

Maude E Phipps, BSc Hons (Mal), PhD (Cantab), is Professor of Human Genetics in the School of Medicine and Health Sciences, Monash University Malaysia. Professor Phipps researches human population genetics, genomics, and Indigenous health in Orang Asli and other ethnic minorities in Asia. She is resource person for genetics and principal coordinator for early years medical ethics on the MD programme. Professor Phipps is a member of the Asia Pacific Bioethics Network and Future proofing Healthcare Initiative. She was Co-Chair of the Policy Review Board of the Human Genome Organization PASNP Initiative and principal investigator on several large national grants. She is currently co-investigator on 'Healthcare utility among Orang Asli: Developing an ecological healthcare rationality model'. Her published works focus on medical genetics, population genomics, cardiometabolic risk, and disease in Indigenous populations.