The reflexive relationship between available university services and mental health ideations: A complexity informed perspective

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Using Communication Complex as our theoretical framework, we explored socially constructed notions about mental health from a complexity informed perspective. Through qualitative interviews we investigated the availability of mental health services provided at three universities—one in Wrocław, Poland; one in Semarang, Indonesia; and the third in Indianapolis, Indiana, United States. From our interviews we interpreted several salient themes across all three cultures. Discussions about mental health services are meaningless without first defining mental health in pursuit of ascertaining what counts as caring for one's mental health—a process which raises a host of epistemological and ontological questions in both the academic setting and the larger social milieu. These conversations also reified the importance of considering one's whole health, how stigma plays a role in defining mental health "issues", and what stories are being told about the nature of mental health across several cultures. We argue that there is a deeper, reflexive relationship between the ways people talk about mental health and what services are offered that goes beyond traditional notions of what mental health "is" and what counts as a mental health service.

KEYWORDS

mental health, complexity, communication complex, social construction, service utilization, reflexivity, stigma, mental illness

Introduction

College students increasingly seek access to mental health services; one study found that rates of on-campus service utilization almost doubled across nearly 200 U.S. college campuses spanning a 10-year period (Lipson et al., 2019). These and other authors (for example, see Bourdon et al., 2020) suggest that higher service utilization is a result of increased prevalence of mental health issues—a linear-causal link—but the measures by which studies determine the rate or prevalence of mental health issues are themselves socially constructed, leaving the question of "cause" unanswered and of questionable utility (Pearce, 2009). Contrary to dominant research paradigms, our approach eschews foundationalist notions of mechanistic causality in favor of a systemic, complexity-informed

approach. Thus, we sought to question many underlying assumptions—e.g., is there a higher prevalence of mental health issues, or are we getting better at "finding" them? What counts as a mental health service? What "is" mental health? Through qualitative interviews we investigated the availability of mental health services provided at three universities—one in Wrocław, Poland; one in Semarang, Indonesia; and the third in Indianapolis, Indiana, U.S. The interview process revealed that discussions about mental health services are meaningless without first defining mental health. These conversations also highlighted the importance of considering one's whole health, how stigma plays a role in defining mental health "issues", and what stories are being told about the nature of mental health, as well as how they differ across several cultures. We argue that there is a deeper, reflexive relationship between the ways people talk about mental health and the availability and utilization of services.

First, we introduce our theoretical framework and define relevant concepts. This is followed by short introductions to the socio-economic and political context in each country as it relates to mental health more broadly. We then outline our research methods, followed by the results of our analysis of interviews as grouped by country, and then by themes. Then we unpack our findings in the discussion, exploring theoretical, paradigmatic, and pragmatic implications as well as some specific recommendations for universities. Finally, we conclude with questions intended to invite readers to reframe how they approach mental health, research and interventions, and indeed everyday conversations.

Theoretical framework

Our analytical lens begins with Communication Complex (CC), the meta-theoretical framework outlined by Drs. John and Susan Parrish-Sprowl that draws from a wide range of theory and disciplines—from pragmatic and social constructionist communication theory to interpersonal neurobiology (Parrish-Sprowl et al., 2020). This approach urges us to view communication as more than a simple message exchange with merely synchronic, episodic significance; this view conceptualizes communication as a complex process in which individual episodes have diachronic significance as embedded across larger conversational patterns through time. CC also places communication at the center of our social world as the primary social process by which we both construct reality and make meaning out of it, as opposed to a tool we use on an as-needed basis to get meanings across (Watzlawick et al., 1967; Pearce, 2009; Parrish-Sprowl, 2014; Wendt, 2015). As its name implies, the Communication *Complex* perspective calls for an approach to analyzing the communicative milieu that moves beyond a simplistic, reductionist view to a more nuanced understanding of communication in all its complexity. This provides a richer understanding of its systemic, reflexive

relationship with our environment across a variety of contexts, from romantic relationships to public health (Parrish-Sprowl, 2013).

Drawing from the science of complex adaptive systems (CAS) as explicated by Waldrop (1992), Plsek and Greenhalgh (2001) offer a definition for a CAS that begins to unveil what is meant by the words complex and complexity: "A complex adaptive system is a collection of individual agents with freedom to act in ways that are not always totally predictable, and whose actions are interconnected so that one agent's actions *changes the context* for other agents" (p. 625, emphasis added). They go on to explain that complexity in systems involves fuzzy boundaries, emergent and novel behaviors, adaptivity by agents within the system, and inherent non-linearity (Plsek and Greenhalgh, 2001). A key point is that small changes often have large, cascading influences throughout the system, and quite often they are unintentional. This stands in contrast to top-down approaches that aim to change behavior at the individual level with large-scale trainings that miss key aspects of context. Note our emphasis on the change in context—we find this to be key to our analysis given that individuals are enmeshed in multiple conversational episodes simultaneously, across time, in ways that influence both current and future contexts (Pearce, 1989; Wendt, 2015). Also important to the discussion is the focus on the relationships between the parts of the system and the whole, as opposed to individual actions or only macro-level (top–down) concerns. It is in our focus on these relationships as embedded in and constitutive of the ever-shifting processes we call context and communication that our meta-theoretical framework takes shape and shifts us from linear, reductionist views to more holistic approaches to enacting systemic change.

Akin to the shift from Newtonian to quantum thinking, pivoting our perspective using the CC framework draws into focus different questions and assumptions upon which to build our analyses. For example, the assumption that mental illness can be traced solely to biological causes, as in the biomedical model (Engel, 1977), tracks with reductionist and Newtonian logic. From this perspective one either has a mental illness or they do not, and too often the first line of treatment is pharmacological, and individual-focused. This approach divorces individuals from the many contexts in which they are embedded and essentially ignores the influence of social relationships on our overall well-being. Furthermore, the Newtonian perspective, and indeed the biomedical approach, *pathologizes the individual* and their mental states without accounting for the degree to which their situation might be both influenced by environmental factors and ameliorated by changes in their communication ecology. Parrish-Sprowl et al. (2020) define communication ecology as:

> *The patterns, processes, and content/messages that constitute the environment within which people function in a particular context. From our physical surroundings, to how*

and what we say and do both face-to-face and via media, this web of meaning-making shapes and is shaped by our physical sensations, thoughts, emotions, and actions. (Footnote 1)

In contrast, the quantum ontology embraced in the CC perspective considers individuals to operate systemically and in relation to others (Rovelli, 2021) and accounts for the mutual, systemic influences between our biological, mental, and social worlds. From this perspective, as explicated by the World Health Organization (WHO), "[…] mental health is more than just the absence of mental disorders or disabilities" (WHO, 2018a). CC, then, recognizes and accounts for the science and research which shows, for example, that the presence of positive social relationships is as good or better a predictor of mortality and morbidity as smoking, alcohol consumption, or physical activity, among other commonly associated risk factors (Holt-Lunstad et al., 2010). These perspective shifts expand the purview of our analytical lens to include broader, more nuanced contextual information with which to intervene in communication ecologies, with the view that mental health is inseparable from social and physical contexts. This comprises one of the core concepts of the Communication for Whole Health framework (CWH), elucidated in detail elsewhere (Parrish-Sprowl et al., 2020). Emerging from this framework is acceptance of the notion that "We *all* have mental health" (Parrish-Sprowl et al., 2020, para 31), a substantive departure from how the discipline of psychiatry has used the binary states of being "mentally ill" vs. "normal" as the determinants for defining mental health discourse for decades (Westerhof and Keyes, 2010).

The Communication Complex perspective also shifts notions about what counts as an intervention, suggesting that "Every interaction is an intervention" (Parrish-Sprowl et al., 2020, para 1). From this vantage point, interventions in this paradigmatic milieu focus less on generalizability or top-down messaging, and instead recognize the emergent nature of our health and wellness at the intersection of multiple, fluid, and dynamic processes as they shape the context across time. This leads scholars to a different understanding of what comprises an intervention—suggesting that we move from the production and application of pre-made interventions *into* systems (Hawe, 2015) to thinking in terms of context-sensitive efforts conceptualized instead as emergent "interventions-*in*-systems" (Lennox et al., 2021, p. 11, italics added). In other words, by attending to the communication process and focusing on interactional patterns, practitioners can work to perturb existing patterns and make systemic changes from *within* a given context (Parrish-Sprowl, 2014). The body of literature reflecting the CC perspective and complexity-informed approaches in action is growing (for examples see WHO, 2015; Deason, 2020; Parrish-Sprowl et al., 2020; Lamb, 2021; Rascon, 2022). The current study aims to expand this literature further and acknowledge the call for a paradigm shift with its complexity-informed exploration of

discourse related to mental health and service availability at universities in three countries to bring global perspective to the conversation.

Country contexts

There are similarities and differences between the conceptualizations of mental health in each of the countries included in this study. This section briefly outlines the economic, social, and political framing of mental health in each country to set the context before moving into the analysis later in the paper.

U.S.

Despite classification as a high-income nation and having the highest population of the three countries included in our study, the United States' expenditure on mental health is <0.05% of its total public health expenditures (WHO, 2018b). It is also the only country in our study that does not have a nationally socialized healthcare system under which mental health services would be covered. Instead, there is a single-payer system where insurance companies compete for business, and there is no requirement to carry personal health insurance (HealthCare.gov, N.d.). This leaves many without affordable access to mental health care.

There is an association of mental health issues with disability in the U.S. This is helpful in the sense that legislation such as the Americans with Disabilities Act of 1990 (ADA) offers protections for citizens, ranging from housing and employment to education and access to public services (Americans with Disabilities Act, 1990). However, the association of mental illness with disability can also be rather unhelpful in that it helps to perpetuate stigma about mental health and mental illness (Gabriel and Liimatainen, 2000). Furthermore, the language used to discuss mental health tends to be bound within the frame of illness and disorder (Bishop et al., 2014 provides a germane example). Despite these challenges, there is literature (outside the body of work representing CC) reflecting the connections between different domains of health (for an example, see Prince et al., 2007).

Poland

Poland has seen a shift toward national prioritization of mental health and related services over the last several decades, with a special focus on moving from hospital care to community care and from in-patient to out-patient clinics (Puzynski and Moskalewicz, 2001). The country's government expenditure on mental health is 2.6% of its total health expenditure, and it is ranked as a high-income country. Furthermore, Poland has a

socialized national health insurance program which offers full mental health coverage at point of service (WHO, 2018c).

Poland's legislation related to mental health began in the early 1990's with the Mental Health Programme and Mental Health Act, which work together to create a national framework for regulating mental health care (Gabriel and Liimatainen, 2000). The language used in Polish literature tends to focus on pathology and disorders (for an example, see Puzynski and Moskalewicz, 2001), with little attention to holistic approaches to mental health (for an exception, see Kluczyńska et al., 2019). The gap in years of publication between these two references (2001–2019) may indicate that the narrative is shifting to a more holistic concept of health over time, which is evidenced elsewhere in the literature and our interviews.

Indonesia

In Indonesia, mental health has become a national priority, with federal legislation passing in 2014 aimed at eliminating the practice of "pasung" (involuntary restraint of the mentally ill), among other provisions (Susanti et al., 2019). Additionally, there are substantial efforts to increase mental health literacy and decrease stigma, including developing interventions for young people (Brooks et al., 2019a) and even a privately organized, multi-day public mental health festival (Brooks et al., 2019b). Despite these efforts, the movement toward normalization and acceptance is in its nascent stages and faces many challenges, most notably stigma and lack of mental health services and related infrastructure (WHO, 2018d; Irmansyah et al., 2020).

With the second highest population in our study, and as the only country ranked lower-middle income, it is worth noting that the government's expenditure on mental health is 6% of its total health expenditure (WHO, 2018d). In 2018, the National Basic Health Survey found the number of mental health problems in people over 15 years-of-age increased from 6% in 2013 to nearly 10% of the population, with only 9% of patients getting access to medication (Indonesian Ministry of Health, 2018). Currently, mental health services throughout the country focus on rehabilitation rather than prevention and they are generally only available through existing physical health services.

Methodology

Participants

The researchers were fortunate to have the opportunity to collaborate on this study involving participants from three continents, representing a range of mental health discourses and social milieus. These participants and their affiliate universities represent a diversity of backgrounds and a wealth of lived experience ripe for exploration and study. This diversity, which includes a Global South country and a post-socialist nation, is a boon to the breadth of our analysis.

Participants for this study were recruited via a mix of purposive, convenience, and snowball sampling. First, we reached out to students and faculty we already knew; subsequent participant suggestions were offered by some interviewees, and we followed up with those individuals. A total of six individuals were interviewed from Indiana University—Purdue University Indianapolis (IUPUI, U.S.): five students and one faculty member. Four students were interviewed from the University of Wrocław (Poland). Four students were interviewed from the Universitas Dian Nuswantoro (Indonesia) as well as one public primary care provider (PCP) in a sub district of Semarang near the university; this individual has been tasked with handling mental health issues in this community in lieu of other services in the area (including the university). Three of the participants interviewed from the University of Wrocław were international students: one from Egypt, one from Guatemala, and one from Azerbaijan. This is important because this university has a large population of international students, and these interviews provided some insights about mental health in increasingly globalized societies.

Inclusion criteria were broad: participants were required to be 18 years-of-age or older and affiliated with the university (i.e., faculty, student, or graduate). We chose to include the PCP in Semarang when we learned about the lack of other services in the area, despite their indirect affiliation with the university. We did not record demographics data, i.e., gender identity or age; all participants were vetted in the recruitment process to ensure their affiliation with the universities. This allowed us to remain focused on the relevant issues of the study as it pertained to university services. All participants received informed consent documentation via email ahead of the scheduled interviews as outlined by the IRB approved exempt protocol for this study (IU Protocol #1905754492).

Online access

Prior to conducting interviews, we explored the accessibility of mental health resources to participants via each university website. We compared the accessibility and promotion of services on the websites of the three universities included in the study as part of the larger context in which these conversations took place.

Interviews

We conducted semi-structured qualitative interviews, which ranged in length from about 30–90 min. Participants were asked about the following topics: the availability of mental health services at their affiliated universities; the relationship between mental health and their overall health and well-being; and the dominant social narratives regarding mental health (i.e., are

people talking about mental health? How, and with whom? What are they saying?). Follow-up questions were asked as they organically emerged during the flow of conversations and differed slightly depending on the context of the individual interview. One topic that came up in the first interview and subsequently became standard in following interviews was how participants define mental health.

Interviews were conducted remotely because they all took place during the COVID-19 Pandemic. Interview conditions varied, as mediated by technology availability, mask wearing, and language proficiency, among other factors. As such, some interviews were recorded and transcribed while others relied on thorough field notes. Notes taken during the interviews by the interviewer/s were included in the analysis.

All interviews with participants at the universities in the U.S. and Poland were conducted in English by the first two authors. The third author conducted all interviews with participants from the university in Indonesia in the Bahasa language, translated their summarized field notes into English to be shared with the other authors in electronic form, and discussed their findings in multiple meetings with the other two authors. The analysis of data was carried out primarily by the first two authors.

Analysis

A constructionist method to thematic analysis involves searching across data to examine the ways in which events, realities, experiences, etc. constitute the range of discourses operating within society (Braun and Clarke, 2008). After familiarizing ourselves with the data set, we created codes representing a feeling or idea expressed in the interviews. Nine key codes were formed and then grouped into three themes. The "keyness" of a theme is not wholly dependent on quantifiable measures; rather, it hinges on whether it captures something important in relation to the overall research and reflects the salience of the participants' lived experiences (Braun and Clarke, 2008).

Importantly, themes were reflexively analyzed as being socially constructed, taking into account the researchers' own active roles, perspectives, and assumptions, rather than treating themes as objective data to be "found" (Mauthner and Doucet, 2003; Braun and Clarke, 2008). Given that we used a particular theoretical framework through which to view and analyze the interviews and literature, this research falls into their "latent thematic analysis" category, because "[…] the development of the themes themselves involves interpretive work, and the analysis that is produced is not just description, *but is already theorized*" (Braun and Clarke, 2008, p. 13, emphasis added). Our goal was to explore the relationship between mental health services and how people talk about mental health,

starting in the college setting and extrapolating to the larger social discourse.

Results

While this study began as a fairly straight-forward exploration of service availability at three universities, it quickly evolved into discussions regarding the nature of mental health itself, where we questioned epistemologies regarding what counts as mental health, and thus what counts as services related to mental health. For example, when we asked about mental health services at each campus, participants were quick to instead share their own monologues and experiences with stigma, family history, mental illness, and medication, as well as service utilization and more. As mentioned above, definitions of mental health proved to be key to these discussions. In keeping with literature on complexity in health systems, we found that there is no simple nor linear path to understanding people's lived experiences with mental health and related services (Wilson et al., 2001; Rutter et al., 2017; Greenhalgh and Papoutsi, 2018). Another key finding is that current literature and research on mental health most often seeks to explore these issues from a pathological/biomedical model—and this holds true across all three countries we investigated. For examples see Kluczyńska et al. (2019), Irmansyah et al. (2020), and Palumbo and Galderisi (2020) (Indonesia, Poland, and the U.S., respectively).

In this section we report the general results of the interviews and website analysis grouped first by country, to set the context, and then by themes. When appropriate, we include quotations from our participants presented in block quotation format. Given that most of our participants do not use English as their first language, and some are derived from field notes instead of exact transcriptions, we have edited the quotes for clarity, hence the inclusion of ellipses and brackets.

IUPUI (U.S.)

The nexus of mental health services on this campus is Counseling and Psychological Services (CAPS), which offers individual and group therapies, psychiatric/medication services, a 24-h suicide hotline, mindfulness workshops, and more. Many services are free of charge, or priced affordably— e.g., after six free individual therapy sessions there is a charge of $10 per session (IUPUI, n.d.). At the time of data collection, to access this information from the main university page[1] one must click the "Jaguar Life" subheading, choose "Health and Wellness" in the left sub-menu, scroll

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1   https://www.iupui.edu/

down to click the "Health and wellness for the mind" section of this page, then scroll again to click the "Learn more about CAPS" button. Interestingly, the site very explicitly links mental and physical health and places this information under Health and Wellness. This reflects a particular set of social constructions of mental health, which we will discuss further below.

Participants affiliated with this university generally had awareness of these services. However, they did not all seem to know the extent to which they could benefit from these services nor necessarily agree that they are helpful. One participant lamented that in lieu of therapy they were sent to yoga, which they viewed as recreational more so than therapeutic. This indicates that some potential service users may socially construct therapy as a service while discounting the utility of other, more holistic approaches to health.

> *I don't think they really have a lot of options for students. [...] There's a really long waiting list [for individual therapy]. I got funneled into a group yoga session instead.*
> **Student from IUPUI**

As mentioned earlier, the U.S. does not have a national or socialized healthcare system. Not surprisingly, health insurance coverage factored into discussions with participants from the university in the U.S. It was a stressor for students in our study, and some even discounted service utility based on their perceptions of insurance coverage, indicating a lack of literacy regarding the university services and their associated costs. Although the U.S. allows people to be covered by their parents' health insurance until they are 26 (HealthCare.gov, N.d.), this does not guarantee coverage, depending on the parents' situation.

> *I saw a lot of signage about the availability of counseling services [at the university…] I see a lot of emails that mention it [...] in my mind, I go to "Oh I probably don't have the insurance to cover it anyway."* **Student from IUPUI**

The faculty member interviewed from this university confirmed that students see health insurance as a barrier to service access. They also mentioned the scope of their expertise in assisting students as a source of tension for both faculty and students. Given the apparent disconnect between availability, awareness, and utilization of mental health services, many students go to faculty to confide in or seek advice in lieu of utilizing CAPS or other services.

> *Students come to me for help. I do not have a counseling degree. I cannot provide clinical support for students. [This] protects the teacher and the student.* **Faculty member from IUPUI**

University of Wrocław (Poland)

At the University of Wrocław, all participants stated that they were unaware of any specific resources for students regarding mental health, except for a mention of an email that referenced psychological services for those with disabilities or "especially bothersome levels of stress". One participant pointed out that there was no mention of mental health or psychological services during orientation, nor in the health insurance information for the program they studied under.

> *I don't think this exists on campus as a general resource.*
> **Student from the University of Wrocław**

However, the university regulations state that students may receive psychological consultation up to three times per semester, which "do not constitute therapy" (Wiszewski, 2020; p. 8); the page for international students mentions it briefly as well. These services are free to students (Uniwersytet Wrocławski, n.d.).

At the time of data collection, to access this information from the main university page[2], one must click the "students" subheading, choose "disabilities", and scroll down to click "psychological counseling center". Alternatively, under the "studies" drop down at the top of the page there is a listing for "persons with disabilities", then scroll to click "psychological counseling center". Of note is the fact that the psychological counseling center is housed under the "students with disabilities" section of the site, and uses language such as "problems", "coping", "difficulties", and "fear" (Czapiga, n.d.).

As mentioned earlier, Poland does have a nationally socialized healthcare system, and international students benefit from this upon entry to the university. Some participants regard this system as slow and cumbersome, however.

> *If you need help you need it now [...you] have to wait in a long queue for socialized/state run services.* **Student from the University of Wrocław**

Participants mentioned that students, and international students in particular, are under immense pressures and likely all feel stress at many points during their education. Despite these pressures and reported prevalence of mental health issues, they made it clear that stigma highly influences the way students talk about mental health, and concordantly what steps they are likely to take (or not) to promote their own well-being. Although stigma factors into discussion with all participants, it was especially prevalent in discussions with Polish interviewees, and it frequently shows up in the literature—which may impact

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2 https://uni.wroc.pl/en/

use of services and overall trajectories of discussions involving mental health (Switaj et al., 2012).

> *There is definitely a stigma- as an adult, the decision to go to therapy is a hard decision.* **Student from the University of Wrocław**

For international students, stigma emerges at the intersection of their home country's cultural notions and Polish constructions of mental health and illness. All interview participants from the Polish university used the words stigma and/or taboo at some point during the interviews. It was also quite common to hear the words "crazy" and "insane" when referring to anyone who may seek mental health services. One interviewee even framed their impression of the Polish storying of depression this way, suggesting a mock narrative where people say:

> *"You're lazy, just do the things you need to do."* **Student from the University of Wrocław**

Similar to participants in the U.S., students at the university in Poland mentioned confiding in faculty as a preferred option to talking with "some random person", i.e., a therapist. Many suggested that conversations about mental health should be reserved only for the most trusting relationships.

> *The support was more community-based, embedded in the network of the relationships in the university setting. [We] mostly had a lot of support from the professors.* **Student from the University of Wrocław**

University Dian Nuswantoro (Indonesia)

At the time of data collection, the Universitas Dian Nuswantoro website[3] did not provide any information regarding mental health services or resources, and indeed the university appears to have no such services or resources available to offer. The closest thing to a service for mental health in the area is a primary healthcare provider (whose background is nurse surgery), who only started offering services as of 2020. As noted above, these services, embedded in a standard clinic, are focused on rehabilitation rather than prevention.

> *There are no services in college that help students dealing with their emotions that can be[seen as] mental disorder. The college needs to have services about mental health.* **Student from Universitas Dian Nuswantoro**
> *There is no available psychologist in the PCP [...] I have to learn by myself about mental illness and there was no special*

> *training I received to handle the program [...which] focuses on how to handle mental illness patients, what to do if the patients can't handle their emotion and start to endanger the family, etc.* **PCP in Semarang**

It is clear from both the literature and participant interviews that the stigma surrounding mental illness is quite influential in Indonesia. Only one participant from this university had ever sought mental health services despite many participants sharing that they had mental health concerns, ranging from depressed mood or insomnia to suicidal ideation. The primary reason stated for avoiding mental health services was stigma. As if to illustrate the power of this barrier, this participant used online consultation and gave a fake name to the psychologist to protect their identity. In general, it seems that mental health has not permeated Indonesian culture as a normalized topic of day-to-day conversation. However, with the aforementioned efforts and some help from globalization (especially the internet), there seems to be hope among participants that people will continue to talk more about mental health in ways that promote acceptance and thus do more to maintain their well-being.

> *Luckily, right now so many actresses on Instagram are open about their mental health condition and encourage people to be more aware about mental health.* **Student from Universitas Dian Nuswantoro**
> *I decided to seek health information through the internet and watching films based on true stories so I can feel that my problem isn't such a big problem at all.* **Student from Universitas Dian Nuswantoro**

Themes

Our interpretation and analysis of the interview data is further grouped into three broad themes: *Defining mental health*, *Stigma*, and *Self-care vs. Services*. Participant quotes are offered to demonstrate examples of the data from which our interpretive analysis drew for the construction of themes.

Defining mental health

Throughout our interviews we found it increasingly difficult to ask students about mental health services if we did not first ask how the interviewees defined mental health. Often mental health and mental illness are used interchangeably, and it is rarely acknowledged that "[...] everyone *has* mental health" (Parrish-Sprowl et al., 2020, abstract, emphasis added) regardless of whether they have a diagnosis of any mental disorder. Many articles use mental health as a defining factor for behavior (Johnson and Possemato, 2019), but clear definitions of mental health are hard to find outside of the WHO.

Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community. (WHO, 2018a)

Furthermore, the American Psychiatric Association does not define mental health in the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5), though it is summarized as "[…] an effort by hundreds of experts in all aspects of mental health" (American Psychiatric Association, 2020). In addition, seven of 15 interviewees mentioned a mental illness or explained mental health as the absence of mental illness when asked.

Mental health is closely related to depression and crazy […]it is a health problem relating to mental status. **Student from Universitas Dian Nuswantoro**
The complete balance of how thoughts, well-being, and contentment relate to where you want to be and how you move through life […] definitions vary wildly! It's not empirically observable, per se, despite the fact there are, somewhere, textbook definitions. **Student from IUPUI**
It's your work to do as an adult person to be able to know you and to be just with yourself and take care of yourself. **Student from the University of Wrocław**

The constructs of mental health and illness can be confusing, and individuals generally have low levels of literacy (Flood-Grady et al., 2019). The three groups of participants had wildly varied definitions of mental health, and many struggled to come up with an answer for several moments when prompted to offer a definition. Though mental health is an integral part of whole health (WHO, 2018a), only two interviewees made a direct link between physical and mental health in their definitions.

The link between physical and mental health, between body, space, and their interactions reflect how we think of ourselves. **Student from IUPUI**
Good mental health contains self-reflection, yoga, meditation, […] taking time to reflect on things that happen or didn't happen, all of these have profound impacts on our mental health. **Student from IUPUI**

Stigma

All 15 participants brought up stigma. Stigma surrounding mental illness and mental health services has become a common topic in the media and daily discourse. Many of the participants were concerned mostly with judgment from friends and family.

I often feel confused, empty, and unclear. When doing things I like, [such as] hanging out with friends, I get sudden feelings of sadness and loneliness. I want to talk to my parents, but I feel like a burden or that it is meaningless. What makes me not brave enough to go to a psychiatrist is that I worry my family will be disturbed by my condition and I am afraid of judgement from my friends. **Student from Universitas Dian Nuswantoro**

Television and film representations of mental health disorders are more common in recent years, and media representation matters (Flood-Grady et al., 2019). Representation can help alleviate stigma by normalizing conversations and behaviors regarding mental health interventions. Showing authentic experiences and realistic depictions of mental health helps to mitigate the pressure of stigmatization and stereotyping (Flood-Grady et al., 2019). It is notable that eight of the 15 participants mentioned specific television shows, films, or some source of media when storying their mental health experiences. While many attributed their knowledge of mental illnesses to identifying with the stories of fictional characters, some also explained that the "watering down" of certain diagnoses in media portrayals invites others to do the same, which can be damaging to stigma elimination efforts. Several participants described the diminished understanding of disorders (such as anxiety and depression) and self-diagnosing as inappropriate for those who struggle daily with such disorders.

The overuse of words like insane, crazy, depression, etc. devalues words and then hurts those who may "have issues" making conversations about mental health more difficult. We just throw these words around which can muddy the waters. **Student from the University of Wrocław**
There is a big difference between having anxiety before public speaking and anxiety disorder. The lack of common knowledge perpetuates this watering-down of diagnoses. People throw terms around loosely which doesn't give credence to more serious issues. **Student from IUPUI**

Throughout the interviews, many participants mentioned their observations that although social narratives appear to be shifting toward preventive and preemptive care in the world of physical well-being, that same shift has yet to happen in discourses of mental health and mental well-being. For example, the family setting is often the foundation of sense-making about mental health and illness and their complexities—but families often communicatively reinforce stigma in order to distance themselves from the influences of stigmatization and stereotyping (Flood-Grady et al., 2019). Not surprisingly, this can have systemic influence on social discourses and alienate people further from friends, classmates, and other family members.

> *Some friends in college noticed I have an emotional disorder, but the friends do not really help, sometimes I feel judged.* **Student from Universitas Dian Nuswantoro**

Meanwhile, participants suggested that mental health professionals are improving at talking about mental health as a constant state of fluidity as opposed to a sickness vs. wellness binary, but this is not the dominant discourse yet. In relation, the kind of resources available are primarily resources that are associated with the limitations of the existing healthcare system. The current biomedical focus means we have a system focused on sickness, as opposed to one focused on wellness. As a result, we are taught to seek resources or medical help only after our situation becomes unbearable, as opposed to acting systemically and preventively. Put in simple terms, if we pathologize mental illness like we do physical illness we will seek treatment as such, i.e., once we are already feeling enough symptoms for the situation to become problematic.

> *It must be really bad before you do something about it.* **Student from the University of Wrocław**

Self-care vs. services

Originally our goal was to illustrate the availability of mental health services on university campuses. However, the notion of resource availability was not greeted with much detail or enthusiasm. The conversation fell short or fully stopped, which reflects the importance of strengthening these communication ecologies. As the interviewees told us briefly if they knew about on-campus services, few of the conversations went beyond simply listing these resources. Usually, interviewees lost focus and often the conversation evolved into participants recalling personal stories regarding services they had used in the past. The lack of discursive resources made it hard to talk about mental health services and stunted our conversations surrounding mental health. When we asked participants to tell us about services on their respective campuses, we were ignoring the fundamental issue of defining mental health. People get caught up in language games that hinder engagement with these discursive resources.

> *Looking at the whole system […] it's so much easier to find medication than to connect to a therapist, let alone a therapist you even like.* **Student from IUPUI**
>
> *As an adult the decision to go to therapy is a very hard decision […] I am more ashamed about my mental state than I am about going to therapy, but it is not the same for my friends. They will wait to have a [mental] breakdown before asking for help.* **Student from the University of Wrocław**

While many participants acknowledged existing mental health services, only one stated they were utilizing services at the time of the interview. However, all 15 participants reflected that they engage in self-care to stay mentally healthy, suggesting that they take a holistic approach. Participants talked about being deliberate and intentional with a healthy lifestyle to cope with everyday stressors and although practices varied per individual, the goal was the same—greater well-being.

> *I prioritize eating healthy and hot yoga […] sleep, waking up on time, medication, and I make myself get up and move—however, just giving myself the benefit of the doubt has been really transformative.* **Student from IUPUI**

Often, participants conflated the availability of mental health resources with the availability of medication. Interlinking the two, many of them could not speak of mental health and self-care beyond terms of medication. However, we found differences in stigma and stories regarding the use of medication in different countries. For example, participants from Indonesia—facing a lack of appropriate services—turned to medications easily and faced few barriers to getting ahold of them. Participants in Poland, however, seemed to fear the use of medication, citing stigma as a major barrier to accessing this resource.

> *When my mood is really bad, I take a sleeping pill […] I get the medication from the pharmacy and I do not need a prescription, I just tell the pharmacist I have insomnia.* **Student from Universitas Dian Nuswantoro**
>
> *Meds are very uncommon here; I think Poles are afraid of medication and their family doctors are not prescribing. You must go to a psychiatrist if you want medication for a mental illness, but we know the stigma there.* **Student from the University of Wrocław**

Discussion

Overall, our analysis of the interviews and literature yields a complex, seemingly contradictory picture of discourses regarding mental health and concomitant services. On one hand we see issues like stigma preventing participants from acting to ameliorate their suffering, while simultaneously lamenting that people tend to wait until they have a problem to do anything about it. Furthermore, we see that participants want to normalize talking about and tending to mental health—while often defining mental health only in terms of illness. There is little agreement about what counts as a mental health service, or indeed at what point services should be sought and how preventive care factors into this process. These and other tensions reflect shifting paradigms and the unfolding of "New ways of talking about a problem with old (i.e., foundationalist)

implicit assumptions still apparent to varying degrees" (Parrish-Sprowl et al., 2020, para 13). Communication Complex offers a framework for thinking about these issues with more depth, inviting us to embrace the messiness and complexity of the real world in order to account for our lived experiences in a more holistic way. What this looks like in practice will vary based on what is needed in any given context, meaning an intervention should be constructed in real-time, from within the appropriate context, in tandem with those who will benefit from its implementation.

Perhaps the obvious recommendation for universities is to bolster their mental health services and increase awareness of them throughout the student body. This is certainly useful. However, this tracks with interventions within existing, reductionist paradigms—which tend to be reactive, ad hoc, top-down, message-focused, and unable to address the constraints of lived experience. The experience of one of participant, who studies in a social work program, offers a pressing example of these limitations.

> [The] program talks about self-care all the time but there doesn't seem to be time built in for that with all the expectations! We had whole sessions to remind us to practice self-care but all they did was talk about self-care rather than actually teaching skills, or allowing actual time to practice it. **Student from IUPUI**

This participant highlights how systemic issues such as time constraints and lack of specific resources prevent students in this program from practicing the self-care that they are repeatedly told they need. Clearly, the effort to educate students in this program using a message-focused approach fails to account for the constraints inherent to the design of the program itself. It also fails to recognize that the design of the program contributes to the stress of students in the first place. This mirrors the larger, societal discourse and structure as undergirded by reductionist thinking. Increased awareness is a necessary but not sufficient condition for service utilization, regardless of what form the service takes—whether it be a formal therapy session or advice embedded into programming.

The participant in the above example recognized the need for systemic changes that account for the individual in the larger context—to include expectations in their personal life, time and stress management, dealing with secondhand trauma and burnout, and reducing stigma, among others. These suggestions resonate with a complexity-informed approach to managing our mental health and reflect our intuitive, daily lived experiences. One interviewee talked about going home from the gym with higher levels of serotonin but arriving at an empty home and facing feelings of loneliness— pointing to the importance of community and the inextricably interlinked individual and social dimensions of our health. Universities would do well to recognize this need for systemic change too,

and to consider how students can be best supported across all the domains of their lives. Service provision is only one part of a systemic approach to mental health, let alone whole health. For example, several participants mentioned turning to faculty (often untrained) for mental health support. Certainly, universities should train faculty to better respond to student needs and appropriately refer them to professional services. However, even when services are available—and folks are aware of them—there is a gap in utilization, often due to stigma or trust issues. We need to expand our lens to include the classroom, student orientations, text on university websites, and beyond, to foster communication ecologies that treat every interaction as an intervention. In this way, we can embed mental health as a social practice in our everyday processes of communication, rather than pathologizing individuals and continuing to ignore problems until they get out of hand.

It is important to consider how our language use reflexively constructs our experiences of mental health. The different ways people talk about mental health create certain stories, and as these stories become perpetuated and then reified in our societal discourse, they form the foundation of what we think mental health "is" and thus how we manage it (Pearce, 2009). For example, the U.S. National Institute of Mental Health (NIMH) positions itself as "[...] the lead federal agency for research on mental disorders," and uses the motto, "Transforming the understanding and treatment of mental *illnesses*" (National Institute of Mental Health, 2022, italics added). Despite the name of the organization, it is clear that the biomedical paradigm shapes their work such that they focus explicitly on mental illness. This is just one example out of many in our data that shows how difficult it is to talk about mental health without the constraints of normalized language that is couched in the concept of illness.

We argue that this is a massive hindrance to progressing our understanding and management of mental health and mental illness. This is not to devalue the impact of mental illness— as mentioned above, participants in this study were keen to point out that conflating relatively normal, daily stress with more intense and long-term illness is not helpful (and we agree). Mental illness is not to be taken lightly, and its effects are quite real and can be devastating. However, as the old saying suggests: "If all you have is a hammer, everything looks like a nail" (most often attributed to Maslow, 1966). In other words, if we only speak of our mental health in terms of illness and disorders, we relegate it to the world of illness and disorders, and thus limit our perspective and exclude the possibility that mental health can be treated as more than illness, disease, and disorder.

> Sometimes we overuse some language, which doesn't mean directly what it's supposed to mean, and it makes the conversation about mental health more difficult [...] on the one hand we use some words, like, too easy. On the other, some words have too much volume, [...] I think maybe that's

> *one of the reasons why people tell people with depression "just wake up and do your things, you're lazy."* **Student from the University of Wrocław**

In response to the NIMH motto quoted above, we ask: What if instead we seek to transform our understanding and treatment of mental *health*? We believe this transformation should start with communication. In part, this is because communication is bioactive and systemic (Parrish-Sprowl et al., 2020). This process starts at birth, meaning we have a lifetime of conditioning to think of things in particular ways. This conditioning forms our neural networks; as we repeatedly experience conversations, stories, and narratives regarding mental health (or any topic) they become instantiated in our neural firing through experience-dependent plasticity (Siegel, 2012; Cozolino, 2014). In other words, our brains are literally wired by the social narratives we are enmeshed in to think about the world in certain ways, meaning that how we talk with one another shapes our brain structure, which in turn influences how we talk with one another. When we interact using the dominant language that pathologizes each other, then react to the stigma attached to the illness we perceive people to have, we are perpetuating the association of negative emotions with mental health. This gives rise to social structures that reify the need for our constructions in the form of diagnoses, medications, and insurance codes—all of which exhibit a downward causation that limits our awareness of other possibilities for how to move through the world (Wendt, 2015). For example, the fact that the clinic at the University of Wrocław and its services are associated with disability and coping is a powerful indicator of how mental health is socially and culturally constructed in Poland.

However, if we change the narratives to shift both what we are saying and how we are interacting with one another, we can rewire our neural networks at the individual and societal levels and begin to shift everything from how we feel, think, and speak about mental health and illness, to health care policy, to what we count as a mental health service at the local or even global level. This could improve well-being at the level of the individual, as well as systemically with greater access to healthcare services that better fit the needs of populations—because they are reconceptualized according to how they might better suit the context. Defining mental health in terms of disorder, disease, or pathology does not acknowledge that much like physical health, everyone always has a state of mental health—regardless of the absence or presence of a particular illness. By challenging participants to define mental health we co-created discourse that ultimately reflected the lack of consensus on what mental health actually "is" without the need to filter our stories through disorder-oriented language.

The idea of stigma seems to be the least impactful in the U.S. narratives surrounding mental health, and perhaps accordingly the university (IUPUI) appears to have the most holistic approach to mental health care. From the language used on the website to the services offered on campus, progress has been made in moving away from the biomedical paradigm toward a more complete understanding of wellness. Although the word stigma came up the least in our interviews with participants from the U.S., the concept still proved to be a major theme in these discussions; its influence on conversations regarding mental health may be waning. Participants acknowledged that people are starting to talk more openly about mental health, stigma, and services—but it is not yet enough to fully normalize conversations that have positive influence on cultural conceptions of mental health.

> *The way we talk about mental health has definitely changed—it's almost a norm to be on medication [...this is] not a good thing.* **Student from IUPUI**

However, participants also made it clear that more systemic changes are needed at the university and social levels to actualize a better system of care. When comparing the narratives and university services across all three countries, there is a striking correlation between the discussion of stigma and the way mental health and illness are treated in the form of university services. Our analysis suggests that stigma is highest in Indonesia, lower in Poland, and perhaps the lowest in the U.S. Concomitantly, as the stigma decreases, social acceptance of seeking services seem to increase—and the way the services are presented shifts toward a more systemic, complex view of how to manage mental health. As suggested earlier, the stories told about mental health are constitutive of the foundation upon which a society's approach to services is built. Interview participants in Poland and Indonesia were particularly quick to mention medication, stigma/social ostracism, and other unwanted possibilities of seeking services; these conversations quickly diverted from the questions asked about services to focus on these other issues. This may explain why so many participants focused on self-care instead of engaging services; self-care in most forms is inexpensive or free, available without an appointment, and can be practiced in private. It does not generally require health insurance and likely has no stigma associated—depending on the nature of the behavior (i.e., excessive comfort eating may be less socially acceptable than yoga, not to mention less healthy). The many factors discussed by participants are barriers to effective service access or provision, suggesting the utility of change throughout many layers of the system before mental health care services can be tended to more directly. One such change could be reflecting the language of mental health promotion (as opposed to mental illness reduction) on the websites of the universities. Small changes such as this can have widespread, systemic influence which can lead to bigger changes throughout societies.

Universities, and perhaps any organization, can benefit from embracing the paradigm shift discussed in this paper. However, in conceptualizing mental health and services as complex systems and interrogating the relationships between the many parts and the whole, some may feel overwhelmed by the magnitude of the changes they see fit to enact. While this is understandable, it is not insurmountable. For example, Parrish-Sprowl et al. (2020) made great changes in an incredibly resource-limited setting by collaborating with local stakeholders to engage many complex layers of communication ecologies while operating under the notion that "[…] every interaction is an intervention" (para 1). Given what we know about the nature of change in a CAS, we can turn our attention to meaningful, collaboratively designed, context sensitive "interventions" ranging from changes in the conversational strategies found between providers and patients/clients, to simply changing how we use (or don't use) words such as "depressed" in daily life. When we treat every interaction as an intervention, we are all—as agents in interlinking systems of systems—empowered to make collective changes that can add up to more than the sum of our individual contributions.

Conclusion

The implications of this research support the notion that a shift in thinking is needed as discussed throughout the literature (Carey, 2013; Greenhalgh and Papoutsi, 2018). While we are clearly not the first scholars to suggest this, the current paper argues that, generally speaking, people understand that how we talk about mental health matters. We conclude with questions for thinking about the future of mental health, inspired by our interviews: What if mental health services were reconceptualized (along with definitions of mental health) to be ongoing, embedded, systemic, and dynamic? What if a yoga class counted a service relating to our mental health that was covered by insurance? What if we accepted that our social connections are integral to our overall well-being and curated a communication ecology that supports our mental health, rather than focusing on mental illness? What if we tended to our mental health like we care for our physical health? In embracing complexity in our approaches to answering these questions, the prospects for our future are myriad and exciting.

We choose to pose these questions as an invitation to others to embrace a new paradigm for a few reasons. First, the content of the questions does reflect recommendations (e.g., we do urge others to broaden their discourse regarding mental health beyond illness), but *what this looks like in practice* will inevitably vary in different contexts. Also, these questions reflect the paradigm in motion as it unfolds—we really cannot know what some of these shifts will entail. However, given the scientific grounding of the CC perspective and its growing

body of literature reflecting successful application, we have good reason to believe that making these changes in our thinking is likely to show favorable results. Lastly, a complexity-informed, quantum paradigm accepts that the world operates in terms of probabilities, not certainties, and our efforts are often met with unpredictable results. Thus, we must remain curious and flexible in how we approach perturbing patterns, always questioning what works, for whom, and in what contexts (Pawson and Tilley, 1997).

This study has a few limitations. Although we did not collect reportable demographic data, our participants hail from diverse backgrounds; however, a greater range of ages and better distribution of genders, including folks identifying outside the gender binary, could expand the range of application of this knowledge. Also, it would be useful to hear from more faculty at the different universities in the study, or even expand this line of inquiry to other universities and other countries. Furthermore, a larger sample size could increase the depth of analysis and breadth of application. Finally, complexity-informed research in its current state is still somewhat nascent, and thus more research could help us to better understand the benefits of embracing this paradigm shift.

Despite its limitations, this study contributes to the field of health communication in several ways. To our knowledge, we have conducted the first study of mental health care services on campuses using a complexity-based approach. As supported by our findings, and other similarly framed research cited herein, we suggest that complexity-informed approaches allow a deeper, more nuanced exploration of many of the interlinked parts of the whole system. These participant interviews offer many salient examples demonstrating that the ways we talk about mental health are constrained—so much so that in our attempts to discuss service availability our conversations quickly derailed into focusing on many perceived negative or unwanted effects of seeking services or sharing mental health concerns with friends and family. We argue that we must evolve beyond the use of illness language and narratives if we are to shift our thinking and social structures to support greater overall mental and physical well-being. Our theoretical approach calls for a greater understanding of mental health services *in context* and begs that we move beyond reductionist ideals to encompass broad possibilities for health care and health services. Empowered by the notion that every interaction is an intervention (Parrish-Sprowl et al., 2020, para 1), we suggest that it is imperative to shift our focus from the individual as a bearer of pathology to a more complex and systemic view of our communication ecology that allows us to craft daily conversations that support our mental health—from billboards to board rooms, from clubs to clinics. The lived experiences of participants attest to the shifting social norms and the positive outcomes of these changes—yet remind us that there is much to be done.

Data availability statement

Ethics statement

The studies involving human participants were reviewed and approved by Institutional Review Board at IUPUI. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

Author contributions

JW and TL conducted all interviews with participants affiliated with the Polish and American universities, and SH conducted all interviews with participants affiliated with the Indonesian university. JW and TL prepared the original manuscript, with conceptual feedback, and additional support on the sections regarding the Indonesian context from SH. JW prepared all revisions for publication. All authors contributed to data collection and literature review.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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