

Designing for Logic Hybridity in New Service Development: A Case of the Estonian Youth Mental Health Systems

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Abstract

Amid the shift to embrace systems thinking within service design, there is often a tendency to reduce many coexisting systems into one. This paper builds on recent literature that calls for a more mindful approach to working with plurality amid and between systems in service design. Using a research through design approach in the context of Estonia youth mental health systems, this paper presents a framework for holding onto the tensions that arise between multiple logics in new service development and maintaining logic hybridity in the service design process. By exploring how such a framework informs service design decisions and its implications, this research offers inspiration for thoughtfully negotiating plurality in practice.

Keywords: service design, institutional logics, plurality, logic hybridity, new service development

Introduction

Service design is increasingly understood through a more systemic perspective (van der Bijl-Brouwer, 2022; Sangiorgi et al., 2018; Vink, Koskela-Huotari, et al., 2021). However, when adopting such a perspective, scholars and designers alike often refer to working with *the* system (singular). It becomes a goal in service design to transform “*the* service system” or realize “*the* desired system”. At the same time, there is also growing acknowledgement of the need to work sensitively with plurality, or the coexistence of different realities, in service design (Duan et al., 2021). Scholars acknowledge the multiplicity of service systems within a given context

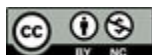
(Sangiorgi, Patricio & Fisk, 2018) and highlight that these coexisting systems often have very different organizing principles or underlying rationales that guide people's thinking and acting, referred to as 'logics' (Sangiorgi et al., 2022).

When a singular notion of the system is maintained in service design, there is a risk that service design neglects differences across people, perpetuates dominant systems without critical reflection, erases systems that are seen as more peripheral, and ignores a host of possible resources (Vink, Nilsson, et al., 2021). It is recognized that working with conflicts across these system logics can support service innovation and system transformation (Siltaloppi et al., 2016). Thus, service design practitioners need to build a greater awareness of these taken for granted system logics and take a more critical approach to the ways that service design works within and across these many logics (Nilsson, Prakash & Vink, 2022).

In response, we take a research through design approach to investigate ways of working with plurality, through a focus on system logics within Estonian mental healthcare. This paper explores ways of working with logic hybridity and holding onto plurality during the process of developing a new service concept. We unpack the many logics at play within Estonian mental health systems and present the frameworks we developed to support service design decision-making and generative thinking regarding the service concept. This practice-based research offers a framework and strategies that other service design practitioners can learn from to support critical reflection on the ways that new service development reproduces and transforms system logics.

Theoretical Framework

Scholars have called for the field of service design to more carefully attend to the organizational legacies that shape people's current thinking and actions (Junginger, 2015). Zooming out from a focus on individual organizations, researchers highlight the key role of service systems—arrangements of multiple stakeholders and resources that interact to co-create value, typically well beyond organizational boundaries (Sangiorgi et al., 2018). Adopting a more systemic perspective, the understanding of service design has shifted from simply detailing the specification of service attributes to transforming the institutional logics within a given service context (Kurtmollaiev et al., 2018). Institutional logics are historical patterns of organizing principles or rationales along with related material practices that provide meaning to social realities (Thornton & Ocasio, 2008).

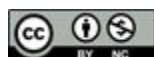


These established patterns provide a frame of reference for people in guiding their behavior and identities (Goodrick & Reay, 2011); for example, the identity of being a doctor may be grounded in a professional medical logic. Different institutional logics have contradictory practices and beliefs that are rooted in different spheres of social life, such as the market, the state, the family and so on (Alford and Friedland, 1985). This means that in a particular service context there are many logics with different, often conflicting rationales (Greenwood et al., 2011). While these conflicting logics can cause problems, service literature also highlights that these conflicts can be a source of innovation (Siltaloppi et al., 2016), and that there is the possibility for the coexistence of multiple logics (Jaakkola et al., 2019). There is recognition that doing service design requires mindful negotiation amid a multiplicity of institutional logics within different overlapping service systems (Nilsson, et al. 2022; Sangiorgi et al., 2022).

In particular, there is widespread acknowledgement of a plurality of logics in the context of healthcare services (Mol, 2008). Different institutional logics, such as those driven by the state or community, imply different logics of care that service design needs to work carefully with (Nilsson et al., 2022). In mental health care, the logics of the state, market, community and professions, have been highlighted as particularly prominent (Sangiorgi et al., 2022). Informed by work done on typical, widespread institutional logics in Western society (Thornton et al., 2012), the state sphere implies a logic based on democratic participation, bureaucratic processes and hierarchy. The market sphere implies a logic based on profit, competition, efficiency, self-interest and transactions. The community sphere implies a logic based on trust, reciprocity, solidarity and emotional connection. The profession sphere implies a logic based on professional education, training, expertise and association.

Each of these logics may imply a different way of caring within a service context. For example, the market logic may suggest individuals should be able to choose what is best for them, whereas the professional logic may imply the deep knowledge of an educated medical specialist is the best way to inform a care plan. Recognizing these conflicts, there have been a growing number of practices to explore related logics as a way of informing a more mindful service design process. For example, there have been approaches developed to unpack the influence of different logics within a specific service situation (Nilsson et al., 2022) or tools to track the strength of influence of different logics over the course of a service design project (Sangiorgi et al., 2022).

These developments in service design connect with calls for appreciating and respecting plurality in design more broadly (Escobar, 2018). Such aspirations build on the Zapatistas' vision for autonomous communities of "a world where many worlds



fit". This vision demands respectful negotiations and dialogue across differences without working toward sameness (de la Cadena & Blaser, 2018). One attempt at taking up this cause in service design has been through attention to the many institutional logics that service design works with and within. While the current literature provides a necessary understanding of the complexity of the service context, existing approaches have little to say about how this understanding of plurality can inform new service development and service design decisions amid this process. More research is needed to understand how to take a mindful approach to designing new services amid a plurality of logics.

Methodology

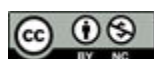
Research through Design Approach

In order to investigate ways of working with a plurality of system logics in service design, this project takes a research through design approach, which integrates the tacit knowledge of designing into design research (Frayling, 1993). Adopting a sequencing approach that is informed by theory from other domains (Redström, 2017), the design process focused on new service development and was informed by literature on institutional logics from the domain of organizational studies. The aim of this research was to simultaneously support thoughtful service design processes within the given context while contributing to the much needed theory building in design (Cash, 2020).

The project brought together a primary healthcare clinic and a local municipality in an attempt to leverage community resources typically not used by the healthcare sector. What resulted from the service design process was the incorporation of multiple logics in the development of this new service concept as well as the creation of tools and approaches to inform service design decisions amid a multiplicity of logics.

The role of service design in this case was intended to facilitate very early stage ideation for a service concept through a participatory process with the outcome of creating a prototype. By experiencing a simulation of the service concept, stakeholders are able to better understand potential challenges to enabling the idea prior to operationalizing (Alves et. al, 2013).

The ten-month project was led by three designers who played multiple roles throughout the project, including facilitating, leading, researching, and authoring this paper. The author team also included an external design researcher, who supported reflection on the design process and analysis of learnings.



It is important to note the designers were not neutral in their approach. The research methods, which were selected based on previous experience with participatory and co-design methods, heavily favors community logics. Key goals for the designers were to create cross-sectoral collaboration, interdependence, and choice for participants. The designers worked within several constraints, including: a ten-month timeframe and collaboration with the healthcare sector.

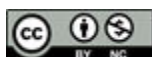
Project Context

Currently, there is a lack of mental health services for young adults, aged 16-26, in Estonia (Sotsiaalministeerium, 2020), even though young adults make up the biggest patient group seeking care for mental health (Eesti rahvastiku vaimse tervise uuringu konsortsium, 2022). According to a recent Estonian National Mental Health Study (ibid), one in every four adults has an elevated risk for depression and every fifth is at-risk for generalized anxiety disorder. Even more alarming, these estimates are substantially higher among young adults (ibid).

Increasingly, healthcare systems within Estonia aim to provide continuous mental health support for young adults. However, mental health specialists, whether doctors, nurses or psychologists, are in short supply in Estonia. Amid the context of underfunding, there is a need for Estonian healthcare systems to develop new models of care for mental health that are both low-cost and resource-efficient, while providing more comprehensive care.

Offering group-based services is one way to cope with a specialist shortage. However, group-based services, such as group therapy, are currently underused in Estonian primary healthcare clinics. System stakeholders attribute this to a lack of funding, space and staffing, specifically related to coordination and administration. Additionally, peer counseling is typically a volunteer or private service, and is not funded by the Estonian Health Insurance Fund (Kogemusnõustajate koda, 2022), resulting in a limited impact.

Throughout the last decade, various service design projects have emerged to address challenges within Estonian healthcare systems. For example, design professionals and students have been involved in creating patient-centric treatment journeys, for example improving patients' care in hip and knee replacement (Melioranski et al., 2021). Despite the emergence of design for healthcare in Estonia, working in the mental health space is still an emerging topical area for service design.



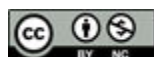
Methods and Participation

The overall goal of the project was to create a new mental health service for young adults that better meets their specific needs while not creating a further burden on the existing healthcare system. To achieve this, incorporating logic hybridity in the development of the new service helped explore the problem space from the perspective of many logics, while also shaping the process through the creation and use of new approaches to inform service design decisions.

The designers saw an opportunity for community services to help contribute to health systems where continuous mental health care is part of the model. Working together, the intention was for stakeholders within the primary healthcare system and the broader community to create new ways of delivering mental healthcare services. The designers sought to understand where and how collaboration between multiple stakeholders, including staffing, funding and service structure, could work in reality.

Tackling the identified problem space required bringing a variety of stakeholders together from multiple organizations that do not interact on a daily basis. Mental health specialists at the Järveotsa Family Health Center represented the primary healthcare sector, and, with their help, therapy patients (18-25 years old) were recruited and selected for co-designing. In this context, Haabersti Youth Center served as an anchor in the local community with extended knowledge on youth-like methods and activities. Specialists and city officials from the Estonian Health Insurance Fund, Haabersti Administrative District, and the Mental Health Department at the Ministry of Social Affairs of Estonia helped clarify the state-funded mental healthcare systems and provided insights about future development plans. A local NGO, the Estonian Youth Mental Health Movement, shared how they create a sense of community among youth who are struggling with their mental health. Table 1 shows the participation of different stakeholders and their involvement through a variety of methods.

Stakeholders	Number of Participants & Codes	Roles/ Professions	Methods
Mental Health Specialists at Järveotsa Family Health Center	5 (S1, S2, S3, S4, S5)	mental health specialists	1:1 interviews, 2 co-design workshops, weekly project update meetings over two months
Therapy patients (18-	10 (P1, P2, P3, P4,	anxiety and/ or	1:1 interviews, 3 co-



25 y/o) recruited and selected by Järveotsa Family Health Center	P5, P6, P7, P8, P9, P10)	depression patients	design workshops
Haabersti Administrative District	1	health specialist	1:1 interview, 1 group interview
Haabersti Youth Center	6	youth workers	2 group interviews, 1:1 interview
Estonian Health Insurance Fund	6	board member, specialists, mental health specialist	1 group interview
The Ministry of Social Affairs of Estonia, Mental Health Department	2	policy specialists	1 group interview
Estonian Youth Mental Health Movement	1	mental health specialist	1:1 interview

Table 1. Various methods used with each stakeholder group.

Mental health specialists and therapy patients participated separately in co-design workshops to envision a new mental health service (as shown in Figure 1). Other stakeholders were contacted for context mapping and reflection about the new service vision. Specialists' and patients' one-on-one interviews and co-design workshops were recorded and transcribed to support synthesis. Other stakeholders' inputs were captured as meeting notes.

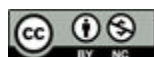




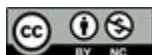
Figure 1. Co-design workshop with mental health specialists: Photo by Merilin Kuklas.

Through discussions with the external design researcher, the concept of plurality emerged as relevant and became the basis for additional analysis. The collected quotes and meeting notes were grouped based on the notion of institutional logics. Through different rounds of sketching, a reflection framework was created to visualize the decisions made for the experience prototype of the new service concept.

This research paper explicitly shows the process of identifying the different logics present in the current mental healthcare in Estonia. Through the new framework, current and future mental healthcare is visualized and exemplified through four service design decisions that became especially important for the experience prototype.

System Logics in Practice within Estonian Mental Healthcare

Logics can be used as an analytical framework for institutional analysis (Thornton et al., 2012). Based on alignment with the local context, the designers used four



institutional logics throughout the project—market, state, professional and community—as a framework to help understand the distinct realities, values, and sensemaking that stakeholders brought into the project.

The section aims to demonstrate how each of the logics emerged in the design project. It can be tempting to align a particular stakeholder with one logic; however, it's critical to understand that every stakeholder operates using multiple logics, even if the stakeholder demonstrates a preferred or dominant logic. The logic examples below demonstrate how stakeholders understood multiple ways of caring and problem solving connected with different logics.

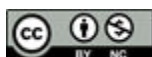
State logic: Regulatory standards

State logic is based on the idea that a governing body, typically a nation, can and should create fair and equal markets rather than solely prioritizing economic gains. State logic values authority, fairness, control, management, and administration. This process of standardization often results in a de-emphasis of personalization. Centralized planning and regulation are key functions, in addition to measuring and evaluating outcomes.

In Estonia, the path to seeking help for mental health is intended to be identical for everyone, which exemplifies a state logic. In order to see a psychologist, a young adult needs a diagnosis from their primary care physician and a referral letter issued by their physician, which allows them to see a mental health specialist. The referral allows for a maximum of five therapy sessions.

State logic also shaped the initial rationale for funding this research project. The project's physician advisor observed that after five therapy sessions there was no offboarding process or referral services available to young adults who wanted additional assistance. There is a high demand for therapy and a significant backlog of Estonians waiting to work with a specialist. However, in order to see patients that are most in need, specialists need to offboard patients or have access to referral services.

It is unclear to stakeholders why the number of initial referral visits is set at five sessions. One specialist mentioned they typically expect to see progress after six months (S1). This limitation of the number of sessions reflects a more bureaucratic approach compared to what most mental health specialists would recommend, which would ideally be to treat the patient until they have developed the appropriate coping skills. If a young adult needs additional sessions with a therapist, it is possible to receive an additional referral letter from their physician or to seek out other alternatives, which are typically self-funded.



When discussing potential funding at an institutional level, stakeholders from the Ministry of Social Affairs (E13, E14) understood that regulation could hurt the fledgling project. They cautioned, “Do not fix the finances yet, it might become too restrictive too early.” Stakeholders from the Estonian Health Insurance Fund suggested using an existing billing code, like the group therapy code, to fund the project, which offers an alternative approach more rooted in state logic.

In the context of Estonian mental health systems, measurement is also key to the state logic. If something is being funded by the government, it is understood that it should be impactful. Measuring progress, goals and effects of the service were brought up by multiple specialists in order to assess the experience concept and enable future funding and scalability.

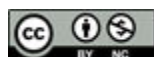
Market logic: Individual responsibility

Design is often influenced by a market logic. Market logic rewards individual responsibility. Choice in the market attempts to meet individual preferences. User experience design, in particular, is focused on creating easy to access products and services that cater to an individual's specific needs and desires, often reflecting a market logic (Kimbell & Bailey, 2017).

Market logic was closely tied to the desire to make the peer service personalized and tailored to each individual within the group. Multiple stakeholders within the project, including young adults, specialists, and the Estonian Youth Mental Health Movement called for the personalization of activities, through individual goal setting and tailoring activities to shared and individual interests. Personalization encourages individual ownership and growth. Through customization and choice the service also can change and adapt to the needs, preferences, and desires of young adults.

Despite the upsides, young adults felt emphasizing individual responsibility typically put those who were going through a mental health crisis in full control of their own care, often when they had the least amount of capacity to do so. A specialist (S4) also observed, “Making an effort feels uncomfortable [for young adults]. If things don't go as planned or imagined, their coping mechanism is low.” The current system prioritizes and is able to serve those most capable of seeking out help and those that have the follow-through to navigate the primary and specialist care systems.

Not surprisingly, market logic was at the forefront of discussions when talking about who pays for the peer mental health service and who is responsible for making progress. Participants and specialists agreed that anyone who participates in the peer service should have some financial responsibility. “If they pay they will show up,” a specialist (S2) told us. While no one suggested that participants pay for the full



cost of the service out of pocket, there was a consensus from participating stakeholders that participants should pay something to encourage commitment and reliability. This was especially true if the activities in the service required special equipment, for example, if a painting activity required a canvas, brushes, paint, etc.

Community logic: Community relations

Community logic is often defined in contrast to what it is not—market logic, which refers to capitalist structures and systems (Marquis & Lounsbury, 2007). Community logic emphasizes social relationships, collective responsibility, and mutual cooperation.

The project constraints imposed were heavily influenced by community logic. The designers required the final service concept to integrate existing community assets, for example, the local youth center, and the personal interests and skills of the young adults. The service concept also needed to serve a group, and not just individuals.

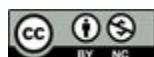
Community logic emerged in discussions with young adult participants when they were asked about the concept of a peer community to address mental health. They were generally open to the idea. As one young adult (P4) stated, “Maybe it would be nice to have some people around. Not necessarily your friends, but people you can openly talk about your stuff with. Like a community.” Participants also liked the idea of connecting with others through the experience of a shared diagnosis, but not limiting interactions to just this topic in order to broaden their relationships.

Learning how to deal with mental health by trying new activities and techniques was of interest to participants, and relates to community logic by emphasizing relationships and cooperation. Specialists valued participants trying new activities together, because if participants “have no interests, it is difficult to trigger them for change” (S4).

From the discussions, the designers understood that community can create a sense of belonging, which can also inspire change. It is “important [for participants] to feel they belong somewhere, to improve their communication skills, to make friends, and to have something meaningful to do after school or work,” mentioned one specialist (S2). What is implied is that it can be easier to find new and different interests while in community.

Professional logic: Specialized expertise

Professional logic values the expertise of the professional and the expertise that is created because of this knowledge and specialization. Through the lens of professional logic, there is an inherent belief that professionals have more knowledge



and expertise, and this know-how is highly-valued compared to someone's lived experience. Professional logic often uses economic value as a legitimizing factor (Qiu et al., 2011). Yet, it is different from market logic because not all professions emphasize economic gain, which is true of many of the healthcare stakeholders within this study.

Seeking help from a psychologist, psychiatrist or mental health specialist was perceived to add legitimacy to an issue that can often feel lonely and isolating. Participants suggested that involving a professional can often be the only way to understand the scope and severity of the mental health issue. As one participant said, "I did not know where to seek help, (...), I thought maybe there is nothing wrong with me" (P5).

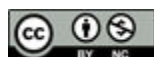
Yet, expertise can be viewed differently by different actors. For young adults, the dynamic of a professional having more expertise and authority can also be challenging. A participant remarked, "I have authority issues. Knowing that someone is above me creates repulsion" (P6). A specialist acknowledged that "winning their trust is difficult," (S4) when asked about the challenges of working with young adults.

While the professional logic benefits, centers, and empowers mental health specialists, professionals are aware that the approach they are trained in might not be "the best solution for everyone" (S2) and mentioned other useful approaches during one-on-one interviews. Yet, when discussing who should be the leader of the peer group, professionals worried about potential harm that could happen if a professional did not lead the group and a tough situation escalated; for example, if someone threatens to self-harm. Specialists felt someone without the same training, such as a youth center worker, would be not able to handle the situation and respond appropriately.

When creating the peer mental health service, the profession logic created tension, especially around the issue of referrals to the service. Specialists thought they should help curate peer groups by identifying various factors to determine who should participate. Young adults, on the other hand, felt anyone should be able to participate based on their own experience and their belief that the service would help them.

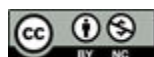
Stakeholder Demonstration of Logic Hybridity: Exploring Blended Visions

There are various patterns, trends, and values that reveal what each logic looks like in action in this context. In this project there were always various logics at play, and it is important to recognize that stakeholders are not only aligned to one logic. The following table shows the ways that each stakeholder group considered and actively



used many logics in their thinking, designing and decision making when considering the development of the peer service.

	Community Logic: Community Relations	Profession Logic: Specialized Expertise	State Logic: Regulatory Standards	Market Logic: Individual Responsibility
Articulated by Therapy Patients	Value peers who have relatable experiences and can offer support in ways that trained professionals cannot	Trust lived experience over professional training	Trust the health care system more than local government	Felt they didn't have capacity to seek help and navigate the healthcare system while dealing with a mental health issue
Articulated by Mental Health Specialists	Experiencing new activities and experiences with peers in a safe space motivates new behaviors and habits they would otherwise not engage with	Specialists need to assign young adult participants to groups and control over who has access to the service	Service should be funded by Estonian Health Insurance Fund with a small fee contributed by youth participants	The act of developing personal goals through the service encourages ownership and growth. A small fee for service demonstrated buy-in from youth
Articulated by Haabersti Administrative District	Society has not learned how to take care of each other	-	Prevention is project-based and cyclical	Young adults are not very active in community events
Articulated by Estonian Youth Mental Health Movement	Each activity should center around connecting with others, which demonstrate the value and potential of a	The title and background of the group leader is not important. What matters is previous experience	Minimal effort is key to the service, and it is not the same as a doctor's appt. The number of required steps should be taken	Allow time and space for everyone to open-up at their own discretion



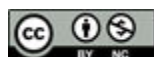
	group setting	leading groups	into account	
Articulated by Estonian Health Insurance Fund	-	Medical outcomes are necessary to document. Evidence of progress is based on professional methods	Use existing group therapy code for funding and rely on proven methodologies for group therapy	-
Articulated by The Ministry of Social Affairs of Estonia	Demonstrated support for the creation of a community service because it allows for more flexibility	No referral by specialist needed, use nonclinical staff members	Fixed financier might be too restrictive and limit options too soon	Create additional groups that also focus on prevention and other problems unique to young adults

Table 2. Summary of logic multiplicity across stakeholder groups.

Reflecting on Mental Health System Logics: Moving Towards Hybridity

Recognizing the many logics at play within Estonian mental health systems, there was acknowledgement of the need to maintain plurality rather than reduce it in the service design process. This is inherent in Escobar's (2018) call for design to support a pluriversal approach to worldmaking and in literature in service design highlighting the importance of the coexistence of multiple logics (Siltaloppi et al., 2016; Nilsson et al., 2022; Vink, Koskela-Huotari, et al., 2021). As such, part of the focus in this service design process was on exploring the many logics in the new service development process.

During the co-design workshops, tensions about service design decisions, such as debates over who is qualified to be the group leader, became evident. This left the designers puzzled about the potential next steps and at-risk of reinforcing a singular, narrow notion of the system. Initially, there seemed to be only two simplistic options: choose one service concept or create a hybrid service based on combining multiple visions for the service. Through discussions with the external design researcher, a logic hybridity approach emerged that took into account multiple institutional logics

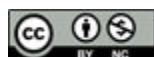


and allowed for differences across people and preferences. This awareness helped the designers facilitate a temporary nuanced dialogue between stakeholders. After decisions for the service concept prototype were made, the designers and the external design researcher created a framework to reflect together and visualize logic hybridity.

The act of mapping out the multiplicity of institutional logics allowed two, often conflicting, pairs of logics in mental healthcare in Estonia to emerge: individual responsibility created tensions with regulatory standards, and professional expertise conflicted with community relations. To emphasize the tensions, a diagram was created with two conflicting logics on the x-axis and the other two on the y-axis to illustrate the relationship between these rationales. These pairs act as a temporary connection to provoke discussions and guide decision-making for service conceptualization. Yet other pairs of logics might emerge in other contexts with different stakeholders.

This framework was also used to visualize the current and desired future mental healthcare landscape in Estonia, making evident the shift in mindset needed for the desired future. The current state of mental healthcare in Estonia is based mainly on three logics: state, market, and professional logic, with little emphasis on the community logic (Figure 2). Mental healthcare is funded by the Estonian Health Insurance Fund using billing codes that require professional expertise and regulate the time spent per patient. Additionally, individual responsibility plays a big role as patients are expected to contact their family doctor to start treatment and must navigate multiple systems for care.

The desired state envisioned by the co-design workshop participants is based on four logics (Figure 2): the main shift involves concentrating on community relations by connecting patients with similar interests and using existing community-based organizations to grow. Figure 2 shows the relationship between current and desired future mental healthcare in Estonia.



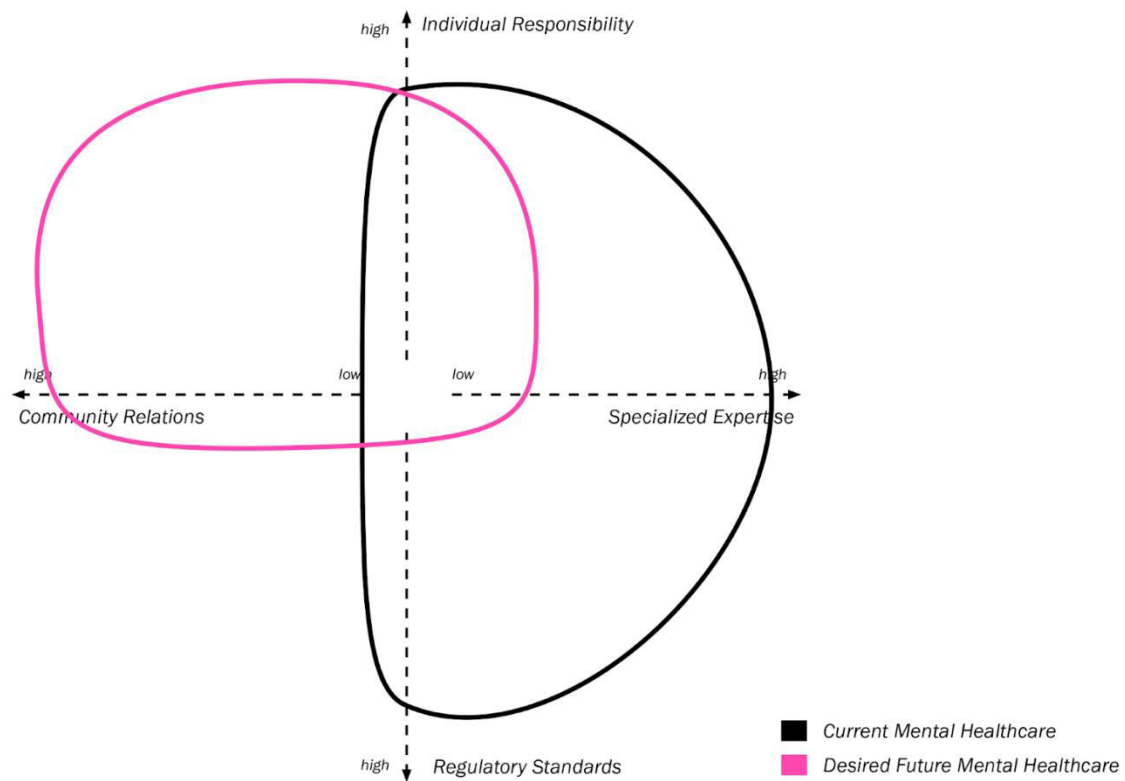


Figure 2. Current and desired future mental healthcare in Estonia.

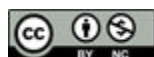
Only visualizing the desired future mental healthcare in Estonia is not enough to show the necessary service decisions required to launch a service concept prototype. In retrospect, the discussions with stakeholders centered around four main service design decisions: 1) staffing, 2) referrals, 3) funding and sustainability, and 4) purpose and activity. Each service design decision consisted of several questions to be answered in order to fully envision the new service:

- **Staffing:** Who is responsible for leading the service? Is there a mental health specialist involved?
- **Referrals:** Who gets to participate and who decides? How are the groups formed?
- **Funding & Sustainability:** Who pays for the service? If positions are not volunteer-based, who is paid and how? What makes this service sustainable?
- **Purpose & Activity:** How are young adults' personal interests incorporated in the service? How are they involved in the planning of services?



Using the four logics described in the previous section, the necessary service design decisions could be answered through different logics. For example, to better envision how referrals could work, at least four possible answers appeared, ranging from self-determined registration to referrals by therapist, or even a drop-in system. Mapping potential answers to specific design decisions across the four logics demonstrates how logic multiplicity can be present during decision-making within a service design process. Here as well, stakeholders moved between logics and expressed simultaneously multiple and often conflicting desires. Table 3 shows responses to the four service design decisions across four logics that capture potential options yet do not exclude various combinations or in-between choices.

	Staffing	Referrals	Funding & Sustainability	Purpose & Activity
Community Logic: Community Relations	Anyone with experience leading groups or trained peer counselors	Drop-in with word of mouth from an existing community member	Use existing community assets combined with small personal contribution	Create personal connections between participants and promote shared decision-making
Profession Logic: Specialized Expertise	Mental health specialists: from clinical psychologist to mental health nurses	Referral by mental health specialists	Funded by Estonian Insurance Fund and small fee paid by patients	Distribute the workload of therapists and free the time for patients, practice therapy techniques; create and make progress on personal goals
State Logic: Regulatory Standards	Clinical psychologists or non-clinical psychologists	Offer referrals for various state funded organizations	Finance through state funded systems: healthcare system or city government	Follow evidence-based methodology
Market Logic: Individual Responsibility	Based on the feedback and ratings from the	Through self-determined registration	Fully paid by the customers	Purpose and activities are based on customers'



customers

feedback

Table 3. Logic multiplicity through the lens of four service design decisions.

Mapping logic multiplicity through the lens of four service design decisions illustrates both broad opportunities and limitations of the new service. When considering decisions required for the experience prototype, stakeholders arrived at a more nuanced, hybridized service concept, rather than choosing one or two logics across the necessary service design decisions. Figure 3 shows decisions made by stakeholders for the experience prototype and the various logics that these decisions reflect and combine.

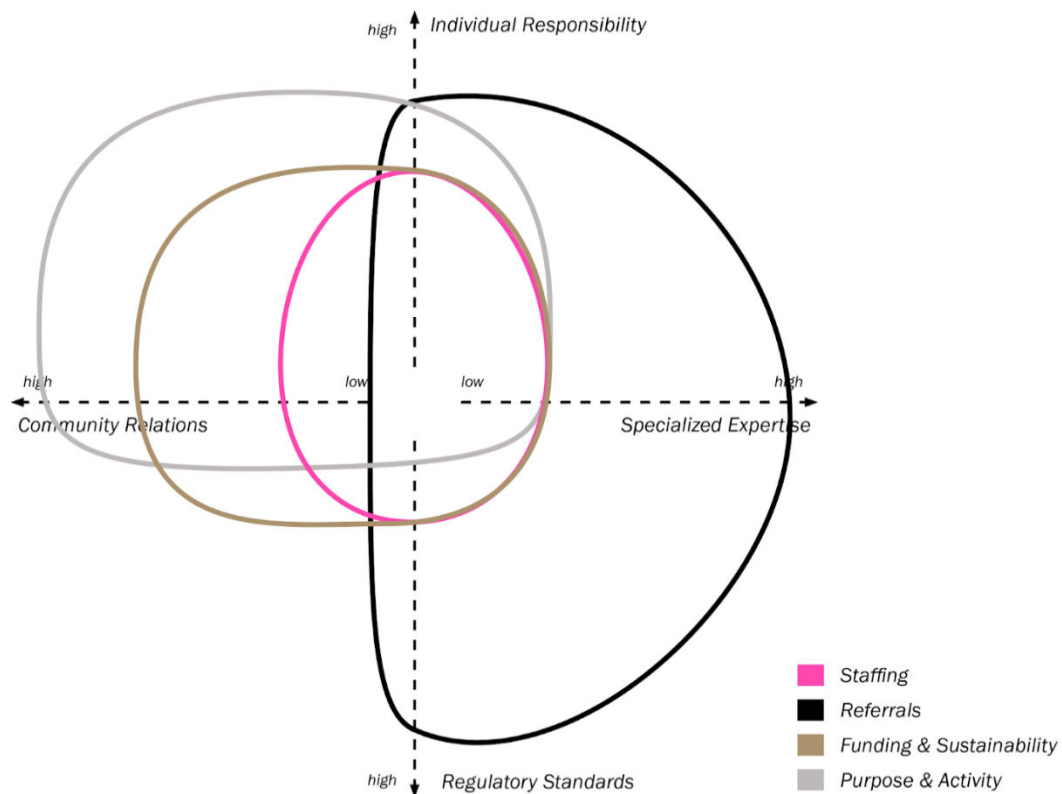
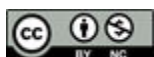


Figure 3. Logic hybridity of mental healthcare service in Haabersti (Tallinn, Estonia).

The various design decisions for the experience prototype make the coexistence of logics explicit. The new service concept was co-created by the family health center and the youth center who was responsible for coordination. A physiotherapist led the



group, while a youth worker assisted with conducting activities and administrative tasks. In the figure, this design decision (marked in pink) combines professional expertise with community resources, while accepting existing regulatory standards, and personal willingness of the staff members to participate.

Young adults were referred to the mental health service by their therapist. The cost was covered using a group physiotherapy billing code that is regulated by the Estonian Health Insurance Fund. This design decision is visualized in the figure (marked in black) as being heavily dependent on professional expertise, respecting regulatory standards and influencing only those young adults who are already actively seeking help.

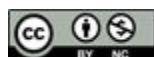
Collaboration with a youth center allowed for creative reuse of community resources while also creating cost savings on space and staffing. In the figure, this design decision (marked in brown) falls in between professional expertise and regulatory standards but is heavily dependent on relations between various organizations, demonstrating community logic.

The goals of the sessions were to connect with peers, practice therapy techniques, and set personal goals. This design decision (marked in gray) is dependent on the relationships created between therapy patients and staff members. In the figure, one can see that this decision heavily concentrates on community relations, participants' individual preferences, and takes into account staff members' personal skills and networks to organize the activities while adhering to budgets and timeframes.

These four service design decisions take into account all four logics, thus visualizing the coexistence of logics in one potential service model: taking into account professional expertise by involving trained professionals, creating community relations by collaborating with existing community-based organizations, accepting regulatory standards by applying existing billing codes, and relying on individual responsibility by involving patients already seeking in therapy.

The aforementioned service decisions were tested in an experience prototype in October 2022 in the Haabersti district in Tallinn. A physiotherapist from the Järveotsa Family Health Center and a youth worker from the Haabersti Youth Center organized three peer support group meetings for six therapy patients from the primary health clinic. The new service concept resulted in positive feedback from youth and a fostered sense of belonging.

Despite the overall positivity in response implementing patients' desires into the service concept prototype, there were tensions around evaluation and measuring results. For the clinician, it became very important to involve more experts to



precisely evaluate the effect of each activity. There was also a lack of confidence in the ability of the facilitator to handle deeper topics, and discussion about additional training arose. These early disagreements indicate the need for continuous reflection tools around decision-making and reflection on the importance of an experimental mindset.

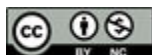
Accepting stakeholders' different realities allows for the possibility of continuous mental healthcare that is both appropriate for young adults and considers other stakeholders' needs. The careful act of balancing logics allows for the application of professional knowledge while also respecting current state regulations and incorporating personal interests into the service concept. Using this framework to support collective reflection helped to create transparency, exposing the multiple logics present in a variety of decisions.

Discussion

This practice-based research builds on existing literature stating the need for service design research to thoughtfully work within logic multiplicity (Sangiorgi et al. 2021; Nilsson et al., 2022). The process of creating a new youth mental health care service in Estonia provided an appropriate empirical context for exploring how the negotiation process between co-existence of multiple logics can be generative and pragmatic. The resulting framework delineates logic hybridity through the lens of four service design decisions. This framework complements similar emerging tools, such as the wheel of logics (Sangiorgi et al., 2022) and the hotspot analysis (Nilsson et al., 2022), moving from a greater focus on *analysis* of logics in a service context to investigating how such an awareness can inform new service development.

Revealing existing logics in the current mental health care system in Estonia provided necessary insights into institutional logics that shape stakeholder's various behaviors and identities. The act of mapping the tensions between various stakeholders helped bring awareness to power dynamics and guided the process of allowing for multiple logics to be maintained in service design decisions. The resulting framework captures the interdependence of service design decisions on various logics and visualizes multiple logics for one service concept.

The process of creating the framework helped the designers clarify stakeholders' perceptions and preferred conditions. The act of mapping logics revealed real tensions, but at the same time, created space for collaboration. Without careful synthesis, the desires of multiple stakeholders would likely have been simplified and reduced to a few options that represented only one or two logics. The visualization



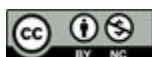
offered a tangible opportunity to reflect upon decisions and create deeper awareness of multiple stakeholders' underlying rationales and existing tensions.

Previous research has highlighted the value of the coexistence of multiple institutional logics for service innovation (Sitaloppi et al., 2016), the ability of service design to influence institutional logics (Kurtmollaiev et al., 2018; Vink, Koskela-Huotari, et al., 2021), and the need to protect the plurality of institutional logics when doing service design within health and care (Vink, Nilsson, et al., 2021). This research through design work demonstrates an attempt of mindfully working with many logics in the process of new service development. In doing so, it may offer inspiration and some transferable approaches to service design efforts in other contexts looking to maintain the coexistence of multiple logics.

It's important for new decisions and negotiations within and between multiple logics to occur as the service is implemented, rather than initial decisions prescribing the approach for future implementations. This includes, for example, if and when the service scales beyond the experience prototype to other districts in Tallinn or other counties in Estonia. To allow for scaling and customization, the designers may encourage stakeholders to use the new framework as a starting point for tackling potential service challenges and to identify new opportunities.

However, conflicts and tensions between institutional logics can not be solved simply by exposing the logics of service design decisions. Tensions are constantly present in service implementation, and they are expected to evolve over time. We believe the process of reflecting on system logics needs constant care and mindfulness from service designers. The new framework could potentially help mediate stuckness in decision-making and create transparency around the coexistence of logics. Vigilant attention to the unintended consequences of these decisions and careful adaptation to how these tensions are being held remain fundamental.

Further research is needed with a focus on if and how the framework could assist the end-to-end synthesis process, be incorporated into service plans and across service moments, and its effects in other contexts. It is important to note this institutional logics framework is based on ideal types of different rationales in Western societies (Thornton & Ocasio, 2008), and, therefore, is not all encompassing or appropriate in all contexts. One framework can never alleviate or solve all tensions, but a framework, as a way of thinking, exposing and visualizing, could potentially offer clarity, create a moment of agreement or help to negotiate coexistence. It is our hope that this framework may inspire others to continue holding the tensions through multiplicity logic in service design, where appropriate, rather than simply selecting between logics and inadvertently reducing plurality.



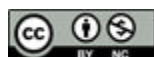
However, connecting back to discussions of plurality in and beyond design, it is important to point out some critical limitations of this way of working with logic hybridity. In particular, there is a risk that working toward logic hybridity emphasizes the overlaps between realities, cleaning away the aspects of plurality that do not neatly fit together or fit within these typical logics. Furthermore, this approach and the frameworks we developed, fall into the designerly trap of assuming that we can use one Western framework to categorize everything and that these divergent realities and diverse knowledges can and should be made visible, making them extractable and blendable for the benefit of service design (Ansari, 2022). While our attempt was to cultivate a dialogue across differences amid these systems, there is a need for continued research into ways of supporting divergence relationally, without flattening them into one common reality or making them extractable for others. Ongoing development is needed to explore relational approaches to new service development that do not require an emphasis only on what is common but to also embrace dissensus into the very design of the services and service systems themselves.

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Insights collected from mental health specialists and young adults informed the design process enormously and helped to shift the direction of the research project. The research team would like to thank Järveotsa Family Health Center for their dedication to the project and their creative energy. With their help, the recruited patients were successfully onboarded for fruitful co-design sessions and group meetings. The willingness of the young adults to share their personal stories and participate in a seemingly ambiguous project shows their resilience and sense of mission while they still actively cope with their mental health. Enormous help and dedication came also from youth workers from Haabersti Youth Center who opened their premises to host the peer support group meetings and offered their assistants in conducting the chosen activities.

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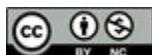
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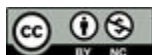
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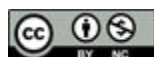
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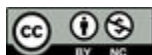
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