



# A Matter of Time: Anticipation Work and Digital Temporalities in Refugee Humanitarian Assistance in Turkey

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Scholarly work interrogating time and temporality in CSCW predominantly focuses on the temporal coordination of work in high-resource settings and is usually based in Global North. This paper aims to complicate and complement this scholarship by investigating the temporal entanglements of digital humanitarian work with refugees and asylum seekers in Turkey during COVID-19. We interviewed 22 humanitarian workers to understand their experiences and concerns as well as strategies they employed to support refugees and immigrants at a distance. The data reveal the complex temporal, informational, and infrastructural dimensions of technologically-mediated refugee support work, challenging the trope of “pivot to remote work”, as popular in western countries. Our findings contribute to the CSCW research on the theory of anticipation work and its relationship with the concept of collaborative rhythms to explicate the relational and situated aspects of the temporal experiences of humanitarian workers in low-resource settings.

CCS Concepts: • **Human-centered computing** → **Empirical studies in collaborative and social computing**.

Additional Key Words and Phrases: temporality, WFH, future of work, remote work, anticipation work, humanitarian assistance, refugees, immigrants

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## 1 INTRODUCTION

As conflicts and crises become more intractable across the world, the number of forcibly displaced people has increased over the last decade [117, 131]. In responding to their immediate as well as longer-term needs, humanitarian organisations provide essential services to refugees and asylum seekers in host country environments [8, 92]. Globally, the COVID-19 pandemic has profoundly impacted everyday life at various domains, including the delivery of key services, as the physical access to public sites and facilities became heavily restricted necessitated by public health measures. While service providers around the world perform “remotable” activities in their work, the impact is even more significant for humanitarian workers transitioning to digital service, for the first time for many, to continue serving refugees who have been historically affected by the digital divide and other forms of digital exclusion [108].

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In CSCW and related fields, much attention has been rightly dedicated to document the unique circumstances of refugees and immigrants who interact with various computing systems, both during their move, in the refugee camps, or the different stages of their resettlement in a new country [1, 37, 70, 73, 114, 116, 130, 149, 152]. Much less effort has been made to address the needs, challenges, and concerns of those who support self-sufficiency of communities at risk, while navigating increasingly complex socio-technical landscapes within the CSCW scholarship [55, 133, 144]. Humanitarian workers provide a variety of highly-context-sensitive services and community-based strategies, including but not limited to, the distribution of food, cash, and other forms of aid, the collection of data (e.g. for the registration, needs assessment, donor reporting, and other relevant purposes), the coordination and delivery of care and counselling, the provision of information, translation, referral, and socio-cultural services. Certainly, there is a growing need to provide further insight into the collaborative and situated practices of refugee assistance work across time and space, which is arguably triggered by several social, political, and environmental exigencies [36, 72]. Such knowledge is deemed necessary to ensure that not only refugees have sustainable access to essential services, but also that organisations that support them are adequately supported in their efforts.

We focused on remote work in the context of humanitarian support to understand intricacies and complexities of digitally-enabled assistance to refugee communities encountering varying levels of social, economic, and language barriers as well as issues with access to health care during the pandemic. We employed a worker-centred approach to elevate the experiences and perspectives of humanitarian workers and bring their voice and challenges that they face to the fore during remote work. This study extends existing CSCW research on remote work [61, 102, 103, 110] by looking at the forced transition of workers (and their families) to work from home (WFH) with inadequate planning and preparation. Existing research has addressed several areas of WFH, including work-life balance [29], relationship between WFH and team diversity [22], work-family balance [63], monitoring performance and job satisfaction [69]. Further, studies have focused on remote work in the contexts of public [43] and private [51] sectors. In terms of worker cohorts, most research has focused on knowledge workers [22, 134]. In this study we explored the non-profit (or helping) sector, with a focus on work that includes relational and caring components. We presented findings from an interview study that center the vantage point of refugee assistance workers within non-profit organizations operating in Global South. We ask: *What challenges refugee humanitarian workers face during unprecedented remote work, and how they envision and maintain work-life balance while supporting refugee communities?*

The need to understand the challenges and aspirations related to remote or hybrid work are even more salient as some version of WFH are expected to persist after COVID-19 [7, 16, 107]. Studies suggest factors such as workers' satisfaction with remote work [148] and individuals and organizations investing in physical and human capital necessary to accommodate remote work [155] will impact the persistence of remote work. Further, increased cost of living and income reduction due to high inflation rate have an impact on access to affordable childcare and transportation [27], leaving many individuals and parents in the workforce with WFH as the only viable option. Ecological factors such as climate change are also found to be effective for organizations to permit remote work for their employees [86]. Such developments are likely to shape coordination and planning practices of individuals and families who work from home as well as the new ways of working that lie ahead of us, therefore they constitute important contexts which may inform the design of future CSCW technologies.

In this paper, we report the results of an empirical study with 22 humanitarian workers in Turkey, the country that hosts the largest number of refugees worldwide [142], which investigates workers' experiences transitioning to technologically-mediated service amid COVID-19. We situate

our analysis within the framework of social theories of time which views temporality as a lens through which we can make sense of human experience [93, 122, 145]. We draw on the theory of anticipation work [126]: how people individually and collectively engage with practices in present to cultivate and nurture expectations of the future. A conceptual lens of anticipation work allows us to capture how workers adapt and cope with unprecedented shift to WFH and remote humanitarian support. Anticipatory practices have been previously studied in scientific work [68, 126], science and technology studies [4], and its applications were discussed in the health field [31]. We draw on it in the humanitarian work context to understand how remote workers in the refugee assistance field manage uncertainties and unknowns resulted in WFH structures.

The motivation of this paper is to unearth the lived experiences of humanitarian workers shifting to remote work amid COVID-19. The narrative of “smooth pivot” to remote work has been widespread in the western contexts, implying the individual and organizational capacity to move and redirect work processes and strategy to digital quickly [60]. Our findings, however, indicate the unevenness and messiness of humanitarian workers’ transition to technologically-mediated service, revealing multi-layered complexities of socio-technical challenges, all compounded by issues of access, equity, and agency. We argue that the sudden transition to remote work during COVID-19 has created new temporal regimes that demand constant reconfiguration of people, policies, materials, tasks, and technologies.

We contribute to CSCW literature by both validating and expanding the theory of anticipation work in this understudied context. Our contributions are as follows: first, we provide empirical data to inform the development of anticipation work as a strategy to maintain work-life balance. Second, by focusing on temporal experiences of workers, we distinguish new factors shaping the production of anticipation work. Third, we identify a set of rhythms through which workers coordinate their work. Our work contributes further insights for CSCW/HCI communities about how social, professional, and domestic dimensions of remote work are anticipated by workers through elucidating their implicit temporal experiences. We also offered design implications that could support anticipation work by making domestic coordination easier and creating awareness of workers’ agentic practices in WFH contexts to maintain work-life balance. The findings and observations we shared in this paper have numerous implications for designing for the new ways of work. While the pandemic has sped the shift to hybrid or remote work arrangements and sparked new discussions on flexible work, burnout, work-life balance, other factors that are likely to affect these issues remain relevant.

## 2 BACKGROUND

Turkey hosts the largest refugee population worldwide with more than 3.7 million Syrians, 44% of whom are children, under temporary protection within the framework of the *Law on Foreigners and International Protection (LFIP)* and around 400,000 other refugees and asylum seekers, mostly Afghans, although the actual numbers are estimated to be higher, around 1 million, due to backlog in registration [143]. Turkey ratified the 1951 United Nations Convention on the Status of Refugees with a ‘geographical limitation’ so that Turkey’s legal responsibility to protect applies exclusively to Europeans where non-European refugees, such as Syrians or Afghans, receive temporary protection status [74]. Scholars have identified this as one of the primary reasons why Syrians choose to risk their lives to travel to Europe to seek refugee status [12].

Under the Law, all refugees are required to reside in the city where they were registered, i.e., remote provinces called ‘satellite cities’. However, most refugees live outside of their satellite cities, especially in major cities like Istanbul where there are often more job opportunities. In terms of living conditions and access to services, the situation is dire. According to recent figures, over 98% of refugees in Turkey reside in urban areas, with less than 2% living in temporary shelters [81].

64% percent of Syrian households in urban settings live under poverty level, with 18% living in extreme poverty [105]. Temporary protection enables access to essential services, such as healthcare. However poverty, language barrier, not living in one's satellite city pose significant obstacles to access to services. For refugees, access to labor market opportunities has been limited; they are only allowed to work in the livestock and agriculture sectors. Work permits are hardly obtained to access to more stable jobs due to the significant financial and bureaucratic burden to pose to employers [84, 109], resulting in refugees working in informal markets [41]. Both local and international humanitarian organizations are tasked to deliver key services to refugee communities [10, 26].

The COVID-19 pandemic and subsequent lockdowns exacerbated the situation and overwhelmed the challenges faced by refugees, and adding the new ones, including difficulties accessing food and basic needs, increased financial and emotional distress, maintaining social isolation and distance due to overcrowded dwelling [44]. One event of particular note is that Turkey's President announced on February 28th, 2020 that he would open the country's borders with Greece for migrants and refugees. This resulted in thousands of refugees and undocumented migrants arriving at Turkey-Greece border, trying to enter the European Union, shortly escalating a local humanitarian emergency [5]. With COVID-19 spreading through the region, the humanitarian agencies provided rapidly increasing immediate protection and urgent needs of refugees and asylum seekers [98].

Turkey has received less attention in international migration research in CSCW/HCI and adjacent fields. In a recent literature review on the international migration research in HCI and related fields, Sabie et al. [115] describes how the host governments with authoritarian tendencies retain varying level of control over research processes, and they concluded that this may explain why Turkey has received very little attention from international HCI/CSCW scholars, compared to countries such as Jordan, for example, where the government and the NGOs working on the ground are willing to invite researchers. Similarly, in her Humanitarian Research framework for HCI/CSCW community, Fisher [49] reported that only few research focused on non-governmental organisations (NGOs) supporting refugees in this area, signaling the understudied character of refugee humanitarian organizations in Turkey. We address this gap by focusing on the refugee support field in Turkey, surfacing work practices carried out by humanitarian workers, analysing complex temporal, informational, and infrastructural dimensions of digitally-mediated refugee assistance and protection. Our work presents insights into how remote work is anticipated and experienced by humanitarians who are required to deal with several social and technological glitches, while lacking organizational or professional support as well as social recognition of the value of their work.

### 3 RELATED WORK

#### 3.1 Social Theories of Time and Temporality

Time is a fundamental characteristic of human and more-than-human experience. It is 'everywhere', multidimensional, yet 'ineffable' to reduce it to a single concept [14, 137]. In common sense knowledge, time is associated with history, change, duration, resource [14]. In Western social theory tradition, theoretical discussions of time usually demonstrate two distinct ways of dealing with the concept of time: time as an objective, cosmological, abstract, and absolute versus time as a subjective, experiential, phenomenological, relative experience [3, 18]. The social differentiation between "clock time" and "event time" is often grounded in this dichotomy of objective and subjective perspectives [104]. Clock time has been associated with division of time into objective and quantifiable units, governed by clocks and schedules. Event time, on the other hand, refers to qualitative time, and is "anchored in the duration of social practices, tasks and processes". As Zerubavel indicates event time organizes social life:

“In general, most of our routine daily activities are scheduled in a fairly rigid manner for particular times of the day and for the particular days of the week. Thus, we usually eat not necessarily when we are hungry, but, rather, during officially designated eating periods such as “lunchtime” or “dinner time.” Similarly, we usually go to bed not necessarily when we get tired, but rather, when it gets “late.” Cleaning one’s home is another activity which typically takes place not necessarily when things get dirty, but, rather, on particular days of the week that are designated as “cleaning days” in a standard fashion.” [157]

Temporal issues have been central to the organization of work and labor relations. The coupling of time with efficiency can be situated in a larger capitalist economic system thinking and practice that historically privilege profit and competition [113]. E.P. Thompson’s now-classic work *Time, Work-Discipline and Industrial Capitalism* [136] is central for establishing a relationship between labor and disciplinary time. Thompson argued that with transitioning from the peasant society to industrial capitalism, the labor became timed with clock rather than task. For many, clock time became central to capitalism’s mode of operation [28], regulating work hours and disciplining worker subjectivities. Punctuality, time-reckoning and compunction about “wasting time” become key temporal values of capitalism [40] where ‘time is money’. Clock time used to measure labor and keep track of progress, thereby presenting a metric for productivity [58]. Roy [112] showed that the clicker operators interrupt their work time by generating informal social times, such as “banana time”, “coke time”, “coffee time” in the hope of escaping from tensions in an extremely monotone and standardized work context.

Much sociological inquiry about time treats it as a resource embedded in social structures. As Wacjman rightfully put “time as a resource remains differentially distributed, accessed and interpreted by different groups, depending on their circumstance” [147]. A great deal of work conceptualizes time as a scarce resource, interrogating work-life balance, family boundaries. Focusing on everyday allowed possibilities to explore gendered access to time and gendered temporalities. Time-use studies provide empirical evidence of how people actually spend their time and how labor allocation is done within the household everyday. Studies showed that gender disparities in employment and household duties, as well as leisure time, increase while couples transition to parenthood and gender inequalities remain rather stable throughout parenting [42, 59]. In another study, exploring parental time-use with children, working fathers associate time spent with children with the costs in other areas of their lives, such as work [38]. In terms of the quality of leisure time, women’s leisure time is more fragmented while men experience less interrupted leisure time [35]. Women’s time poverty is also found to be exacerbated with other economical and educational disadvantages in developing contexts [151]. We draw on larger sociological scholarship that considers our understanding of time is not ‘natural’ but socially constructed, culturally differentiated, evolving over time and inextricably interlinked with issues of power, control, and hegemony [24, 100, 145]. As Adam noted “time embedded in social interactions, structures, practices and knowledge, in artefacts, in the mindful body, and in the environment” [2], which highlights the importance of exploring *in situ* experiences.

### 3.2 Time and Temporality in CSCW

Computer-Supported Cooperative Work (CSCW) has long been interested in how work is temporally organized around and across computers [15, 48, 87]. Wiberg and Stolterman [150] indicated that although time and temporality have been dimensions in many studies, these topics have shifted from a secondary concern to a dominant focus over the last five years. Scholars focused on temporal factors enabling or constraining collaboration concerning information technology

design and use. Studies brought insights on how the perception of time is modulated through the complex interaction of cognition, emotion, and embodiment [66, 140]. Tam et al. [132] developed a notification system which uses automation and haptic cues to increase time awareness and facilitate the time management in organizational settings by supporting timing needs of individuals.

Research on time and temporality in CSCW focused temporal organization and coordination of activities. In organizational literature, Orlikowski and Yates [104] suggest temporal structures both shape and are shaped by human actions, defining the rhythm and pace of organizations. Scholars highlighted the recognition of temporal patterns, or rhythms, as a vital element of understanding and supporting collaborative practices. Steinhardt and Jackson [125] defined rhythms as “the temporal patterns and regularities that stem from and in turn help to frame and support ongoing forms of action in the world”. As significant elements in distributed collective activities, rhythms are the outcome of different time modalities being accommodated and aligned. Jackson et al. [76] distinguish four rhythms – organizational, infrastructural, biographical, and phenomenal – that shape temporal experience or practice in collaborative settings. Drawing on their work, our study highlights two additional rhythms (e.g., biological, policy) to depict the patterns of activities.

Studies that centered on scheduling and coordinating highlighted the social characteristic of temporal patterns and its relationship with information work. In their study of information seeking in the surgical intensive care unit setting, Reddy and Dourish [111] considered how temporal patterns enable clinical members, such as physicians, nurses, and pharmacists, to share, provide, and manage information in the context of their work. Rhythms present “broad temporal pattern of the work iterated over time” and categorized as large-scale rhythms and finer-grained rhythms. While the former concerns nurse shifts and morning rounds, the latter is about finer temporal structures, such as lab results and drug responses. They found that these rhythms can provide valuable information for different members as they transition through multiple roles and encounters in collaborative tasks. They suggest a sense of continuity in time, linking the past activities to the current ones, creating awareness of others’ activities, while also supporting members to orient themselves toward future activities. However, if they differ, work rhythms may cause conflict among members, creating different expectations about the availability of information. Therefore, the need for reconciliation of multiple temporalities becomes evident in clinical work. We agree with these scholars [75] on the importance of attending rhythm as a synthesising concept to discuss temporal patterns relevant to collaborative practices. Through our study, we also show that a temporal reconciliation is also needed in working from home regimes.

Norris et al. [99] noted that temporal coordination is based on a shared understanding of “what time it is” (and what day and date it is), as well as people’s capacity to act on that knowledge in a synchronised, timely, or across geographically dispersed groups. Drawing on the case of digital humanitarian information work following the 2017 Hurricane Maria, they reported how volunteers understand and accommodate pluritemporality to collaborate and produce work under pressure. Their work is particularly helpful as it demonstrates the range of sociotemporal elements necessary to negotiate while addressing complexities in globally distributed teams, including high volume of information, different data and metadata structures across platforms, as well as culturally distinct ways of temporal representations. In similar high-tempo contexts, such as trauma resuscitation events in emergency departments, Kusunoki and Sarcevic [85] identified a set of temporal awareness issues in dynamic and fast-paced activities and they observed that clinicians’ perceptions of time are skewed, necessitating precise and intuitive timekeeping in order for them to pace aptly in clinical settings.

Others interrogate lived experience of time and mediative role of technologies in temporal experience. Mazmanian et al. [94] critically engaged with the dominant idea of time (time as linear, chunkable, ownable, and allocated for a single purpose), and offered an alternative understanding of

time called ‘porous time’ which factors lived experiences, power relations, and managerial visions on time into discussions of working and living with time. The notion of temporal entrepreneurship, as introduced by Erickson and Mazmanian [46] entails enactments of creative and disruptive engagements with dominant temporal logic and adoption of these engagements by critical others; as such they become legitimate and accepted. Lindley [91] concerns with the role of technology in shaping temporal infrastructures and shifting reified temporal patterns.

Approaching time as a resource and focusing on ICT practices of the professionals living and working in Kenya, Wyche et al. [154] characterized users engaging deliberate interactions that are focused, involving activities requiring a good level of offline preparation and planning to maximize task efficiency due to time constraints in infrastructure-poor settings. Due to low bandwidth and excessive cost of internet connectivity, users turn to offline artefacts and preparation activities to decrease the time they have to be online, such as emailing colleagues back.

These studies provide much helpful insights to sensitize the complex, multi-layered relationship between time, temporality, and technology in collaborative work. They explain key temporal aspects of coordination, including how different actors from medical professionals to knowledge workers and humanitarian volunteers negotiate coordination, with varying degrees of infrastructural support. Our work differentiates itself from earlier studies in several ways. First, we capture the experiences of workers from refugee service organizations which had to close their doors overnight and had to switch to remote work. Earlier studies focusing on time and temporality in CSCW did not have the elements of unpredictability and contingency related to mandatory remote work which shape many levels of organizing work and life, which we believe, important factors to consider. Second, our interest in WFH practices enabled us to study temporal issues emerging as a result of coalescing of different rhythms, both at home and work, while our focus on humanitarian paid work enabled us to show how workers navigate institutionally structured work time. And lastly, our case of refugee assistance in Turkey, enabled us to demonstrate how complex political, bureaucratic, and social dynamics shape workers’ temporal coordination in WFH.

### 3.3 Anticipation Work

To get a broader understanding of how refugee support workers navigate WFH during pandemic, we draw on the theory of anticipation work [31, 126]. The concept was proposed within the context of large scale scientific infrastructure building to invoke practices that support and sustain anticipatory and imaginary activities in the face of a dynamic world. We use this concept in the context of remote humanitarian support work because it is a helpful lens for unpacking many elements of work that are invisible and unrecognized. Exploring anticipatory practices through the lens of temporality allowed us to capture the complexity and breadth of the organization of daily work.

As Adams et al. [4] note anticipation is “thinking and living toward the future”. Anticipatory modes of doing and being offer a moral route where the “future sets the conditions of possibility for action in the present”. Anticipation acquires moral and epistemic value: “a virtue emerging through actuarial saturation as sciences of the actual are displaced by speculative forecast”, synthesized both as a politics of temporality and affect. Anticipation practices are “employed to navigate daily life and to sustain relations” [106]. Zamenopoulos and Alexiou [156] noted that anticipation implies circularity, while troubling the fundamental principles of time and causality, since it interrogates how future affect the present. For Clarke [31], the work of anticipating constitutes three processes: abduction, simplification, and hope. As a cognitive and experiential act, abducting concerns with both the iterative cycles of pragmatic reasoning, gathering information as well as testing and playing out with the possibilities and implications to construct understandings. Simplification involves “more explicitly situated analytic claims”, while critically focusing on tasks and activities,

that entails deleting and sorting of the redundancy, and rearranging and (re)presenting meaning. Citing Star [123], Clarke denotes the removal of procedures, work, and relationships as a result of simplicity. And lastly, hope indicates forward-looking affective state that is both driver and product of the work of anticipation [31].

Within the CSCW scholarship, Steindardt and Jackson [126] defined anticipation work as “the complex behaviors and practices that define, enact and maintain vision across individual and collective, and temporally close and distant scales”. As a form of sociotechnical work, anticipation work attends “forward-looking frames to capture practices in the present that cultivate our expectations of the future, design pathways into those imaginations, and maintain those visions in the face of a dynamic world” [126]. Often invisible, anticipation work is emergent when actors engage in developing standards and generating social structures that would position them to unite and calibrate individual and collective action. Critically, anticipation work highlights mundane, everyday actions that are forming the near and far futures.

Our interest with the anticipation work in the context of current study (remote work experiences of humanitarian workers who work from home for the first time due to COVID-19 pandemic) emerges at its core anticipatory practices concerns the management of uncertainties and restoring agency [31]. We argue that humanitarian workers engage with anticipation work to navigate compounded challenges of remote refugee support in WFH. Our decision to explore anticipatory practices by attending temporality offers openings for new ways of conceptualizations.

## 4 METHODOLOGY

### 4.1 Data collection

This study is part of a larger project analysing the technological practises of humanitarian workers who assist refugees in Turkey. Initial face-to-face interactions were made with workers from one local and one international humanitarian organizations in Istanbul and Gaziantep, the two cities that have the most refugee communities in Turkey, in late 2019, although the study was halted owing to COVID-19. We then contacted the same workers in May 2020 to invite them to participate in the research. We also addressed another local office of an international humanitarian organisation where the first author volunteered for services for Syrian refugees in Istanbul between 2015 and 2017. We first started recruiting participants through these three refugee service organizations, which include local branches of two international humanitarian organizations and one local organization working with refugees, and via snow-ball sampling: using a snowball technique to recruit, we were introduced to more participants by those who had already participated in the study and shared our study information with other people whom they know in their professional community which made us to connect seven organizations in total. In terms of size, the organizations in our sample ranged from five to twenty-three employees. Local organizations were in the form of grassroot communities or registered non-governmental organizations, operating small-scale mostly; whereas international humanitarian organizations functioned as local branches of wider international bodies and humanitarian networks. Regardless of the type, the majority of humanitarian workers held short-to-mid term contract-based appointments. The overall focus, mission, and practices of both local and international humanitarian organizations are to provide immediate and subsequent support to refugees and immigrants in a wide range of areas, including protection and legal support, distribution of essential goods and services, information and referral provision, the coordination and delivery of care, counseling and social cohesion, and data collection for organizational and operational activities. Importantly, the organizations offer context-sensitive and community-based strategies that bolster the self-sufficiency of communities at risk.



Our recruitment spanned from May 2020 to October 2021. Interviews were conducted remotely using our institutional Zoom account. We received ethical approval for our procedures from our university's ethical board prior to commencing the study. Semi-structured interviews were conducted in Turkish or English by the first author who is of Turkish origin and fluent in English. The interviews typically lasted between 60 to 90 minutes. All interviews were recorded, and then transcribed verbatim. The interviews conducted in Turkish were then translated into English. The interview participants were not compensated.

The interview questions aimed to understand how the participants work. They were prompted to talk about their typical work days spent during COVID-19, their considerations of arranging and planning their working time, as well as challenges and benefits they have experienced as a result of remote work. They were also asked about their access to and experiences of using technologies in the course of their work. We hoped to understand the underlying reasons of participants' preferences around using or not-using specific technologies, so follow-up questions were also asked about details of their job duties, certain tasks and responsibilities.

We aimed to establish an understanding of workers' temporal experience with supporting refugees at a distance, adopting technologies in the course of collaborating remotely. We, therefore, focused on capturing narratives and stories, rather than asking our participants to record how much time they use in doing a list of tasks. We thought this would have been distracting for them given the emergent nature of their work. Still, the findings of this study will be useful in understanding how our participants' perception of time allocation has changed in the broader narrative of their lived temporal experience.

## 4.2 Participants

We interviewed a total of 22 workers from 7 humanitarian organizations (Table 1 has the demographic details). The sample of organizations was selected through convenience sampling technique with a consideration to represent the type of organizations and the city in which the organization operates. The participants of the study were chosen through snow-ball sampling considering the situation of COVID-19, their workloads, and the capacity to participate in the interviews.

Our participants represented a range of roles in refugee assistance, including social protection, mental health support, psycho-social support, case work, and legal aid, working at Local Humanitarian Organizations (LHO) or International Humanitarian Organizations (IHL) in the most refugee-populated cities in Turkey. All participants have work experience in the humanitarian and refugee settlement sector, ranging from 3 to 10 years. Of special note, all of our Arabic-speaking workers have refugeehood background, migrating to Turkey from Syria over the last 7 years.

There were multiple times where we had to reschedule the interviews due to the emergent nature of their work and other responsibilities. Our participants expressed their appreciation that the interviews gave them time to reflect on their profession in general and work activities they engage with on a daily basis.

## 4.3 Data Analysis

Our participants gave detailed and very engaged answers to our interview questions. We began with a close reading of multiple interview transcripts to get an initial understanding of the data as a whole. The coding process involved combination of both deductive (i.e., theory-driven) and inductive (i.e., data-driven) reasonings [118, 135], through which we consolidated our codes and themes [21] into higher-order themes. Our objective in the interviews was to gain a wide understanding of varied challenges and practises. We were seeking for notions and understandings of our participants' practises, feelings, behaviours, and reactions rather than statistically generalizable data.

Table 1. Fieldwork Information

P	Org. Type	City	Gender	Language	Job	Age
P1	IHO	Gaziantep	F	English, Arabic, Kurdish	Translation, Case work	32
P2	IHO	Gaziantep	M	Arabic, Turkish	Translation	36
P3	IHO	Gaziantep	M	Arabic, Turkish	Translation	22
P4	IHO	Gaziantep	M	Turkish	Social protection	46
P5	IHO	Gaziantep	F	Turkish	Case work	34
P6	LHO	Istanbul	F	Arabic,Turkish	Social protection	26
P7	LHO	Istanbul	M	Arabic, Turkish	Psycho- social support	27
P8	LHO	Ankara	M	Turkish	Case work	31
P9	LHO	Istanbul	M	Turkish	Case work	29
P10	LHO	Hatay	F	Turkish, Kurdish	Mental health	29
P11	LHO	Istanbul	F	Turkish	Mental health	32
P12	LHO	Istanbul	F	Turkish	Mental health	40
P13	LHO	Istanbul	F	Arabic,Turkish	Psycho- social support	34
P14	LHO	Istanbul	M	Turkish, Kurdish	Mental health	32
P15	IHO	Gaziantep	M	English, Arabic	Translation, Case work	22
P16	LHO	Gaziantep	M	Turkish	Mental health	26
P17	IHO	Istanbul	F	Turkish	Legal aid	37
P18	LHO	Istanbul	M	Turkish	Mental health	41
P19	LHO	Ankara	F	Turkish	Legal aid	36
P20	LHO	Istanbul	M	Arabic, Turkish	Translation, Legal aid	23
P21	LHO	Hatay	F	Turkish	Mental health	28
P22	LHO	Hatay	F	Turkish	Social protection	26

We first created high-level themes drawing on conceptual frameworks and coded deductively based on the type of activity participants spoke about. We based our deductive coding on Steinhardt and Jackson's [126] and Clarke's [31] anticipation work and conceptual components found in the literature. After a few iterations, we clustered related codes into ten themes: organising for remote work, time loss, preparing for remote work, pressed for time, projecting clients' challenges, clock-time, biographical rhythms, biological-rhythms, policy rhythms, organizational rhythms. These 10 themes were categorized in 4 thematic areas: planning, preparation, expectation, temporal patterns.

We subsequently used an open coding process to inductively identify emergent themes, key insights, and patterns that reoccurred in the data [33]. Our initial analysis resulted in roughly 35 codes (e.g. gender dynamics, virtual peer support, challenges of access to resources). We then iteratively refined and discussed the codes to ensure that they were representative of the data. Related codes were then clustered into 13 higher level themes. The themes emerging out of this process, included adaptation to remote work, practices to control overwork, work-life conflicts, access to resources, reasons for choosing specific digital platforms over others.

The 35 codes and 13 themes were formalized in a codebook, which was used to code all the transcripts. The final coded transcripts were then analyzed against existing literature, and the coding was iteratively refined: through this iterative process, we developed three major and mutually constitutive themes: socio-technical context for anticipation work, navigating shifting temporalities, and rhythms during COVID-19. Conceptually, we found that these three themes appertained to the development of anticipation work during WFH. Additionally, our empirical data presented in Findings section also represent other themes that also surfaced during the data analysis.

This study followed the long and rich tradition of interpretivist work rooted in critical studies, and is widely used in CSCW and related fields, where qualitative researchers embed themselves in the context of the study to gain a deeper understanding of the field. Contrary to many qualitative studies that involve multiple researchers to conduct posthoc analysis of the collected data to reduce biases, these studies rely on the subjective interpretations of the researchers as the key to develop the findings. The findings are shaped by the researchers' own experiences that are co-developed with the people they study, and no other external interventions are sought during the posthoc analysis of the data. The coding process with a single-coder thus aims to be reflexive rather than replicable. Following this tradition, the first author made the coding and data analysis. The first author is Turkish and understood the culture of work in the Turkish context. The first author maintained detailed notes that documented the disagreements in each iteration of coding [71]. We present our major findings in the following section.

## 5 FINDINGS

### 5.1 Socio-technical context for anticipation work

Refugee humanitarian workers interact with numerous contextual elements - technological, informational, political, and organizational - as they transition to remote work. First, we found that access to technology resources (e.g. devices, internet, bandwidth, tech education or training) is a challenge for humanitarian workers where the majority of them had to share work devices with family members which creates difficulty in coordinating work and maintaining work-life boundary. Second, our participants spent a significant amount of efforts dealing with misinformation in refugee communities about several high-risk situations (e.g. COVID-19, border crossings to migrate to Europe), as well as within local communities about refugees' access (or lack thereof) to public resources and how they are treated in terms of local and international politics. This form of information work adds extra to humanitarian workers that is not supported or compensated, and

creates additional challenge for them to maintain healthy work-life boundary. Third, the lack of meaningful support and appreciation from family, friends, and relatives regarding workers' profession has negatively impacted their morale and wellbeing. For example, Turkey's local environment of high political polarization and increasing anti-refugee sentiment during pandemic has compelled humanitarian workers to be extremely discreet and cautious about their work, not just publicly but also privately among their own families and friends, leaving them further isolated. And lastly, lack of organizational support has pushed humanitarian workers to create temporary fixes. For example, we found instances where workers pay for the data bundles so that refugees can participate in services, which leads to workers losing money without being reimbursed.

*5.1.1 Technology Non/use.* Technology plays an important role in providing humanitarian support to refugees. Refugee assistance workers rely on technology to coordinate service and referrals, share information to clients, obtain information about ever changing rules and regulations, collecting and reporting service data, and participating in professional development opportunities. We found our participants drew on a combination of paper-based and digital solutions before remote work, with several software tools and devices being used to support mentioned activities. While the direct service provision was entirely in-person, workers relied on emails and phone calls for service coordination and referrals (e.g. contacting public organizations or other humanitarian agencies for aid distribution) through office laptops and phones. Pre-WFH, personal phones were used by our participants. Information sharing with clients occurred through in-person events and informative sessions, as well as in some cases through web-based applications which provide mass texting service. Service data was mostly collected through verbal and written medium in-person. We understood that paper-based approaches were used for the case administration and data collection, with some supplementary digital methods, i.e. workers enter data that were collected manually into digital forms. And lastly, professional development training occurred in the agencies or elsewhere physically.

With the organizations rapidly transitioned to WFH, we found many cases where technology transformed how humanitarians provide services and led to the adoption of new technologies and structures with remote work. The tools for coordinating services and referrals now ran through personal phones and laptops at home and were diversified - for example, our participants adapted messaging apps that allowed group chats, such as WhatsApp. As our participants report, several WhatsApp group chats were created with participants from the humanitarian sector based on the need and demand of refugees (for example, COVID-19 test centers). Such group chats made referral and service coordination much easier since it allowed access to people in higher administrative positions who were otherwise difficult to reach. Service data was collected through verbal and written medium digitally, stored and reported through Microsoft and Google Office productivity office suites (mostly spreadsheets and forms). We also encountered a few cases where the KoBoToolBox was deployed for data collection. Cloud-based service solutions were explored and adapted by few organizations. For direct service provision, applications such as WhatsApp, Zoom, Google Meet, Facebook video, were heavily adapted. Our participants reported using Zoom and Skype to join professional workshops and training which also included provision of short training sessions about how to use Zoom in service provision. Below, we present additional details about our participants' access to and use of technologies.

All participants owned a mobile phone, with 5 interview participants obtaining a work phone from their organization. Of the 22 participants who had mobile phones, 16 reported that they shared their mobile phones with other family members, such as spouses, children and elderly parents. The situation was similar for computers. Only 2 participants reported having work computers, which were brought from the office when remote work had started, otherwise they would not have a

computer. For others, they reported using personal computers at home. Only 2 workers had sole access to their computers. The rest of our interview participants (n=18) reported that they share computers with other family members such as their spouse and children. All participants reported that they had access to a laptop or desktop in their offices, with only 3 participants reporting that they used to share these devices with co-workers in the office. All participants had home internet, with 12 mentioned their household had to upgrade the plans or purchase better packages for speed; all our participants emphasized that home internet was expensive and not fast enough.

Prior to remote work, our interview participants reported using technologies for work related activities mostly in the office: their use were related to case management purposes, including coordinating meetings and referrals through calls and emails, documenting service results through emails to the donors. The entire client support services were provided in-person either in the organization's physical office space or during home or school visits. After remote work, our participants started using computers and phones to accomplish a range of tasks, including teleconferencing and/or videoconferencing with clients and co-workers; communicating with co-workers and clients through messaging apps; contacting other service providers and colleagues through calls, email services and messaging apps for referrals and further case coordination; creating, sharing, saving documents and spreadsheets for the track of workflow and reporting purposes.

For all participants, except P15, remote/digital service provision was a new territory. Only our translator participants had used WhatsApp with their refugee clients to accommodate some of the logistical needs, including "*sharing location of the agency before the client's first visits*" and "*sending fellow translator's phone number*", and answering some daily questions. From our interviews, we learned that our participants provide a range of services to refugees and asylum seekers. We grouped these individual services such as information provision related to COVID-19 and public health or other matters related to settlement.

Psychosocial support and focused therapies were delivered through audio and video conferencing. They coordinated aid distribution (in-kind relief items) and cash transfer (rent support). Along with services to individuals, they provide group services by scheduling online meetings. These services include health and wellbeing programs, general information sessions. Our participants reported that they have tested several platforms for videoconferencing, including Zoom, Jitsi, Google Meet, Facebook, over time. WhatsApp and short-messaging services have been primary messaging services.

*5.1.2 Misinformation and COVID-19.* Our findings revealed that humanitarian workers are significant actors in refugees' everyday life in Turkey, mediating their access to information, resources, and services in the lack of permanent protection infrastructure for refugees. During a crisis context, such as the one brought by COVID-19, their assistance was especially vital in sustaining public health measures for both refugees and local communities.

Our participants reported using social media platforms for outreach and publicity, and especially for creating awareness in broader Turkish society about the situation of refugees and asylum seekers. They emphasized the importance of sharing information about the source of their funding (i.e., most of the funds come from the EU and other international bodies, rather than local donors) and allocation of these resources (i.e., services supporting refugees integrate into Turkish society) publicly as they previously experienced harsh criticism, sometimes accusations, from the local Turkish community on social media on the ground that refugees exploit public resources otherwise available for Turkish nationals. This aligns with the findings of [6] who demonstrates how the intersecting economic inequalities, ethnic prejudice toward marginalized groups, compounded with difficulties exacerbated with lockdowns contribute misinformation widely circulated during pandemic.

Our participants believe that social media is especially useful during COVID-19 in communicating accurate information to the wider public and advocating for refugees, particularly for combating misinformation that has appeared on various channels claiming that refugees are allegedly responsible for the spread of the virus because they are highly mobile and not in compliance with social distance measures.

They also noted that refugees contact them frequently to confirm information or fill gaps in their understandings. As most of our participants recounted they received several phone calls from clients asking for more clarity on the event of the opening of Turkey-Greece border on the late February, whether it would be safe to cross the border and enter the EU, and checking if this is a genuinely encouraging call from the government. Our participants provided information as well as guidance to their clients on the safety and security implications of such a move. There has been other forms of misinformation, as our humanitarian workers deal with on a daily basis, spreading on social media platforms and messaging platforms among and across refugee communities, about the aid distribution, vaccines, and the availability of other forms of assistance.

*5.1.3 Fear, Frustration, and Political Climate.* Our findings reveal complex challenges humanitarian workers encounter in the course of their work. Previously, [141] documented the avoidance of using social media among refugee service providers given the fragile relationships with refugees and local communities in Turkey. Similarly, our participants spoke of how carefully they need to be when communicating any message from organizational social media accounts. Depending on the topic and circumstance, either managers or team leads review social media posts which, according to our participants, provide an extra layer of safety. In addition to that, our findings showed that same precautionary attitude is relevant for workers' personal accounts. Participants were cautious posting about their work with refugees and refugee and migration issues, in general, on their personal social media accounts despite not being public. A number of reasons stated, including the general political environment in Turkey, highly politicized nature of refugee issues in the country, general hostility toward refugees among the public which spread to their own family and friend networks. Several participants recounted that throughout their professional lives they think they were previously more vocal about issues related to refugee rights on social media, however they feel exhausted and overwhelmed dealing with anti-refugee sentiments. Some of our participants also stated they believe they should be very private in their use of social media to preserve the professional boundaries with their clients. They were considerate and thoughtful about avoiding any action on social media that may put their clients in a risky situation.

*5.1.4 Organizational support.* We asked about the availability of organizational resources which could support workers transitioning to remote work. In terms of organizational guidelines about use or non-use of technology, none of the organizations have any guidelines regarding rules and regulations around using technology in the workplace. Our participants also stated that they never heard of such policy in the sector in general. When asked about whether they have received any training related to technology at any time during their professional journey, none of the participants reported any technology training received either in current or previous organization. In terms of the availability of IT support - either remote or office-based - some of the participants (n=8) mentioned that they were aware that IT support exists for ad-hoc queries yet haven't used it. Reflecting on previous experience, P1 and P13 expressed their unease with the IT support team being constituted only by male staff, thus not feeling comfortable asking their questions. We asked what technologies - hardware or software - were made available to them while transitioning to working from home. Most of our participants expressed they feel under-supported regarding the demands of remote work. Only translators were provided with work phones. The incapacity of the organizations to procure items that were not addressed during the current budget cycles was

mentioned as a common reason why workers do not have work phones or laptops to be used while working from home. Several participants mentioned that they requested from their managers to include those items in the next project cycle. None of the participants compensated for any of their purchase they made by their organizations. P13 shared that she thought “*it was not the right time to ask for compensation*” given that the organization has limited financial resources. Similarly, P12 coordinated her colleagues to raise money to buy data bundles for refugee clients, considering the organization cannot afford it and the clients wouldn’t have the means to participate otherwise.

In this section, we presented the socio-technical context for anticipation work. Steinhardt and Jackson [126] describe how the current constraints actively shape future imaginations and jointly planned and improvised trajectory that develops them as reality. Our data also revealed that both material (e.g. access to technology, bandwidth issues) and socio-cultural constraints (e.g. lack of a supportive political and financial environment, limitations to workers’ wellbeing) provided the context for humanitarian workers to construct socio-technical imaginaries of WFH and leverage speculative efforts to imagine ways of approaching work-life balance. Similarly to oceanographer participants who learn programming languages alongside construction activities to prepare for data-intensive science [126], our participants engage in anticipation work by learning how to use digital platforms (e.g., videoconferencing tools, messaging apps) and testing each of them to ensure compatibility with the purposes of each service line. Furthermore, as workers actively consider future scenarios in which they would have to work from home permanently, they demand that organisations apply for funding for long-term technology purchases. In the section following, we describe how anticipation work evolves in the lives of humanitarian workers as they move through different phases of WFH.

## 5.2 Navigating the shifting temporalities

In this section, we report our findings on anticipation work and describe how anticipatory practices evolve with associated temporal experiences of our participants. Overall, we identified two processes of anticipation work: planning and preparation. Planning in our data refers to the abductive nature of anticipation work [31] where our participants continually strive to demystify uncertainty and confusion about the possible structures of what their first experience of remote work and WFH would look like. They gather information from different sources, generate near-future scenarios based on numerous assumptions, then switch back and forth between the information obtained and the assumptions made. Preparation involves activities and practices of what Clarke [31] calls simplification, drawing on Star’s [123] “simplification work”, in which tasks are shaped as a response to the constraints on material resources and transformed into workable pieces, as Steinhardt and Jackson [126] put forward: “the future and how people anticipate it is integral to understand action.” In our study, preparation entails simplifying practices in the sense that it contributes to development of an array of worker activities, such as learning new technologies, rearranging work tasks, and trying and exploring new modes of approaches to serving clients. Anticipatory practices of planning and preparation contributed to the workers’ assumptions about the future of remote work and WFH. Of important note, these activities are co-constitutive and occur in a variety of orderings and combinations, often simultaneously [31]. We report anticipatory work together with our data on temporal experience.

In exploring temporal experience during the pandemic, we asked how participants felt about time as they switched to remote work as well as other factors such as the duration of stages and the meanings attached to them. When discussing the ways they make sense of it, our participants used discursive markers to designate temporal sections. Overall, the data reveals two notions relating temporal structures of digital humanitarianism affected by the pandemic: the sense of time loss

and feeling of pressed for time. While we explain them, we concurrently show anticipatory work employed by our workers navigating these structures.

*5.2.1 Time Loss.* Majority of participants used markers of “loss of time” in sharing their experience during earlier stages of the pandemic, which corresponds to the first 2-4 weeks of the announcement of lockdown. At this stage, our participants engage with abduction through which they try to make sense of the situation and the way their work move along. Through engaging with planning practices, they gather information, generate explanations, bouncing ideas back and forth with colleagues. Our findings about loss-of-time perception have three thematic focuses, touching the issues of competency, empathy, and productivity.

Firstly, our participants’ accounts of “feeling of unpreparedness” regarding digitally-mediated work. were mostly associated with not having previous experience of working at a distance, concerns that were often crammed between competences, and confidence of uptaking technologies for remote support. As P12 recounted,

*“So, I went home on March 16, right, and the manager called me that night saying that we don’t come to the office until further notice. I would say the first two weeks were just lost. We started holding team meetings over Skype to think through what we are gonna do, how we are gonna reach out to people. We kept meeting and meeting.”*

Another participant also agreed that their organization “lost so much time” in figuring out how they could keep case work:

*“We didn’t know what we didn’t know actually. Online is a whole different thing. It took time to get to set up accounts on Facebook, Instagram, and understand how to reach out to clients over there. And at first, we were wondering whether they use it. We’ve never asked them!”.*

P11 shared that the first week of lockdown felt like “kind of working but producing nothing”. Similarly, P17 said that “I should say we faltered for like 2-3 weeks. We keep asking around to see how other agencies are doing. We are a small center with limited resources. Our manager told us that in the meantime each of us reach out to colleagues working in bigger organizations and report back”. P14 also confirmed their organization also asked others who are more knowledgeable and experienced with technology products.

Planning through collecting information in the face of uncertainty supports cooperative work by alleviating workers’ feelings of unpreparedness with respect to digitally-mediated services. As our participants suggested, existing inter-organizational ties and a history of collaboration within the refugee humanitarian community contributed to this process of planning, especially going back and forth with ideas, methods, and schemes of services. As P18 explained why he advises his colleagues to make multiple plans.

*“It’s so hard to arrange an online program. Everyone’s schedule has messed up. You say: ‘OK. Let’s start at 1pm on Monday this week. They [children] go: I have a class at that time. I have this, I have that. Then, you tried hard to assign a time, reschedule everything on your day. You opened Zoom and only 2-3 children online. You can’t start the training, so you wait. The rest gets connected after some time. They go: “Sorry, my previous class didn’t finish on time. I couldn’t leave!” Nothing finishes on time at Zoom, and this ruins all the plans. You always need to have Plan B, C,D. Plan A is never enough.”*

Secondly, the feeling of loss of time is also associated with disruption of services, hence not being able to support their clients. These instances imply an empathetic quality to temporal experiences. As one participant stated: “Everything stopped. Psychosocial support? Stopped. Food aid? Stopped. Child service? Stopped. We’re just being absent when they most need us!”. We learned from our



interviews before remote work, a typical case work starts with a refugee or asylum seeker in need of help either physically coming to the agency or, if possible, calling the agency and after a brief with the staff and the translator, if needed, to schedule an in-person meeting. Additionally, staff would do home visits or school visits for various reasons, such as needs assessment or delivery of programs and services. While these service landscape got disrupted due to pandemic, workers enacted a series of planning to resume service provision. This requires from workers to do a client group-based planning and engage with specific details of each refugee beneficiary's case and build anticipations around how to interact with them. For example, another participant recounted a similar feeling of frustration exacerbated with the introduction of imposed curfew:

*“In GBV cases, we would work as a team. Not only with the woman, but with her child/children, and at least one close woman neighbor. We tell the kid: if you see mom is being hurt and crying, go to the neighbor and tell her ‘My mom is asking for sugar!’. The neighbor would understand the situation and either directly call the police or call us to let us call the police. But now, with the curfew, that is not possible”.*

We noted that this as a case of preparation, one form of simplification work, where they impose constraints on collection of potential actions by considering who they need to try reaching out first. So they prioritize client groups who have experienced cases of gender-based violence (GBV), domestic violence, or child labor. Other actions included forwarding the calls coming to the office phone to the translators' mobile phone number not to miss any call from refugees with additional vulnerabilities.

The third and last theme of time loss was related to access to physical and digital materials. As our data indicated, before remote work, for some of the participants, their work occurred in a physical information environment. They create information on paper regarding cases they work on. As P11 stated,

*“The worst thing that has happened to me was not having my binders with me. I mean physical dossiers in my office, with all those paper documents with beneficiaries' information on it. Since lockdown, I have been doing Google spreadsheets. Now I have to rely on my memory if I need any piece of information to decide on anything for the case, and it took so much time, you know. Sometimes I call my colleagues to ask - ‘Do you remember what I remember?’”.*

Transitioning from local to digital, the feeling of time loss in relation to material access is also associated with the future. Our participants shared their anticipation around time loss they may experience when they will be back to the office. Similar to P11, other participants (P7, P9, P16, P21) started using Google spreadsheets, and expressed concerns about how long the merging of the physical and digital files would take.

**5.2.2 Pressed for Time.** As organizations transitioned to services online, our participants expressed the work tempo has increased significantly. They shared several instances of extension of work time and consequent feelings of rushing, with the three major factors emerged in our data: increase in the number of clients, changing the nature of needed support, and infrastructural issues shaping overwork.

First, they told us that the number of clients our participants served increased. Our participants mentioned several reasons, including notions of access, participation, and trust. Several participants stated that for refugees it was relatively easy to access to online services compared to using public transportation to visit agencies. Also, normally stuck at their satellite city, clients were now able to participate in services delivered in other cities, thus connecting with people from other cities in

Turkey. For our participants, this was a valuable experience for refugees. Also, trust was mentioned as another reason:

*"I had around 15 Syrian teens in my program before the corona started. Now I have 15 times 3! Because the parents didn't trust online programs at first. They were suspicious about what's happening. The father didn't give the phone to the children. Then I taught let's create online sessions with fathers and mothers just to make them trust us, trust here, ensuring that their kids are safe. So I started wellbeing sessions, conflict resolution sessions for them. They love it! They came, they made friends. So now I have programs with parents running on Mondays and Thursdays. And with their children, I do Wednesdays and Fridays!"*

Our participants engaged with this preparation work of putting additional services and solutions together to cater the increased number of refugee clients, breaking problems into workable chunks, thus compensating for unexpected events. Preparation helped them to calibrate information gathering as well as limit and assess a variety of factors affecting remote humanitarian service. Many participants noted how their refugee clients enjoyed using Zoom to receive services. Refugees felt valued and cared for being introduced to a new technology and connecting with service providers on what they believe to be a "professional" platform, rather than WhatsApp, where they pursue everyday informal communication with family and friends.

Secondly, the changing nature and intensity of the support needed were mentioned as reason of the extension of working time. As our participants recounted, one of the reason is that many clients who worked in the informal sector and took daily service jobs lost their income, and in many cases, ability to support their families. This resulted in their traumas getting triggered, and cases of domestic violence have increased. Our participants frequently encountered their clients' anxieties getting piled up with the fear of getting the virus. This is particularly stressful because social distancing is impossible with 3-4 families sharing a small apartment. In context of undocumented immigrants, several participants indicated that those clients' stress is also caused by the fear of going to hospital or any public health units in case they get the virus or being stopped by the police while going to hospital as the presence of police in public areas in general, marginalized neighborhoods in particular, has got higher with public health measures. Both P20 and P21 said that as a result of this, they have had cases of late COVID-19 diagnosis of their undocumented clients, which has resulted in them working longer hours to solve financial and regulatory challenges. As P20 recounted:

*"At the end of the day, you've got to add so many new numbers on your call list. It's good when the person on the other side of the phone wants to help you and your client. If the person was understanding, I put 'helper' next to their name in my phone list and write to my colleagues on WhatsApp: - this person is helpful, here's the phone number, call them if you need. Don't waste your time with other guys!"*

Other reasons were also mentioned. Some cases hold significant time pressures, such as supporting women refugees who need access to abortion. Other cases with time pressures were also mentioned, such as funeral arrangements and issues related to the preparation of body. P21 mentioned the window is extremely narrow since the hospital administrations rush moving out bodies of deceased who died of COVID-19 and there is little time to obtain official documents and contacting the consulate or embassy and family in the country of origin. P13 added that funeral organizations become even more complex if the deceased isn't an officially registered migrant.

Thirdly, our participants stated that supporting clients remotely and digitally takes a very long time, compared to co-located support. All of our participants stated that online sessions with clients take up time as these digital tools and videoconferencing applications are neither familiar to our

participants nor their clients. This is not an easy process, as our data shows, since the in-built language options in these applications were not in Turkish or Arabic so for clients to be able to join the sessions, our participants provide detailed explanations of how to download, use the software into their phones and computers at each session in their own language. Briefs about features and functions were provided by translators before the sessions. Since each session may be joined by different clients, translators repeat these briefs in case a new client has joined.

*5.2.3 Controlling Work Time.* Throughout our study, participants' challenges of work time extensions and desire to control overwork emerged as a shared experience. Infrastructural constraints were frequently mentioned as important barrier to finish work on time. Our participants shared instances of dropped calls, having connections lost either briefly or indefinitely, either from themselves, clients or translators, due to unreliable Internet connectivity or old devices, resulting in pauses, and in certain occasions, repetitions of the statements. As P10 noted:

*"It's like we speak the same thing multiple times. You say something and wait for the translator to translate that part to the client. But he's like - Oh I missed after you said this or that. What did you say? Say again. Then you repeat and he catches it, and then he does his part. And the client is like - Sorry I didn't hear you. Then the translator repeats the question, and then the client gets it, responds to it, and the translator would translate it to me...I mean, if I have like a 1 hour session, I'd tell myself - no it'll be at least 1hour 45 minute".*

When asked how they envision service interaction with technological issues, our participants recount their experiences with imagining what may go wrong and engage with planning accordingly. To illustrate: *"I think to myself -well, what if the connection gets scattered? What I can offer them [clients]?"*

*"There are lots of times where you think before your sessions. What if Zoom drops in the middle of my call? I have these materials that I have to deliver, right? I've tried several times to wait for folks to get reconnecting but it only makes the session longer. If Zoom drops, then I switch to WhatsApp and record my voice." (P6)*

*"Some of us are more creative, and frankly I learned from them. Now I have a couple scenarios to run in my head. If some of them have bad internet, I tell them don't worry I'll share screenshots with you later or we'll catch up over the phone. I continue with the rest. Otherwise it'd disturb my schedule." (P16)*

These hypothetical outcomes act as cognitive resources for our participants to do anticipation work and support their desire to have control over the extension of work time and manage work-life tensions. However, not all anticipation work resulted in fulfilling expectations. Rather they encountered resistance from actors who demand more transparency.

*"The list was extremely long. I'd say hundreds of people. I thought - if I hide the phone number, they can't call me back so it won't eat my time, [...]. So I called one by one, introducing myself and the organization, checking on them, giving the information, and responding to questions. But then one client said - Who are you? I don't want to talk to you. Why is your number secret? How could I know you are from that organization?. I hung up immediately and told myself - this was a mistake! I've never done that again".*

This small excerpt captures the characteristic of anticipation work as being not determinate and can challenge and complement by actors within a sociotechnical system [126].

Throughout our interviews, our participants described how working long hours has relentlessly become a norm in their organizations. They told us that their co-workers and managers alike work

extremely long week-day working hours as well as during weekends. Many participants reported engaging some forms of peer-support to limit over-work or support wellbeing.

*“When I go online to look at something on the spreadsheet, if I see my colleague working late at night, I’ll go - What are you doing here? Log off and take a rest.” (P6)*

*“I believe that those of us who live nearby positively motivate one another. We decide to meet at the nearest park in the neighbourhood when we need to talk about something over the phone or Zoom. So it felt good to get away from the screen and go for a walk while still accomplishing what we needed to do.” (P12)*

While many participants attempt, and to some extent succeed, controlling overwork, some reported this is not always the case. P6, working on social protection of children and gender-based violence (GBV) cases with women refugees, stated that not being able to see the clients physically in their environment always means inadequate information: *“And you think to yourself - OK, she sounds fine but it’s possible that it’s because she’s with her husband or other offender at home.”* Similarly, as P7 mentioned that she deliberately prolongs the conversation on the phone:

*“Without visual indications, it’s really difficult to get a sense of the client’s situation over the phone. What I’ve been doing is just stretching the conversation as much as possible and, if feasible, making my clients talk more, relax, and give more details to me so that I can better understand the case and help them”.*

**5.2.4 Gender and anticipation work.** We found that gender to be a significant factor in determining anticipatory practices where women participants navigate through multiple temporalities where their clients’ expectations and domestic responsibilities intersect. Our women participants spoke of WFH as extremely challenging for them due to overlapping responsibilities, roles, and obligations. They were forthcoming about taking care of children and other familial responsibilities, such as caring for elders who live in the same apartment or building or live nearby, a household tradition in Turkey, while keeping up with work tasks. For those who have parenting responsibilities, we noticed kids’ online schooling became a huge matter of attention. Additional concerns were also associated with attending kids’ screen time and use, such as making mundane plans to provide children a means to make them busy while their parents work. As one participant aptly said, *“I may seem to fully focus on my laptop, but I keep my one eye on them, looking at what they are watching”.* These findings resonate Gregg’s observations [57] about women creating work environments at home where they can watch over children. Our women participants commonly referred to these topics in their responses to questions about daily life coordination and planning. We found that women are not only disproportionately tasked with planning and preparing the online school setups for children, but also work setups for their husbands and other daily coordination needs for their elderly parents or in-laws. As one participant described:

*“If I put my two children in the same room and make them join their class, my husband should be on the balcony, so their voices don’t disturb each other. I’d be in the kitchen, cooking meals, watching children in the meantime so they don’t get into fights. As soon as my husband is done with the laptop, I’ll begin my training session.”*

We found that receiving calls or texts from refugee clients outside of work hours was particularly challenging for our woman participants. Many participants mentioned that it is extremely difficult to establish boundaries with clients after having to give their personal phone numbers as they began WFH due to lack of professional technology support. In the WFH context, our participant shared that women refugee clients *“have the impression that they are visitors in your house, and no matter how hard you try bringing up the limits of the relationship, because they share all the intimate details of their lives, their womanhood, for them you are a friend, and you felt the connection.”* (P10).

Our woman participants thus found to be hard to navigate these dynamics because video-calling adds another layer of attachment to client-provider relationship. Some participants reported that they keep making the calls and messages received on weekends or evenings wait as a strategy for navigating such conflicts and managing work-life balance. As one participant shared:

*“There’s a little bit like - I just wait to see if it’s urgent. If my phone keeps calling or my WhatsApp beeps on the weekend, I continue to do my own thing, but also keep checking the screen, you know. You kind of expect those things, and get to know when to respond without stealing from your children’s time.”*

Such instance of prudent waiting shows that women workers act at temporal edge between temporal demands of their refugee clients and of their personal lives, and they engage with anticipation work to navigate what will otherwise likely to escalate work-life tension.

In this section, we presented the temporal experiences of workers and how they engage in maintaining work-life balance during pandemic-induced WFH. With no time for organizational planning or strategy development, we found that humanitarian workers developed anticipatory practices. Our data showed that planning and preparation as discursive resources to be enacted for generating desired future conditions and circumstances. Our study reveals that they serve to accommodate work-life balance in workers’ experiences with WFH frameworks: being precautious about over-work and managing family duties, engaging in peer-care to prevent burnout and compassion fatigue. Further, as has been described, women workers are found to be immensely active in anticipatory practices.

### 5.3 Rhythms during the COVID-19 Pandemic

In the previous section, we presented shifting temporal experiences of humanitarian workers during remote work and how they collectively contributed to development of anticipation practices in the accounts of workers. However, the contours of these practices are structured by temporal rhythms. We use Jackson et al.’s lens of rhythms [76] to reveal the multiple, simultaneous or successive in nature, ad hoc or staged cycles of activities among workers. Anticipation work is crucial to temporal alignment as actors strive to reconcile predictable and unpredictable nature of collaborative life [126], and help us to reformulate practices through interlinking past(s) and future(s) across different temporal patterns. These temporal patterns manifest themselves at varying degrees of relationality as evident in worker-client interaction and collaborative work practices.

**5.3.1 Clock-time.** We recognised clock-time as one major device that defines the everyday routines of our participants and how they collaborate. Their accounts indicate a timetable that divides the working hours – which normally begin around 9 a.m. and conclude between 6 p.m. and 11 p.m., into staff meetings, individual and group sessions with clients, and other tasks related to planning and preparation. The number of meetings varies considerably depending on the nature and demands of the cases as well as organizational needs, but as our participants indicated, staff meetings that had been usually scheduled weekly or bi-weekly for reviews, recaps, reporting, problem-solving and knowledge sharing became a daily event for all the organizations included in our study. Some participants have a rough timeline, as P11 recounts:

*“I try not to exceed 5 sessions daily: I do two before noon; and my afternoon schedule is like 1-2 p.m., 3-4 p.m., 5-6 p.m. sessions. Of course, things change. They always do. But this is sort of a general plan that both my manager and my translator colleague are aware of and we plan accordingly. If it’s a typical day, I do my notes and staff meetings after the sessions”.*

While others, P4-P9, P20, keep their mornings with more administrative tasks and reserve the afternoon with client meetings. Most of our participants said that they always pay attention to setting aside 1-1.5 hours in their morning schedule for urgent matters, such as client calls or messages, that were received after 6 p.m. the day before. Our data presents temporal aspects related to social and cultural characteristics. For example, our participants stated that they sometimes work on weekends – Turkey observes weekends on Saturday and Sunday, and some of our participants indicated that they ensure there isn't anything scheduled on Friday early afternoons due to *Jumma* prayers, religious duty according to Islamic tradition, which both some of our participants and their clients observe.

We identified other rhythms that are related to scheduling, timing, planning and other aspects of organizing their work activities. We grouped them into four different, yet related, categories as biological, biographical, policy, and organizational rhythms.

**5.3.2 Biological rhythms.** Biological rhythms pertaining to cyclical changes that govern processes of individual physiology, as exemplified by circadian rhythms or meal timings. Although biological rhythms that shape working practices of our participants appear to correspond with the clock-time that regulates work hours, our data shows there are exceptions. For example, P12 recounted biological rhythms between herself and her clients, and her efforts to re-sync them.

*“So, normally, we were doing the morning sessions with adult clients. It’s kind of the best time because kids are at school and they have that free time. But COVID-19 hit, they lost their jobs, and their anxieties came back. They didn’t show up. There were times they WhatsApped like 15-20 minutes before the session, asking - can we do it another day please? Now they wake up very late, like in the afternoon, due to their heavy depression. So we keep changing the time of the meetings, we start around 2 or 3 PM these days, or sometimes even later.”*

However, some tensions remained as problems. For example, P11 shared an instant of her client, a refugee woman, taking her mobile phone in the middle of a mental health counselling session, went to the kitchen and showed P11 through the camera their empty fridge saying that they are out of food. Our participant stated that they immediately stabilized the client, ended the session earlier, and reached out to their colleagues tasked with food distribution.

**5.3.3 Biographical rhythms.** In alignment with Jackson et al. [76], we identified individual biographical rhythms as a source of collaborative rhythms shaping collaboration that concerns identities, changing roles, and career trajectories. Our data captured cases of our Arabic-speaking participants felt more time pressures as compared to their co-workers. We note that this is related to first, and most notably, the fact that they work as translators besides their usual case work, meaning that both actual duration and intensity of their work has increased due to the pandemic. Having been the first contacts of clients as well as similarity of lived experience – most of them are former or current refugees with Syrian origin – our Arabic-speaking participants stated they feel pressed for time. Another factor contributing to this is the fact that we noticed that our translator participants are either given work phones or are told to use their personal phones through which clients can reach them directly. Secondly, it also appears that our participants are compelled to take on roles as “technology facilitators” (or in their words, “digital problem-solvers”, who helped clients navigate digital platforms) in their organizations, which adds more tasks to their schedules. This role basically involves helping clients to use technologies, ensuring they are connected to the calls or video-conferences, providing translation support on features, or troubleshooting tech issues. This requires our participants to attend online sessions at least 10-15 minutes before the actual sessions start; and with group sessions, they need to schedule more time to accommodate

the group's technology needs. As P1 and P13 mentioned this role entailed following the list of participants closely and making sure everyone is reconnected if they drop.

*5.3.4 Policy rhythms.* Additionally, we distinguish policy rhythms that govern the collaborative aspects of our participants' practices. By policy rhythms we refer to temporal patterns imposed by political and administrative regimes, as exemplified in our case, related to COVID-19 lockdown. Unlike most of the other countries worldwide, the Turkish government enforced age-specific stay-at-home orders to contain the virus [9, 79], mostly announced in ad hoc nature [32], which imposes strict lockdowns for seniors older than 65 years, starting from March 21th, 2020, and children and youth younger than 20 years, starting on April 5th, 2020 [17, 79]. The curfew schedules were tightened or loosened from time to time, mostly in response to economic considerations, as in the instance of granting exemptions for those aged 18 to 20, a key working group of the country [64]. Our participants most often described how changing curfew schedules create conflicts in organizing their work and home schedules. As P5 described having her mother-in-law and children stuck in the same room while delivering support to her clients as very challenging, she tries to shift their meetings to very early morning when her children are either sleeping or not in their full energy mode. Similarly, P4 and P17 explained scheduling calls and counselling sessions with clients who have children or elderly members at home as becoming increasingly unpredictable because when the curfew restrictions lifted for a short window they want to spend time with their family members.

*5.3.5 Organizational rhythms.* Finally, we identified organizational rhythms that determine and shape temporal and technological aspects of remote work experiences. Organizational rhythms concern socially constructed patterns of plans, processes, timelines, and deadline [76]. In our data, organizational rhythms emerged as fiscal cycles, project or program deadlines that lead to organizational actions and decisions and enable or constraint workers' practices. Some organizations in our research are given "Pandemic-specific emergency funding" from the donors where the organization must spend before a certain date. In these cases, our participants mentioned they prepared a list of beneficiaries and organized teleconference meetings with refugee and asylum seeker clients to determine eligibility for cash assistance. Eligible profiles include for example single mothers, families with children who are out-of-school and labor, having experience of violation, unemployment, or lack of housing. Due to high volume, intersecting vulnerabilities and time constraints, the meetings were meant to be kept short and joined by one translator and at least two colleagues to determine in a quick yet right manner. Several of our participants spoke of how the procurement windows are tied to project funding cycles, making the decisions of purchasing work phones and other technology support to be postponed.

In this section, we presented temporal patterns that shape the work practices of our humanitarian participants. In our data, rhythms are central to understanding how anticipatory practices institute activities envisioning work-life balance. We outlined the temporal patterns, such as clock time, as well as biological, biographical, policy, and organisational rhythms. Taken together, as Jackson et al. [76] indicated, these rhythms constitute distributed collective practices, and are constituted by them, through shaping the timing, duration, and co-occurrence of anticipatory practices that inform and shape near-future expectations of a more balanced WFH experience.

## 6 DISCUSSION

This study investigates the challenges that refugee humanitarian workers face during an unprecedented shift to remote work, and how they maintain work-life balance. Our paper provides an in-depth understanding of refugee service providers' lived experiences of digitally-mediated work that is entangled with the complex interplay of tools, technologies, and temporalities during

pandemic-induced remote work. Inspired by Thrift [137] who calls for localized accounts of social experiences of time, our objective is to offer a local, situated understanding of temporal experience in remote work structures. Our findings reveal that humanitarian workers engage in anticipation work as they manage uncertainties while moving through these new WFH circumstances, while actively thinking towards predicting and managing futures of refugee service provision.

In this paper, we first set the socio-technical context shaping our participants' anticipatory practices in WFH. We then provided accounts of understanding of their lived experiences in relation to time and presented a myriad of social, organizational, and material circumstances affecting it. Subsequently our findings reveal tensions with sudden remote work and how this is dovetailed with other temporalities, obligations, and responsibilities in lives of humanitarian workers. Drawing on Wajcman [146] we analyze "the mutual shaping or coevolution of new technologies and temporal rhythms", and argue that mandatory remote work during COVID-19 has created new temporal structures that require ongoing reconfiguration of people, policies, materials, tasks, and technologies in remote work contexts. Our findings highlighted the development of anticipation work as a strategy to maintain work-life balance. Through a nuanced focus on temporal experiences of workers, we identified new factors shaping the production of anticipation work. And finally, we identified a set of rhythms through which workers coordinate their work. We reflect on our findings and situate them with respect to prior work.

## 6.1 Deployment of Hypothetical Outcomes

We demonstrated that anticipation work plays a central role in envisioning the futures in the work of humanitarians. Anticipation work here is used to draw attention to formal and informal practices involving the reenvisioning of digitally-mediated service delivery where usual supporting mechanisms of assistance get disrupted. We identified *the deployment of hypothetical outcomes* as one form of anticipation work in our data where workers individually or collectively imagine unfavorable scenarios about the technologically-mediated service. Our findings highlight hypothetical constructs usually emerged with actors' engaging 'what if' abductive reasonings and are triggered by technological, infrastructural circumstances beyond their immediate control (e.g., "What if Zoom drops in the middle of my call?"). They enact a variety of practices, including imagining, planning, calculating, considering, and foreseeing different scenarios (e.g., the instances of call/signal dropping, delays in voice and audio, and slow streaming) that would cause extension of work hours. These anticipatory practices enable workers to experiment with switching to asynchronous technologies (i.e., WhatsApp groups) or avoid using high-bandwidth demanding technologies such as videoconferencing. This resonates with Baumer et al. [20] who described non-use as "continually negotiated practice" where actors constantly negotiate dis/engagement with technology. Wyatt [153] also examined the exercise of agency. Other studies provided insights on both reasons and contextual aspects of non-use and different ways of engagement with technologies [19, 64, 119]. Our work highlights that non-use is also mediated by future-oriented thinking of the actors involved.

Anticipatory practices such as the use of hypothetical constructs help actors' technology choices and use orient to the future, while also encouraging the generation of claims favoring certain forms of temporal experience while using technologies. This contributes to the body of work within CSCW and related fields around technology choice and adoption in organizational settings [67, 88]. Others focused on the implications of uncertainty on actors' weighing of benefits and costs [101]. While these are significant, our work signals that anticipated temporal experience also shapes technology adoption.



## 6.2 Device Sharing and Coordination at Home

Our work identified new factors that shape the production of anticipation work in working from home. This relates to and extends existing HCI/CSCW literature on technology sharing [23, 77] and everyday coordination [97] in domestic environments. As presented in our findings, the lack of spatial and temporal distinction between work life and home life added granularity and complexity to how anticipation work should be done. Our work illustrated that several relational dimensions play a role with actors engaging in anticipatory practices, such as anticipating daily plans of family members. As individuals' times gets increasingly fragmented, temporal and spatial coordination requires communication and planning. This becomes even more complex when devices are being shared. This view enlarges the analytical terrain of anticipation work. Future research in remote work needs to factor temporal and spatial coordination into understanding how family members collectively anticipate and negotiate work and leisure times along with household spaces.

A particular concern for our participants was planning of their work activities in relation to the work, life and/or school activities of their family members. This occurs based on the nature of activities; especially if activities are synchronous and having same characteristics of timing and duration. Unlike negotiating access over computer use with co-workers in low bandwidth offices [154], our data provide accounts of workers negotiate scheduling with their family members. They try to avoid overlapping calls and videoconferencing of their family members partly because they believe their network is unable to support multiple calls that require specific bandwidth, and also because having to co-locate in a limited physical space would result in their voices being cut off. Additionally, negotiating timing and schedule of events becomes necessary when our participants share their devices with others.

## 6.3 Gendered Demands in Anticipation Work

Feminist perspective in CSCW scholarship increasingly focus on issues of power and gender-based oppression in collaborative systems [52, 53, 127], which is well suited to the long-established social justice oriented agenda that place in/visibility at the center of problematizing work [124, 129]. Domestic spaces and technology use in households has intrinsically been tied with gender relationships throughout history [146]. WFH cannot be analyzed without thinking about how it restructures power relationships within households.

Our findings reveal gender-based differences among humanitarian workers in the enactment of anticipation work to support WFH. The blurring of work and home introduces gendered domestic routines into work settings. As we aver in this paper, the gender gap in the production of anticipation work tends to result in women workers being disproportionately involved in multitasking, juggling across different roles, responsibilities, and rhythms, all rooted at the intersecting experiences of class, ethnicity, language, migratory status, and other markers of power and privilege. This anticipation work feeds into the cognitive labor that is disproportionately shouldered by women in a household [39]. Echoing Daminger [39], we find that this kind of anticipation work is hard to document or schedule and “[i]ts amorphous nature makes it an especially disruptive and distracting form of labor”. The invisibility of this kind of cognitive labour is unrewarded and needs to be considered when we think about WFH.

These findings critique the promise of WFH offering flexible work schedules and greater autonomy to workers - instead it points to the unequal terrain that burdens some identities over others. The blurring of home and work only seeks to amplify the inequalities that already exist in either spaces.

#### 6.4 Prudent Waiting: Agency in Working Time

In CSCW and related areas, the notion of waiting is mostly treated as it corresponds to “waiting time”, something that “occurs amidst existing tasks” [25], and yet to be theorized fully as a practice of making discursive and material claims. Cai et al. [25] introduce the concept of wait-learning which automatically monitors wait time and enables people to micro-learn while waiting. Goncalves et al. [56] offered a crowd-sourced approach that allows people to submit their subjective queue length estimation, mitigating stress and uncertainty associated with waiting. Focusing on clinics, Leong and Horn [89] found that waiting areas are conducive spaces for patient and family learning experiences, and offer insights to enhance the waiting experience of medical communities. Waiting is associated mostly with boredom and idleness in these instances, where actors are offered solutions to challenge monotony. Inherent in these insights is also the understanding that waiting is something that happens to people outside of their autonomy, a timepiece that is mostly wasted, thus needs to be traded with productivity.

Research outside CSCW theorized waiting more extensively [47, 62, 78, 120]. Bailey [13] suggests the notion of “situated waiting” to unpack multi-layered dimensions of waiting, i.e., professional and physiological characteristics of the person who wait, the wait event, and the context of waiting, in organizational settings. Flaherty [50] posits waiting patterns signal a politics of time, pointing out status determines who waits, for whom, and for how long. Klingemann [83] noted waiting can also be pleasurable.

In our study, waiting emerged as a temporal strategy in the lives of remote workers to attain a greater control over their work time. We call this activity *prudent waiting*, an agentic practice through which people carve out a temporal space in present time to create possibilities for futures. As exemplified in our data, humanitarian workers enact vigilant waiting as not responding the calls, emails, or texts coming outside of work hours. This is not simply to delay temporal attention and staying as fully immersed on the existing task, or not being imposed by institutional policy. Rather, a deliberate act to control the working time, while doing other things, for instance, checking their phone screens or emails peripherally to give themselves enough space to act timely if the situation is an emergency. This resonates with the notion of agentic capacity [46, 91] to manipulate temporal experience.

#### 6.5 Design Implications

Based on the findings and discussion, we offer three implications for the design of future technologies to support anticipation work as it relates to WFH circumstances. First, we argue that design for better domestic coordination should take into account the spatial and temporal complexities of domestic life and sharing of digital devices. CSCW has long been interested in using calendars (and similar tools) to mediate household activities and support domestic coordination. Elliot and Carpendale [45] investigated the use of family calendaring and identified three key areas where calendars help manage combined schedules: 1) coordination and negotiation of activities as well as providing information about what, where, and by whom they are completed; 2) reminder and review of short and long-term activities, as well as performing as a to-do-list; and 3) raising awareness among family members about where other family members are and what they are doing. Neustaedter et al. [96, 97] proposed design principles that supports everyday family coordination and meet family members’ awareness needs. They noted that understanding family routines help to improve digital family calendar design. In our study, device sharing was mostly coordinated through verbal communication or by following family schedules using calendars between family members. However, our participants shared that family members sometimes postpone or simply forget to return items once the task was completed. As one participant mentioned, they would like

to know when the device is no longer required for their spouse or children during a day so they can better arrange their work time. This is also required for better device coordination for future work or digital leisure activity scheduling among family members. This awareness is important in anticipating daily schedules of family members, therefore a balanced work-family life. It is possible to use these insights to design better notification systems that help family members keep track of the coordination of their devices. A system could, for example, read a user's schedule via Online Calendar Systems (OCS), such as Google Calendar or Microsoft Outlook Calendar, and then remind them or others to return a device when the current task is nearing completion.

Secondly, CSCW and HCI scholars have increasingly called for focused attention and broader understanding of practices that entail care beyond medicalized contexts [80, 138]. Relatedly, researchers and developers have designed socio-technical systems to support caring relationships [82, 139] to provide better means for coordination of care work and inform the awareness needs in different care ecosystems. Anticipation work can also be viewed as a form of care work as it concerns maintenance of people and their relationships and social connections [54]. Our research reveals that anticipation work often seeks to align future expectations and present constraints and possibilities in the context of multiple temporal demands within relational and care-giving activities. In other words, while "clock-time" is meant to coordinate refugee support through regulating work schedules within organizational contexts, digitally-enabled service delivery put different temporal pressures in WFH settings, enabling humanitarian workers engage in anticipation work. These mostly mundane and informal activities often remain invisible and uncompensated, and as our findings indicated, they are disproportionately shouldered by women workers. Research focusing on invisible and gendered aspects of care work have always raised questions of whose work tends to get neglected and expected to be performed without compensation [80]. Our study also highlights a new, and related, question: whose forward-looking practices and future expectations get missing? Thus, designing to support anticipation work entails envisioning what kind of temporal experience would be imagined and configured for whom. We therefore propose that design of scheduling and future planning tools should consider better ways of capturing, documenting, and archiving users' future aspirations. This recommendation ties in to the existing research on futuring in CSCW/HCI [65, 90] which outlines strategies to co-craft possibilities with marginalized communities to react to, plan for, and prepare for futures.

And lastly, anticipating a more balanced work-life routine requires making normative claims and generate activities about what a "good life" can do and can be within remote and/or hybrid work structures. As has been described throughout the paper, our participants brought up several issues they face in their daily lives and workplace, such as the non-unionized character of their work (e.g. long work hours, unpaid overwork), lack of organizational support (e.g. lack of supervision, technology aid). Issues such as suffering from high levels of burnout and emotional/compassion fatigue as a result of long and intense exposure to the traumatic experience of refugees and asylum seekers came frequently in the interviews. Therefore, for humanitarian workers, creating opportunities for good life means constantly thinking toward, making decisions, improvising, and exploring ways of controlling overwork, trying to separate personal life and stressful work. However, despite the mental loads it creates for humanitarian workers, anticipatory work such as "deployment of hypothetical outcomes" often remain distant from the leadership gaze at organizations. Our participants reflected a greater diversity of needs and aspirations that organizations can address to mitigate issues inherent in remote work. From a CSCW perspective, our paper has highlighted the lived experiences of workers by bringing to focus anticipatory practices of planning, preparation, using hypothetical outcomes, and prudent waiting. Future socio-technical systems need to support such forms of agentic practices, providing awareness to the workers' conditions during WFH and better mediating worker-nonprofit organization engagement in remote work structures.

## 7 LIMITATIONS AND CONCLUSION

In CSCW and related fields, WFH has been primarily problematized from a spatial perspective to understand collaboration as the work space and private space physically intersect [11, 30]. Scholars understandably take up spatially-motivated discourses, and are concerned with the boundaries across the domains of work and home to better support workers who grapple with their erosion. In this study, we join critical scholars, like Sarah Sharma [121] who urge a balanced time-space approach to fully understand the social world. We therefore offered a temporal perspective that helps us to complement and extend the existing literature on time and temporality with respect to WFH. We reported on qualitative study with 22 staff from 7 humanitarian organizations based in Turkey, working in diverse areas of refugee assistance, exploring remote work practices during COVID-19 pandemic.

This study has several limitations. First, our study focused on the local context, Turkey, and was conducted during a particular phase, the COVID-19 pandemic, therefore not generalizable to a wider population or phenomena. However, we believe the findings will resonate among other humanitarian professionals or frontline workers working with refugee communities. Second, although we were able to reach participants from different ages, gender, ethnic, educational and occupational backgrounds as well as socio-economic status, we recognize that our data may be weighted towards rather well-educated – all participants have a university education – group of workers. Additionally, our participants had willingness and, evoking the topic of our study, some ‘free time’ to participate in the research. Scholars point that time is taken for granted in the lives of researchers and their participants and urge scholars to be mindful about both [95]. Like these scholars, we acknowledge that “having time to participate to a research project” as a crucial factor as some of our participants told us that they had colleagues who had to quit their jobs due to increasing work pressures and care/domestic responsibilities because of the pandemic. And lastly, we acknowledge that anticipatory practices that we observed in our data reflect experiences of humanitarian workers who are novice remote workers and had limited previous exposure to work technologies. Anticipation work may be different for more experienced workers or different employee cohorts and sectors with high exposure to technologies [128]. Future work could further examine how practitioners with experience of more technical work (i.e. engineers) orient to and maintain the visions about the future.

We described in detail the socio-technical context in which WFH practices are enacted. Critically, we highlighted how several material, phenomenal (i.e., pandemic-specific), political, and organizational factors enabled or constrained those practices. Therefore, we contributed to CSCW scholarship by demonstrating that the anticipation work [126], (i.e., future-oriented frames to capture practices in the present that cultivate our future expectations), is performed to maintain work-life balance in the lives of refugee support workers. By sensitizing temporal experiences of “time loss” and “pressed for time”, we then showed how workers navigated increasingly shifting temporal structures, and we contributed to the literature by distinguishing new factors shaping the production of anticipation work. We also contributed to the scholarship by describing a set of rhythms (i.e., biological, biographical, policy, and organizational) through which workers coordinate their work. Particularly, our interest in capturing *in situ* temporal experiences enabled us to uncover the complex relationship between rhythms and how they conflict or align with gendered, classed, and ethnicized forms of access, equity, and agency in the work of anticipation.

Importantly, we recognize that the ways in which “pivot to remote work” narratives have been framed is contingent on how labor trajectories are co-constituted with diverse and distinct technologies, policies, and institutions across geographies, workplaces, and professional roles. Post-COVID, many high-SES (socio-economic status) workers in Western workplaces are likely to

navigate between in-office and WFH rather effortlessly, which makes organizations begun to pitch WFH or hybrid arrangements as an employee benefit, and job seekers are increasingly inquiring about an organization's capacity to pivot to WFH when necessary [34]. Our findings, on the other hand, suggest that pivoting to hybrid/remote is neither desirable nor feasible in low-resource settings of refugee humanitarian work. Future research needs to investigate how other worker communities, such as other low-SES cohorts, anticipate for and adapt to the new arrangements.

Combined together, these insights invite CSCW scholarship to critically engage with the key concerns embedded in the myth of flexibility in remote work. The questions of who can be flexible, under what conditions, and what it entails remain to be explored in more depth. Like our refugee support workers in this study who enact prudent waiting in order to establish boundaries against overtime at the temporal edge of work and home, others worldwide experience and experiment with other, both existing and emerging, strategies to maintain work-life balance.

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