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# Doing physical activity or not: an ethnographic study of the reasoning of healthcare workers and people with type 2 diabetes

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## Abstract

According to biomedical notions, physical activity (PA) is an integral part of treatment for several non-communicable diseases, Type 2 diabetes (T2D) among them. Adapting one's life in accordance with such notions, however, involves considerations that reach beyond what can be confined to treatment decisions. Thus, we aim to explore the various reasons for doing PA or not among healthcare workers and people with T2D taking part in programs that promote PA. We do so based on ethnographic fieldwork that includes observations and focus group interviews in two programs in a Danish municipality, and with inspiration drawn from Habermas' theory of communicative action. Our results show that healthcare workers emphasize primarily health-related reasons for doing PA, including a moral imperative to be healthy, while people with T2D have a slew of other reasons for doing PA or not. These reasons together illustrate that for participants with T2D, long-term concerns for health and disease take a backseat to more immediate concerns for enjoyment, pain, and family, and that the participants generally reject the normative health imperative. We suggest that healthcare workers and participants with T2D engage in dialogue about their normative assumptions with the purpose of reaching a mutual understanding.

**Keywords** Critical theory · Ethnography · Healthism · Lifeworld · Communication

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## Introduction

Biomedical evidence generally supports the notion that PA is an important part of treatment for people with Type 2 diabetes (T2D) because it helps patients achieve better glycaemic control (Minet et al. 2010), thus reducing the risk of experiencing many complications often associated with T2D, such as retinopathy (Fong et al. 2004), neuropathy (Tesfaye 2015), nephropathy (Molitch et al. 2004), or cardiovascular disease (Shah et al. 2015). While the biomedical reasoning behind doing PA is clear, our review of European interventions promoting PA for people with T2D has shown that lasting changes in behaviour are rare (Thomsen et al. 2021). This general discrepancy between behaviour recommended by research and actual behaviour in relation to PA may elicit different responses from policy-makers and healthcare workers.

At the political level, the positive influence of PA on participants' health is also emphasized in discourses and policies related to T2D care. For example, the World Health Organization publishes global reports on diabetes (WHO 2016), addressing, among other things, the implementation of programs promoting PA as part of the prevention and/or treatment of diabetes. According to WHO (2016), 68 percent of countries report having operational policies for PA and diabetes. Additionally, the report connects the political ambitions with the biomedical evidence by referring to a 2011 Political Declaration on the Prevention and Control of NCDs (UN 2011) which, according to WHO (2016), recognizes 'that the incidence and impacts of diabetes and other NCDs can be largely prevented or reduced with an approach that incorporates evidence-based, affordable, cost-effective, population-wide and multisectoral interventions' (p. 15). These interventions or programs are thus by and large described from the perspective of researchers and politicians focusing on the potential of promoting, among other things, PA to reduce the incidence, impact, and cost of diabetes at the population level.

In this article, however, we set out to move beyond research informed by primarily biomedical concerns by doing qualitative inquiries into the complex matter of balancing PA with other aspects of life. Indeed, we seek to supplement the existing evidence with insights into how PA is understood and communicated in day-to-day practices by healthcare workers and people with T2D who take part in programs that involve PA.

More precisely, we aim to explore the diversity and complexity of reasons for doing PA or not among healthcare workers and people with T2D taking part in healthcare programs that involve PA. We do so by applying Jürgen Habermas' theory of communicative action (1996, originally published in German as *Theorie des kommunikativen Handelns*, 1981) which supports a focus on the everyday reasoning of the people involved. While the biomedical evidence of the effects of PA on T2D is bound to influence the practical reality and reasoning of healthcare workers and people with T2D in relation to PA, we leave space for other concerns. Following the argument of Habermas (1996), it is morally necessary to create space in research, as in healthcare practices, for different perspectives on



the subject matter (in this case, PA) than the dominant one, since communication and agreement, rather than effectiveness in eliciting certain outcomes, are what legitimize social practices in general. We elaborate on some of the core concepts of the theory of communicative action, and how we apply them, later.

Additional insights into how healthcare workers and people with T2D reason about PA might help us to better understand *why* there is often a discrepancy between behaviour recommended by research and actual behaviour. While attempts at promoting PA are certainly made with good intentions (as the potential T2D-related complications can certainly be dangerous and debilitating), the biomedical view of PA and T2D does not fully appreciate the intricacies of what it means to have a chronic disease and to change certain aspects of one's way of living fundamentally. We suspect that while biomedical evidence of the effectiveness of PA plays a part in day-to-day care settings concerned with PA promotion, so too do all kinds of other perspectives deemed by healthcare workers and people with T2D to be important for everyday life. The practical reasoning of people involved in PA promotion is thus at the centre of this article.

Before elaborating on the Habermasian conceptualization on which this article is based, we present an overview of the literature concerned with PA, T2D, and the perspectives of people with T2D and/or professionals caring for them, highlighting the knowledge gap we aim to fill.

## Existing perspectives on physical activity

Our literature search was aimed at qualitative research exploring PA for people with T2D. The search yielded 17 studies that were deemed relevant for discussion in this article since they explored topics relating to PA from the perspective of people with T2D and/or healthcare workers caring for them. In what follows, we discuss the way said studies framed the role of PA in the lives of people with T2D, as well as the results of some of the studies.

Starting with a general point, of the 17 studies chosen for consideration, 13 (Shultz et al. 2001; Grace et al. 2008; Peel et al. 2010; Didarloo et al. 2011; Booth et al. 2013; Penn et al. 2013; Lidegaard et al. 2016; Jarab et al. 2018; Pal et al. 2018; Bukhsh et al. 2020; Maor et al. 2021; Thorsen et al. 2022; Tripathi et al. 2023) were concerned with the perspectives of people with T2D and/or healthcare workers regarding, specifically, factors enabling participation in PA and/or barriers prohibiting such. Thus, most of the qualitative studies concerned with the perspectives of people with T2D and/or healthcare workers align with the biomedically informed focus on doing PA to achieve certain health effects in relation to T2D while largely neglecting that reasons not related to health might exist both for doing PA and for not doing PA.

The remaining four of the identified studies each take different approaches in their qualitative explorations. Ahlin and Billhult (2012) use phenomenologically inspired interviews and argue that women with T2D show some ambiguity and resistance toward the idea of changing their lifestyles. Moreover, they highlight some of the women's inner struggle of not being content with their choices and actions and yet



giving several practical reasons not to change anything. Martin (2014) explores the case of a single person with T2D and her healthcare encounters and directs attention to the tension between the voices of medicine and the lifeworld of the patient. Rather than deeming the problems *inner struggles*, Martin (2014) calls them misalignments between the medical system and the broader social context within which the person with T2D lives. Similarly, Stuij et al. (2021) recognize a medical imperative to be physically active, the imperative which is also present in the 13 studies listed above, and argue that such an emphasis on PA as medicine elicits feelings of personal responsibility towards participating in PA. Stuij et al. (2021) then perform critical narrative analyses of the meaning given to sport and PA and show that ‘almost all respondents seemed to subscribe to the notion of exercise as medicine on a general level, either quite explicitly or in more subtle ways’ (p. 86). Stuij (2018) presents a similar analysis but from the perspective of healthcare workers giving counselling on PA, concluding that they must balance diabetes care with considerations of what PA represents in the lifeworlds of themselves and their patients.

An overarching point to be made about these four studies is that they all deal with perspectives in a manner that recognizes problems or difficulties associated not only with being physically active but also with the imperative to be so. Stuij et al. (2021) suggest that ‘To improve the connection between healthcare professionals and patients, an acknowledgment that the notion of exercise as medicine is not merely a neutral and evidence-based message but an inherently normative one seems necessary’ (p. 99). By recognizing that the dominant conception of PA as T2D treatment is normative, we might be able to escape the idea that practical, everyday reasons for not engaging in PA are *excuses* or *barriers* and instead view them as legitimate reasons that ought to be balanced with the medical reasons for engaging in PA. To our knowledge, there are no empirical studies that do so in a manner where the reasons for doing PA or not, given by healthcare workers and people with T2D, are broken down and analysed. In addition to providing the moral justification for focusing on the reasoning of the people involved, Habermas (1996) provides a communicative framework suitable for such analysis.

## Approaching reasons through a Habermasian conceptualization

In this section, we touch briefly on the interconnected concepts of communicative and strategic action, lifeworld and system, validity claims, colonization, and reason. We introduce these concepts in order to lay the foundation for an empirical analysis that deals with reasons for engaging in PA or not in a way inspired by Habermas.

Central to Habermas’ theory of communicative action is, the concept of communicative action itself. As stated by Hans-Peter Krüger (2019), ‘communicative action occurs whenever the use of language oriented to reaching mutual understanding coordinates the actions of its participants’ (p. 40). Strategic action, on the contrary, is the name Habermas assigns to actions by which social agents are turned into means to reach certain ends without being part of defining said ends (Habermas 1996; Hans-Peter Krüger 2019).



According to Habermas (1996), communicative action belongs to the *lifeworld*, which Cherem (2023) interprets, in short, as a reservoir of shared understandings we take for granted in our daily interactions with each other. The lifeworld consists of two structural components: *society* and *person*. While the societal component of the lifeworld refers to norms and conditions of solidarity among groups of people, the personal component refers to ‘individual competences enabling subjects to participate in communicative action and establish their own identity’ (Hartmann 2019, p. 250).

In addition, Habermas theorizes a *systems integration* of the lifeworld which means the lifeworld exists in conjunction with societal structures called *systems*. A bureaucratic state apparatus, or for that matter a smaller component of one, e.g., a healthcare service, constitutes a system that is integrated with the lifeworld but operates in a fundamentally different way. Whereas in the sphere of the lifeworld, actions are coordinated through argumentation and agreement, systems are to be understood as acting strategically to coordinate social practices in accordance with the fulfilment of particular goals (Habermas 1996). Let us note, however, that people working within a healthcare system are not merely systemic cogs but are also in and of the lifeworld as socialized beings. This means that they can simultaneously work to advance a systemic goal and engage in dialogue with the purpose of understanding others.

Habermas (1996) warns particularly about what he calls *systems’ colonization* of the lifeworld, a form of reification where the strategic rationality characterizing systems comes to dominate the lifeworld and suppress the exchange of reason directed towards understanding. The notion of colonization is of particular relevance in this article because the medical and political imperative to foster evidence-based practices in a biomedical sense brings with it exactly the risk of undermining the lifeworld if it is done without concern for other perspectives. The defence against colonization is communicative action which entails a form of pragmatic rationality in which participants in dialogue reason with each other by continuously justifying their views and actions in order to coordinate practices that are meaningful to everyone involved (Habermas 1996).

According to Habermas (1996), we justify our views by uttering propositions, raising so-called *validity claims*. There are three different types of validity claims, namely claims to sincerity, normative rightness, and propositional truth. This means that when we engage in communicative action, we appeal to the correctness of statements concerning, respectively, our subjective world (of experiences to which we have privileged access), the intersubjective world (of social orders and norms), and the objective world (of states of affairs, facts)—in other terms, we reason based on appeals to the truthfulness of our own experiences, the normative rightness of our position, and/or what we perceive as objectively true (Heath 2019). As will be elaborated in the methods section, these validity claims are at the centre of our empirical analysis because they constitute a way of breaking down the reasoning analysed.



## Methods

This article is based on critical ethnographic fieldwork (Madison 2020) that included observations, informal conversations, and focus group interviews. All participants gave informed consent in accordance with the Danish guidelines for research integrity. The empirical context of the research described was two different municipally administered programs for people with T2D in Denmark. Participants in both programs were referred by their doctors, and admission was free. Both programs had 10–15 participants varying slightly throughout as some dropped out and others started late. The programs ran for approximately two and three months, respectively, and consisted of a combination of supervised PA sessions and education on disease management focusing on PA as well as diet and medication. The education followed many of the same principles as the Diabetes Self-management Education and Support (DSMES) programs (Powers et al. 2016). The three-month program was aimed at people with T2D specifically whereas the two-month program included participants with either T2D, cardiovascular disease, or chronic obstructive pulmonary disease. Participants in both programs regularly consulted with physiotherapists, dietitians, and nurses.

For two months, both programs offered two weekly one-hour PA sessions supervised by at least one physiotherapist, and for the last month, the three-month program offered one such session weekly. The content of the education on disease management was similar between the two programs. The two-month program had educational sessions for one hour immediately before or after each supervised PA session, and the three-month program had one such one-hour session each week, before one of the weekly sessions of supervised PA.

The empirical material presented, analysed, and discussed in the present article was generated through the engagement of the first author with the contexts described. This engagement included observations of most activities during both programs, amounting to a total of approximately 75 h spent in the field among healthcare workers and people with T2D, observing the formally organized activities as well as engaging in extracurricular activities such as having short meetings with healthcare workers or talking with participants in the changing room or during breaks.

The way of engaging was inspired by some of Madison's (2020) views of critical ethnographic fieldwork. As such, observations were combined with informal conversations whenever possible, and the approach to those conversations was to strive for *dialogical performance*, an attitude toward others that is somewhere between being too detached and too committed and between being too focused on our sameness and our differences. Dwight Conquergood, from whom Madison (2020) has borrowed the concept of dialogical performance, posits that 'The aim of dialogical performance is to bring self and other together so that they can question, debate, and challenge one another' (Conquergood 1982, p. 10). This attitude toward fieldwork fits well with the goal of analysing reasons because the questioning, debating, and challenging of each other often led precisely to exchanges of reasons. Most of the informal conversations occurred during supervised PA



and much of the talking revolved around topics related to PA. The first author made fieldnotes during and after each fieldwork session.

In addition to the observations and informal conversations, we conducted focus group interviews that were recorded and transcribed. In this article, we draw on two focus group interviews with healthcare workers tied to the three-months program and one focus group interview with healthcare workers tied to the two-month program. Each of these interviews involved three healthcare workers, and all interviews involved a physiotherapist directly connected to one of the programs we followed, as well as a mix of nurses, dietitians, and employees working with transitions from the municipal programs to other (more or less physical) activities. Furthermore, we draw on three focus group interviews with people with T2D participating in the three-month program (two interviews with three participants and one interview with two participants) and one focus group interview with three participants with T2D from the two-month, mixed-diagnosis program. All seven focus group interviews with either healthcare workers or people with T2D revolved around PA as part of the programs and PA in the long term (after the completion of the programs). The specific method used to conduct the focus group interviews is described in Thomsen and Agergaard (2023).

After concluding the fieldwork and interviewing, we coded the fieldnotes and the transcriptions of the focus group interviews with healthcare workers and people with T2D from both programs. The process of coding was part of the analytic process as understood by Saldaña (2013) who posits that 'In qualitative data analysis, a code is a researcher-generated construct that symbolizes and thus attributes interpreted meaning to each individual datum for later purposes of pattern detection, categorization, theory building, and other analytic processes' (p. 4). More specifically, we coded the material according to a *values coding* suggested by Saldaña (2013) as particularly relevant in critical ethnography analyses where both fieldnotes and interviews are included. Saldaña (2013) suggests that value coding aims to reflect the *values*, *attitudes*, and *beliefs* of the people in focus.

These concepts bear some resemblance to the validity claims Habermas (1996) introduces. Thus, the concept of *values* resembles that of normative rightness (or the intersubjective world), *attitudes* coincide with the subjective world, and *beliefs* reflect perceived truths about the objective world. This resulted in an approach to coding where reasons for doing PA or not were coded in relation to the three types of validity claims proposed by Habermas (1996). After dividing the reasons by type of validity claim, whether they were made by people with T2D or healthcare workers, and whether they were for doing PA or not doing PA, we had 12 clusters of reasoning. Within each cluster, we grouped together similar codes to construct themes that constitute more general arguments.

We coded 363 sequences of text from fieldnotes and focus group interviews, initially deemed relevant for understanding the reasoning. Subsequently, we scrutinized all codes and their content again as we attempted to fit each into one of the following six categories of reasoning by people with T2D and healthcare workers respectively: *Subjective* reasons (relating to personal experiences) for doing PA, and for *not* doing PA, *objective* reasons (relating to perceived facts) for doing PA,





and for *not* doing PA, and *normative* reasons (relating to social norms) for doing PA, and for *not* doing PA.

Through this process, 113 codes were removed as we did not perceive them as arguments that fit into the structure of the analysis. The remaining 250 codes were divided between 11 of the 12 categories, as shown in Table 1, with the majority of codes describing either people with T2D's *subjective* reasons for doing PA or not, or healthcare workers' *objective* reasons for doing PA. No code was deemed to convey a healthcare worker's *subjective* reason for not doing PA.

All empirical work was conducted in Danish and translated as part of the preparation of this article.

## Reasons for doing PA or not

Within each of the 11 categories, codes were combined and condensed into general arguments made in relation to doing PA or not. Table 2 shows the identified general reasons for doing PA and Table 3 shows the identified general reasons for *not* doing PA.

Since our aim is to explore the diversity and complexity of reasons for doing PA or not, we focus particularly on synthesizing results in a way that helps us see perspectives we perceive as novel. Below, we present results that highlight some of the discrepancies in the perspectives of healthcare workers and people with T2D respectively, in order to lay the foundation for a discussion of themes that need attention if we are to coordinate future healthcare practices communicatively.

## Joy and disease management

Table 2 shows that people with T2D have several *subjective* reasons for doing PA, and that most of them relate to positive experiences during or immediately after PA. The following excerpts from focus group interviews with people with T2D serve to illustrate this general orientation:

I've always been fascinated by tennis [...] I've actually got the urge again [...] it's great fun [...] and I like competitive moments and things like that. (Lydia, participant with T2D)

**Table 1** The categories under which the codes were analysed, and the number of codes in each category

Reasons	For doing PA		For <u>not</u> doing PA	
	Healthcare workers	People with T2D	Healthcare workers	People with T2D
'Subjective'	5 codes	63 codes	0 codes	42 codes
'Objective'	55 codes	10 codes	21 codes	11 codes
'Normative'	12 codes	12 codes	10 codes	9 codes



**Table 2** Overview of reasons for doing physical activity (PA)

Themes for people with Type 2 diabetes	Themes for healthcare workers
<i>'Subjective' reasons for doing physical activity</i>	
<ul style="list-style-type: none"> <li>- Wanting to retain/improve bodily functioning</li> <li>- Feeling satisfied during PA</li> <li>- Wanting to compete (with self and others)</li> <li>- Enjoying the social context of the PA</li> <li>- Having a good feeling in the body after PA</li> <li>- Enjoying nature during PA</li> <li>- Having to transport oneself</li> </ul>	<ul style="list-style-type: none"> <li>- Experiencing well-being during PA</li> <li>- Experiencing a sense of community in relation to PA</li> </ul>
<i>'Objective' reasons for doing physical activity</i>	
<ul style="list-style-type: none"> <li>- PA is good/healthy for the body</li> </ul>	<ul style="list-style-type: none"> <li>- PA is effective as treatment of T2D</li> <li>- PA is good for health (more abstractly)</li> <li>- PA minimizes the risk (and fear) of disease, pain, and death</li> <li>- PA can alleviate existing pain</li> <li>- PA can help improve day-to-day functioning</li> <li>- PA can improve mental health</li> <li>- PA can provide something social</li> <li>- PA improves performance in physical tests</li> <li>- PA compensates for poor dietary choices</li> <li>- PA (during the program) can lead to more PA in the future (through positive experiences)</li> <li>- Participants want to be physically active</li> </ul>
<i>'Normative' reasons for doing physical activity</i>	
<ul style="list-style-type: none"> <li>- You have an obligation towards the healthcare workers that gave you their time</li> <li>- When you sign up for something, you should finish it</li> <li>- You must not fail others who need you for PA</li> <li>- PA should be associated with fun/joy (argument both for and against PA)</li> </ul>	<ul style="list-style-type: none"> <li>- You ought to take care of yourself (in terms of health)</li> <li>- You ought to show a good example for your grandchildren</li> <li>- You ought to act in accordance with what you find meaningful (argument both for and against PA)</li> </ul>

We were also at a tournament, we held a tournament out in [small Danish town] and it was so beautiful, a view over the fjord, it was so beautiful. (Betty, participant with T2D)

I had a friend and we cycled like 10, 12, 14 kilometres a few times a week, and it was like, well, it was actually enjoyable. (Eleanor, participant with T2D)

While a few of the healthcare workers provided *subjective* reasons for doing PA that were in fact similar to the reasons given by people with T2D, the healthcare workers provided primarily *objective* reasons for doing PA. These reasons pertained mostly to the functional properties of PA in the quest for improved health:

[PA is included because it] has a really, really big significance for the citizen's prognosis with their diabetes, so [...] we have to try to prepare them as best as possible to take care of their disease. (Noah, healthcare worker)



**Table 3** Overview of reasons for *not* doing physical activity (PA)

Themes for people with Type 2 diabetes	Themes for healthcare workers
<i>'Subjective' reasons for not doing physical activity</i>	
<ul style="list-style-type: none"> <li>- Experiencing that pain and physical limitations prevent certain types of PA</li> <li>- Experiencing that pain prevents capabilities more generally</li> <li>- Fearing getting hurt during PA</li> <li>- Having difficulties pulling oneself together</li> <li>- Having bad/lacking experiences with PA</li> <li>- Feeling frustrated due to a lack of physical improvement</li> <li>- Lacking interest in particular physical activities</li> <li>- Missing opportunities for certain kinds of PA</li> <li>- Feeling powerless and indifferent</li> <li>- Lacking access/proximity</li> </ul>	
<i>'Objective' reasons for not doing physical activity</i>	
<ul style="list-style-type: none"> <li>- Ailments or pain make PA difficult</li> <li>- PA can lead to ailments/pain</li> <li>- Specific forms of PA are expensive</li> <li>- Work prevents certain forms of PA</li> <li>- There are too few activities for younger people</li> <li>- It is difficult to attend PA when opportunities for transportation are limited</li> </ul>	<ul style="list-style-type: none"> <li>- Other things can be more important right now</li> <li>- Economic concerns might prohibit PA</li> <li>- A lack of access might prohibit PA</li> <li>- Physical limitations might prevent participation in certain activities</li> <li>- Lacking knowledge of the positive effects of PA</li> <li>- Having bad/lacking experiences with PA</li> <li>- Lacking interest in particular physical activities</li> </ul>
<i>'Normative' reasons for not doing physical activity</i>	
<ul style="list-style-type: none"> <li>- Obligations toward family and others are more important than PA</li> <li>- If you sign up for something, you are bound to finish it</li> <li>- PA should be associated with fun/joy (argument both for and against PA)</li> </ul>	<ul style="list-style-type: none"> <li>- It might be right to focus on other things before PA if you lack the capacity to do it all at once</li> <li>- You ought to act in accordance with what you find meaningful (argument both for and against PA)</li> </ul>

They do a whole lot of good in relation to their health, blood pressure, cholesterol level, and prevention of all kinds of diseases, by becoming physically active. (Khloe, healthcare worker)

The lack of focus on health benefits from the perspective of people with T2D did not entail a rejection of the idea that it is generally a good idea, health-wise, to be physically active when you have T2D. Thus, most of the people with T2D shared the *objective* notion that PA is healthy.

Because this program has at least shown me that exercise is also a big part of it, of one's health. (Andrew, participant with T2D)

interestingly, this stands in opposition to the conception among the healthcare workers, several of whom mention a lack of knowledge of the positive effects of PA among people with T2D as an *objective* reason for them refraining from doing PA.



## Pain and gain

While the effects of PA on T2D and the more general health benefits and risks associated with PA do not seem particularly important for people with T2D's attitude toward PA, there is one aspect of PA that is associated with both the immediate experience and the long-term significance of PA that seems very important, that is, feelings of bodily pain.

Among the most prevalent *subjective* reasons for not doing PA given by participants with T2D were experiences of pain during PA and, to a lesser extent, fear of experiencing more pain after PA:

And that's also why it's hard for me sometimes, the thing with walking. There are some days where my legs just won't, my right leg won't move. (Olivia, participant with T2D)

While some healthcare workers acknowledged that pain can be a reason not to do certain kinds of PA, they generally argued that PA can actually help minimize the risk of pain or alleviate existing pain. Thus, the same experiences that constitute reasons not to do PA for several participants with T2D provide, in the eyes of healthcare workers, a reason for doing PA.

Then I also think sometimes [...] we've had citizens who don't want [fitness] machines, but then we know, because you have a swollen, bad knee, that it would be good for you if you just started moving it on a stationary bike [...] so I think that's why we sometimes help people [to try a stationary bike] and hope that they may feel that movement can actually benefit the knee. (Josephine, healthcare worker)

When both healthcare workers and people with T2D speak of pain in relation to PA, they do so primarily with reference to specific activities. Thus, according to both healthcare workers and participants with T2D, pain is not a reason to refrain from PA altogether. Rather, feelings of pain were thought of as something that ought to guide in choosing the types of PA participants engage in.

The apparent concern with joy and pain among the participants with T2D speaks to a general tendency among them to be more concerned with issues of a more immediate character than the potential future issues related to their T2D. Thus, it seems that the healthcare workers and the participants with T2D reasoned with reference to different timescales. Whereas healthcare workers favoured reasoning in relation to long-term returns of PA, participants favoured reasoning in relation to immediate or short-term returns.

## Practicing self-care and having obligations elsewhere

Examining what we identified as *normative* reasons for doing PA, it becomes evident that healthcare workers generally hold the sentiment that people ought to (learn to) take care of their own health.



The knowledge they get should preferably motivate them to care for themselves. To consider what they eat, their exercise habits, and to take their medicine. (Riley, healthcare worker)

Being diagnosed with a chronic disease perhaps sometimes gives them feelings of guilt and shame and a bad conscience. They already have problems accepting the disease and accepting that they should have done something years ago. (Khloe, healthcare worker)

In fact, this sentiment runs as a current through the whole of the empirical material and comes to the fore in several ways, some less direct than these examples.

“There are also some of you who will be motivated to be a good role model for a grandchild”, says [Khloe, healthcare worker], and reminds the participants that Type 2 diabetes is partly hereditary and that they should therefore help contribute to a culture of physical activity in the family, one where you go to the playground instead of watching a movie, and things like that. (Excerpt from fieldnotes)

While the excerpt does not point directly to the perceived obligation each participant with T2D holds in caring for themselves, in our interpretation it still amounts to an albeit subtle way of communicating that same imperative as it equates engaging in self-care practices to being a good role model to others. Put differently, what constitutes a good role model is someone who exhibits healthy behaviour. In addition, several healthcare workers referred to participants who did not prioritize PA as having *bad motivation* and a *lack of adequate resources*, rather than merely *other* motivations and priorities, further adding to the normative health imperative.

Interestingly, the participants with T2D did not share this general *normative* reason for self-care in the form of PA. Instead, their *normative* reasons for doing PA and for not doing PA were tied to feelings of obligation towards other people. More specifically, *normative* reasons for doing PA were often tied to feelings of obligation towards the healthcare workers while *normative* reasons for not doing PA were often tied to a prioritization of others such as family members rather than of themselves and their health.

I do a lot for other people’s well-being, or: “Will you please do this for me?” Then I do it. It is not for my own sake, but I must become better at that. [A physiotherapist] has poked me a little, saying: “Well, listen, before the next session you’ll do such and such.” And then I get it done. (Andrew, participant with T2D)

Most of us who have been in this program, we are of a certain age and have some different baggage, it’s not just diabetes. There are many other things in life that can make it difficult to [be physically active]. [...] even if you are pretty old and your children are grown-ups, you still have your worries about the children and the grandchildren and, everything, there are lots of things that can be a challenge in life, and it’s not just concerning yourself. [...] it’s not just [T2D] that you carry with you. (Olivia, participant with T2D)



Viewing the *normative* reasons in conjunction with the general acceptance among participants with T2D of the notion that PA is healthy, it seems that participants' averseness toward the idea of a moral responsibility for self-care is a rejection of both the central status of health and the perpetual focus on self. They generally agree that PA is healthy, but they do not seem to believe their own health is what is most important in life.

## Discussion

The analyses presented show several discrepancies in the ways healthcare workers and participants with T2D reason about doing PA or not. Namely, these are discrepancies between the participants' focus on immediate or short-term returns of PA and healthcare workers' focus on the long-term effects of PA, as well as discrepancies between participants' and healthcare workers' ideas of normative obligations toward health, self-care, and others. Below, we discuss these findings in relation to other studies, as well as in relation to our theoretical lens.

The tendency for participants with T2D to be focused on the immediate returns of PA, as exemplified in reasoning related to joy and pain, aligns with some of the results of several other studies. Thus, of the studies reporting on barriers to PA from the perspective of either healthcare workers, people with T2D, or both, several touch on the topic of experiencing pain resulting from PA (Shultz et al. 2001; Peel et al. 2010; Lidegaard et al. 2016; Bukhsh et al. 2020; Thorsen et al. 2022; Tripathi et al. 2023). Additionally, Lidegaard et al. (2016) highlight the value of blood glucose measurements during PA due to motivation associated with recognizing an immediate physiological response and Booth et al. (2013) highlight it as a barrier if people with T2D do not feel the effects of PA in the short term.

In contrast to the immediate or short-term character of the reasoning of the people with T2D, the healthcare workers in our study justified the promotion of PA based mainly on its benefits for health in general and the prognosis of T2D in particular. This way of speaking of PA resembles what Martin (2014) has deemed *the voices of medicine* and what Hunt et al. (1998) have deemed perspectives 'rooted in a clinical context, emphasizing technical considerations' (p. 656). Both Martin (2014) and Hunt et al. (1998) contrast these views with what they deem the lifeworld perspectives of people with T2D. Hunt et al. (1998) emphasize the difference in *goals* between *practitioners* and *patients*, arguing that clinical goals are often created in a vacuum, 'extracted from the extraneous elements that surround them in their actual life context' (p. 669), whereas patients' goals are defined in the lifeworld, 'where diabetes and its management compete for time, attention, and resources with all manner of trials and tribulations encountered in the jumble of ongoing life' (p. 669).

When the healthcare workers in our study justified the promotion of PA, they did it based on what they believed to be in the best interest of the participants with T2D. Their line of reasoning seemed, however, to always return to the importance of PA for health and treatment, and their various considerations for participants' other concerns were justified, in the last instance, with reference to the clinical importance of PA.



As argued by Stuij et al. (2021), the notion that one *should* do PA for reasons relating to health is normative. Our analyses clearly indicate that the healthcare workers in our study subscribe to the normative idea that people with T2D have a moral obligation to (learn to) act in accordance with recommended treatment regimens, and that getting caught up in immediate and short-term concerns that prohibit the fulfilment of that long-term obligation is thus nothing short of a lapse in moral judgment. Furthermore, we show that the moral imperative to be healthy is not readily accepted by people with T2D taking part in healthcare practices promoting PA and thus provide empirical substance to discussions related to these concepts.

The moral imperative to be healthy, perpetrated by the healthcare system, has widely been discussed as a medicalization of the lifeworld (Martin 2014) and mimics broader tendencies in many contemporary societies discussed as part of such concepts as healthism (Crawford 1980) and somatic ethics (Rose 2007; Nielsen 2016). While we do not suggest that the notion of health is insignificant, or that people with T2D should refrain from engaging in PA or be left alone with figuring it all out, we do feel it is important to point out that health is not necessarily a moral end. In fact, we suppose that healthcare workers confuse means for ends when they make somatic health the *de facto* purpose of the existence they wish to assist participants with T2D in achieving. At least, based on our results, it seems that for several participants, these notions of health and prevention of potential future sequelae take a backseat to more immediate concerns for physical pain, as well as various perceived obligations towards others.

Returning to Habermas' (1996) theory of communicative action, we see some parallels between a healthcare system acting as an authority on meaning, and the notion of systems' colonization of the lifeworld. As we have argued, this potential colonization is part of larger societal movements towards "evidence-based" medicine, medicalization, and healthism, and thus cannot be deemed to result from acts of isolated employees working independently within the healthcare system. As such, changing practices is an endeavour that requires engaging systems of knowledge by for instance contributing to scientific discourses. To that end, we have provided empirical evidence to support the notion that there are several discrepancies between healthcare workers and people with T2D regarding not just *how* to promote and support PA, but also *why* PA might or might not be important.

Approaching the topic of PA with a theoretical framework based on Habermas' theory of communicative action directed our attention to certain aspects of the empirical context. Like any critical theory, the theory of communicative action is rooted in the idea that systems of power and oppression ought to be revealed and challenged. In the context of this study, this idea urged us to focus on instances where people with T2D were treated less-than-ideally within the healthcare system, not just in the particular medical sense of the word treatment but in the sense of being treated as equal citizens. Such might be the case, for instance, if the lifeworld perspectives of people with diseases are disregarded within the systems tasked with aiding said people.

Our results show that discrepancies in the perspectives of people with T2D and healthcare workers representing the healthcare system are met with attempts to have the people with T2D understand the importance of the healthcare system's



perspective. Given the purported primacy of lifeworld perspectives argued in the theory of communicative action (Habermas 1996), however, we suggest that healthcare workers attempt to remain open to the idea that people with T2D do not necessarily accept the fundamental importance of long-term health and sequelae prevention. Our results support the notion that it might be meaningful to engage in dialogue about PA in relation to pain management, family, and obligations, in order to accommodate what seems important in the lives of many people with T2D.

Communicating curiously about not only the best *means* of supporting long-term PA but also the perceived importance of that *end* itself might help in reaching mutual understanding. Only if healthcare workers and participants with T2D coordinate the ends toward which they work can they figure out together which means might be appropriate, and whether PA might be part of those.

## Conclusion

In sum, we have explored the reasons of people with T2D and healthcare workers for doing PA or not within a framework that distinguishes between *subjective* reasons, *objective* reasons, and *normative* reasons. In so doing, we have identified several patterns with potential ramifications for programs that promote PA. We show that in relation to PA, the participants with T2D orient themselves much less toward long-term returns for health and disease than the healthcare workers do. Additionally, we show that the healthcare workers and the participants with T2D hold fundamentally different views of their obligations in relation to PA. Whereas several healthcare workers infer a moral obligation to engage in self-care and argue for PA in relation to that imperative, the participants with T2D are much more focused on their obligations in relation to others, including their families and the healthcare workers.

These notions together raise many questions, and by so doing, they have the potential to help qualify dialogue between healthcare workers and people with T2D, thus contributing to the development of meaningful healthcare practices. Our study suggests that dialogue between healthcare workers and participants about PA should be geared toward mutual understanding. We encourage healthcare systems and workers to remain open to the idea that participants might not share the view of the fundamental importance of health and sequelae prevention, and that working towards other ends, be it existence with less pain or with more time devoted to family, might also be fruitful, whether such ends are compatible with the health imperative or not. Furthermore, we hope that the discussions provided in this article serve to encourage other researchers working with people with diseases to extend the scope of inquiry to include other perspectives than merely those related to improving the effects of programs and the somatic health of participants.

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**Data availability** Data for this study was generated with informed consent from all participants. They did not, however, consent to all the raw data being shared. Due to the sensitive nature of the research, the data is not available.

## Declarations

**Competing interests** There are no known competing interests to declare.

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