



Understanding air-conditioned lives: qualitative insights from Doha

SPECIAL COLLECTION:
ALTERNATIVES TO
AIR CONDITIONING:
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RESEARCH

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ABSTRACT

This paper uses an interview study in Doha, the capital city of Qatar, to consider the role of qualitative methods in identifying how human relationships with air-conditioning are influenced. Drawing on discussions with three groups of comparatively affluent residents who spent significant amounts of time in air-conditioned spaces, it makes four points to researchers hoping to encourage less energy demanding lifestyles. The first is that 'comfort is only one aspect' when a premature focus on comfort obscures other potentially important analytical concerns. The second is that 'air-conditioning changes cultures' when valuable insights may be gleaned from what people say about how it creates, rather than responds to, local preferences and expectations. The third is that 'comparison can be instructive' when different groups may feel themselves to possess very different relationships with air-conditioning. The fourth is that 'discussion can disappear' when those hoping to influence these relationships may benefit from understanding when and how 'conditioning conversations' currently occur and how they could be part of processes of positive local change. After substantiating these points, wider conclusions are drawn about the promotion of less energy consumptive ways of adapting to a warming world and the value of this approach to the cultural geography of air-conditioning.

PRACTICE RELEVANCE

Strategies for influencing human relationships with air-conditioning stand to benefit from an appreciation of how this technology has become part of everyday life in particular places. Drawing on an interview study in Doha, this paper argues that qualitative research methods can illuminate these processes in original ways and provide fresh ideas about how life with air-conditioning is influenced. With respect to the Doha case, the paper concludes that a fuller public conversation about air-conditioning levels could spark a process of local change with the potential to result in reduced energy consumption.

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1. INTRODUCTION

In accounting for the widespread provision of air-conditioning in Doha, the capital city of Qatar in which most of the country's inhabitants live, there are various reasons why the current situation could be viewed as something of an inevitability. First, desert Qatar is hot with peak daily temperatures that routinely exceed 40°C throughout the summer. In this context, it is easy to argue that air-conditioning is a straightforward necessity for those who live there. Second, Qatari nationals are very wealthy as result of the extraction and exportation of the oil and gas reserves that were first discovered there in the 1930s. In this context, why would they not spend some of this wealth on a technology for insulating themselves from the challenges of significant local heat that has already proved very popular elsewhere around the world? Third, one can look to how those who design and manage buildings still commonly work with the idea that occupants should be provided with standards of ambient temperature irrespective of evidence for preferences that vary depending on where they live. In this context, locally specific practices are often marginalised and desert dwellers should be cooled.

In view of all this, it is tempting to place Doha at the vanguard of a broader movement towards keeping people inside air-conditioned bubbles that aspire to providing comfort but are also highly energy consumptive and could promote cultural indifference to the ravages of climate change outside. However, in Doha, just as in any city, there remain local idiosyncrasies that encourage circumspection about how well this kind of broad-brush account really fits. Given their potential role in avoiding more fully air-conditioned social futures, this paper argues that one very good way of studying these idiosyncrasies would be to speak with some of those who know all about them by virtue of having lived in relevant places. It exemplifies this argument by drawing on a study involving three groups of Doha residents in which the aim was to give them ample space to discuss their thoughts on air-conditioning in ways the researchers could not presume to know beforehand. With reference to the results, four points are made to those hoping to encourage more sustainable ways of living with local climates. Some of these points are not in themselves new. The argument here is more about attending to how they combine to shape social life in identified places. After discussing how they did in Doha, wider conclusions are drawn about the promotion of less energy-hungry ways of adapting to a warming world and the value of this approach to the cultural geography of air-conditioning.

2. QUALITATIVE RESEARCH ON CLIMATE-CONTROLLED LIVES

One obvious objective for those hoping to stave off the global spread of air-conditioning technologies because of the huge associated energy demand is to celebrate and safeguard cultural variation in how people live with their local climates (Brager & de Dear 2003; Chappells & Shove 2005, Hitchings 2011a). Yet the detail of these variations is often either difficult to discern or downplayed in research. This is partly because of the popularity of quantitative surveys that aim to reveal the ambient temperature preferences of those found in different parts of the world (for a recent review, see de Dear *et al.* 2020; for work in the Middle East, see Elnaklah *et al.* 2021). These studies provide valuable evidence if the ambition is to give architects and building managers the confidence to respond more fully to how people possess different preferences partly by virtue of their history of exposure to very different local climates. Yet the lived experiences and cultural practices implied by these variations can be difficult to evaluate through these approaches because these methods generally require the researcher to set the parameters of response in advance of their engagement with the people whose lives they hope to understand. This can also be connected to the suggestion of implied judgement if discussions drift too far towards a more culturally engaged approach. The concern here is that taking such a step might lead to analyses that effectively position some groups as comparatively self-indulgent in having developed more fully air-conditioned cultures. The responses to Prins' (1992) discussion of what he saw as a peculiarly North American attraction to air-conditioning attests to that (Rosa 1992; Cowan 1992). Yet geographically specific ways of living with the climate can be viewed in a more positive light by celebrating vernacular practices that are both less energy intensive and a potential source

of local pride (Hitchings 2020). This thinking is in line with broader arguments about the many ways in which building ‘occupants’ could be engaged with by those hoping to foster less energy-consumptive living and how they could be invited into valuable conversations about desirable levels of local air-conditioning instead of attempting to cater to their imagined needs (Cole *et al.* 2008). Either way, a qualitative approach to this topic is well suited to exploring how this technology has become part of everyday life in specific places. Because of the more open-ended nature of this approach, in which the researcher either invites people to discuss their experiences in their own terms or observes how social life unfolds in relevant contexts, how exactly they coexist with air-conditioning should eventually become clear.

Regarding cultural practices of ambient climate control, there have been more qualitative studies of winter heating than summer cooling so far (for a review, see Hitchings *et al.* 2015). Various cultural dimensions have been revealed through these means. These range from the importance of considering how homes can be heated differently in preparation for visitors by older people in the UK (Hitchings & Day 2011) to the pleasures of coordinating everyday life around wood fires instead of working towards unwavering ambient conditions inside Finnish homes (Jalas & Rininen 2013), and how ‘cosy’ domestic feelings in Denmark can be as much about interacting with materials as being surrounded by bodies of appropriately warmed air (Madsen & Gram-Hanssen 2017). In German homes, studies have shown how some inhabitants regard their stoves as pets that they should lovingly feed with wood (Offerberger & Nentwich 2012), and how attempts at encouraging more window ventilation can be thwarted by cultural norms of windowsill use that mean objects are quite literally standing in their way (Galvin 2013). Meanwhile, in New Zealand cultural beliefs about national toughness have also been seen to encourage those who live there to put on additional clothing instead of heating their rooms more fully during winter (Cupples *et al.* 2007).

Some studies have also drawn on these methods to explore how air-conditioning has become part of locally specific patterns of everyday life. These include examinations of how young Singaporeans are particularly alive to the fashion opportunities associated with colder environments (Hitchings & Lee 2008), how air-conditioning allows the middle classes of Manila in the Philippines to embrace locally valued ‘Western’ aesthetics (Sahakian & Steinberger 2011), and how beliefs about appropriately ‘modern’ ways of managing ambient experience justify its use in Brazil and elsewhere (Mazzone 2020; Chang & Winter 2015). These methods have also revealed how widespread air-conditioning can serve to make the absence of sweat both a marker of middle-class distinction in India (Wilhite 2008) and an embodied state linked to positive peer evaluation amongst girls in Southeast Australia (Waitt 2013) who may feel happier to sweat at home where they feel more protected from public condemnation. Further north in Australia, where higher temperatures arguably make air-conditioning more attractive, locals have been revealed to take pride in how they have resisted its attractions and thereby feel more enjoyably connected to the outdoors (De Vet 2017). To push the analytical register even further away from the idea of cooling people, air-conditioning has also been shown to be particularly valued because it allows scheduled sporting events to be troubled no longer by weather (Hitchings *et al.* 2014) or because it safeguards the wellbeing of pets that are less able to adapt to heat in the ways their owners can (Strengers *et al.* 2016).

Though investigating the various cultural dimensions involved in the global spread of air-conditioning does not necessarily demand qualitative methods (for a recent survey example in India, see Khosla *et al.* 2021), these studies demonstrate their potential for revealing them. Whether indoor climate control is experienced as uninspiring thermal ‘monotony’ (Healy 2008) is more a matter of unthinking ‘addiction’ (Hitchings 2011b), or rather nourishes a concerning environmental indifference (Sahakian *et al.* 2020) that denies people the pleasure of honing their mundane heat management skills (Vannini & Taggart 2014): these are all questions that qualitative methods are well suited to exploring because of their openness to the characterisation that best captures the social experience of particular contexts. The present study applied these methods to Doha as a city that had yet to be studied in this way.

3. THE DOHA CASE

Doha began as a settlement that grew around pearl diving in the waters of the Persian Gulf. The inhabitants lived in low-rise courtyard houses that spread out organically as families built new dwellings alongside those in which some members already lived (Wiedmann *et al.* 2012; Sayigh & Marafia 1998). The result was high-density housing and valuable shade along the walkways between them. Since then, and especially after the discovery of huge gas reserves and the country's independence in 1971, a series of master plans have encouraged Qataris to move to villas outside the city (Al-Thani *et al.* 2019) as traditional housing was replaced by high-rise offices and downtown hotel complexes (Nagy 2000; Rizzo 2014). In so doing, air-conditioning appealed as the 'ultimate technical fix' (Günel 2019) in response to the challenge of creating a modern city in the desert as various developments started encasing people in buildings that were surrounded by mirrored glass and fully air-conditioned inside (Indraganti & Boussaa 2017a). This appeal was also especially strong in a country where the gas exports made cost of comparatively little concern (Elnaklah *et al.* 2021). Since then there have been various attempts to unsettle the local reliance on air-conditioning through alternative approaches to urban design (Winter 2016). It is also true that environmental concerns are at the heart of Qatar's current 20-year development plan (Al-Thani *et al.* 2019). Still, Doha continues to use vast amounts of air-conditioning in response to an already harsh desert climate that has been getting hotter because of wider global warming (Pal & Eltahir 2016). Some would connect this to a distinct style of 'Arab urbanism' in which wealthy countries have been drawn to buildings that are often more spectacular than sustainable (Molotch & Ponzini 2019).

At the time of this study, there was not a great deal of research on how these developments have been experienced on the ground in Doha. One project with Qatari students revealed some ambivalence about 'building glass refrigerators in the desert' (Koch 2014). Surveys with office workers (Indraganti & Boussaa 2017a, 2017b, 2018; Indraganti *et al.* 2018) suggested a degree of air-conditioning adaptation since they find lower temperatures to be comfortable than their contemporaries in countries with comparable climates. Nagy (2000) contended that Qataris often oscillate between feelings of pride about how widespread air-conditioning demonstrates national progress and worries about the health implications of protracted exposure. Though he stops short of reflecting on how they feel about this, Fromherz (2012: 2) has similarly argued that many Qataris now live 'almost perpetually in an air-conditioned bubble'. However, it is also important to be mindful of how not all social groups have access to air-conditioning there. The population of Doha is remarkable for the great number of immigrant workers who have come to be part of its rapid development, with some suggesting that almost 90% of the city's residents now hail from overseas (Snoj 2019). In this respect, though concerns have been expressed about how a Qatari turn away from the outdoors has resulted in vitamin deficiencies because of insufficient sunlight exposure (Badawi *et al.* 2012), there have also been very different worries about how some immigrant workers must more directly confront the desert heat and have died as a result (Pradhan *et al.* 2019). In view of this diversity of local experiences, the present study decided to focus upfront on three resident groups whose perspectives on local air-conditioning were hoped to prove particularly instructive.

4. METHOD

The study involved three groups of Doha residents who were interviewed between 2014 and 2017. These groups were chosen partly because they would likely have particularly high levels of air-conditioning exposure. They were also partly selected in their capacity as those to whom local building and estate managers were presumed to be catering when regulating ambient conditions indoors. If the respondents for whom climate control was provided proved to be ambivalent or unhappy about the reality of their highly air-conditioned lives, the argument for rethinking this situation in pursuit of less energy demand was taken to be especially strong. Though this varied seasonally with the milder winter months prompting more outdoor activities, all three groups spent a great deal of time in the company of air-conditioning, with their homes and workplaces

generally being air-conditioned and their social activities most commonly taking place in air-conditioned spaces. Fifteen people were recruited from each group, with a similar number of men and women amongst them.

4.1 OLDER QATARI NATIONALS

The first group was made up of older Qatari nationals aged between 50 and 80. They had lived most of their lives in Doha and had experienced a variety of ways of handling the local heat over their lifetimes. Though questions were not asked about levels of affluence, they were all likely wealthy. Most of them lived with their families in large, air-conditioned villas in private compounds outside the city. The researchers were aware that interview access might be difficult for this group and that its members might be less fluent in spoken English. In response, they turned to how one of them was already teaching a cultural studies class to Qatari students. Incorporating the project into this class, these students were briefed on the objectives of this study and asked to pose a series of open-ended questions to an older relative as part of a broader exercise in learning about social research techniques. The interview schedule began with questions about how life went on for their chosen older relative before air-conditioning became widespread in Doha. It then asked them to respond to a variety of ways in which they might feasibly think about this technology today.

4.2 PROFESSIONAL EXPATRIATES AND PARTNERS

The second group was made up of professional expatriate workers and partners who had joined them in moving to Qatar. They were recruited through snowball sampling, drawing on the existing networks of the research team. Many worked in 'Education City', a large development on the outskirts of Doha that comprised large 'branch campus' buildings that were affiliated to various established universities elsewhere around the world. All had lived in Doha for at least two years before the interview. Those in this second group largely hailed from either North America or India, as one of the largest immigrant populations in Doha. Because of the recruitment strategy, many of them worked in the education sector, with media professionals also being common in the sample. Because these interviews were carried out by the research team, they could take a more responsive approach in which fruitful lines of further enquiry were identified and immediately explored during the interview itself. However, the overall structure was organised around how life changed with the seasons in Doha as a framework that was taken to be familiar and manageable for them.

4.3 YOUNG QATARI STUDENTS

The third group was made up of young Qatari students who were completing degrees in different parts of Education City. These were also recruited through snowballing techniques that started with contacts at the project's host university in Qatar. All were aged between 19 and 25, and to ensure they had sufficient local experience to develop a position on the topic, they were all required to have lived in Doha since the age of 16. Most had only lived in Doha, though many had also enjoyed significant amounts of overseas travel, often partly as a way of escaping the local summer heat. This group was therefore taken to have grown up with air-conditioning. Many lived in similar villas to the older Qataris and came to university in air-conditioned cars. They were interviewed individually for 40 minutes between their lectures in offices, meeting rooms and indoor canteens around the campus. These interviews followed a similar format to those with the expatriate group. However, partly because they came last, these discussions also asked the younger Qataris to respond to suggestions emerging from the preceding two interview rounds.

4.4 AIM AND FOCUS

The aim of this study was not to evaluate their experience of specific spaces systematically, but rather to identify, and then explore, telling lines of questioning as the study went along. In this respect, the focus was adjusted in response to the features of respondents' lives with air-conditioning that they seemed most interested in discussing during these interviews. Analysis involved a coding process in which identified themes and suggestions were examined by comparing

the ways in which they featured across the full set of 45 transcripts. Drawing on the results of this exercise, the paper now makes four points to researchers hoping to play a part in the promotion of less energy-hungry ways of adapting to a warming world.

5. FINDINGS

5.1 COMFORT IS ONLY ONE ASPECT

And I do think that it should be everywhere [...] though sometimes it is too cold.

The above response, given by one young Qatari on being asked about the overall importance of air-conditioning in Doha, encapsulates a sentiment that was commonly expressed by all three groups in this study. An expatriate academic was similarly asked whether she could live with less air-conditioning. After taking a moment to reflect, she concluded that she was unsure. Yet, earlier in the interview, she had spoken of a frustrating attempt to alert someone to the fact that she was often too cold in her office. Some of the older Qataris were also emphatic about the necessity of air-conditioning. Yet they too bemoaned the physiological effects of spending long periods of time in public spaces that were, in their view, too cold. For all three groups in this study, there was often a difference between how air-conditioning was handled in the abstract and how it was discussed when the detail of everyday life was turned to. This hinted at the symbolic associations of air-conditioning at a general level. Doha was taken to be dangerously hot in summer such that the broad-brush idea of being without air-conditioning was unthinkable there. Yet even though this meant that air-conditioning was highly valued by all three groups in the abstract, it was not always pleasant in practice.

Attending to the subtleties of how these respondents spoke of air-conditioning gave insights into why it was particularly valued by some. For the younger Qataris, for example, it was especially linked to national progress. Indeed, these associations could serve to justify them enduring physical discomfort as some younger Qataris took some pride in how they ‘loved the cold’ in principle. The older Qataris also saw air-conditioning as partly about ‘keeping pace’ with wider changes that it was appropriate for Qatar to follow as a country. The expatriates were less likely to talk in this register. This may be partly because they were less personally attached to air-conditioning, having lived in places elsewhere where much less was provided. But it was also connected to how they felt less personally invested in the national story of Qatar and were less concerned about where the country stood in terms of ‘thermal progress’.

Similar ‘air-conditioning associations’ came to the fore when local opportunities for outdoor socialising were discussed. These were understandably absent during summer. But as the seasons turned towards winter, new possibilities started to register. One of the options available in this regard was to go to a traditional market that involved a dense network of stalls, retail units with open frontage, and enclosed courtyards that used shading and the manipulation of airflow in pursuit of a more pleasant environment for people. However, irrespective of their physical effectiveness, that these strategies were ‘traditional’ seemed part of the problem for some—some ways of keeping people cool were progressive and others were outdated. This was particularly emphasised by one expatriate respondent who felt that if the aim were to encourage more outdoor socialising amongst those living in Qatar, the activities would first need to be positioned as exclusive and therefore desirable. People would then go because they were attracted by these associations such that the challenge of being outdoors would then be more willingly tackled through individual adaptation strategies.

Yet whilst air-conditioning was attractive partly because of these associations, and whilst it was valued in the abstract because it made life in Doha bearable, it could also become boring. This was again particularly apparent when comparing seasonal experiences. As already mentioned, the winter months could provide opportunities for being outdoors that were greatly valued by respondents from all three groups. From the caress of a breeze to the gradual cooling that followed sunset, more physically stimulating experiences that made them ‘feel part of nature’ could be taken advantage of at that time. Summer was discussed very differently in the abstract. This was indeed a time of draining ‘thermal monotony’ that particularly sapped the energy of

the expatriates. This was partly because many of the Qatari nationals could afford to escape this experience through overseas travel at this time. For those who were to remain, however, a 'strange' feeling of environmental disconnection was discussed as they 'hunkered down' during a time when some would compensate through a determined focus on developing new hobbies and others would deliberately ignore the local climate. Some expatriates wore lighter, more 'summery' clothes because they, for the time being at least, retained some degree of ingrained sense that this was an appropriate response to the season irrespective of the reality of life indoors. But additional garments were often close at hand, so they could stay sufficiently warm during the 'long cold summers' of Doha.

It is worth noting how many dimensions featured in these interviews. Air-conditioning was certainly about comfort for all three sets of respondents. But it was also about more than that. And the associations involved sometimes encouraged these respondents to feel positive about currently uncomfortable conditions. In many accounts of how people heat and cool themselves around the world, the ambition is often to recognise that thermal comfort is socially and culturally produced. In other words, the focus is on how people keep themselves sufficiently warm or cool varies across space and changes over time. However, too full a focus on physical comfort downplays the diversity of feelings about air-conditioning that people may have. Because of their openness to how life goes on in specific places, qualitative methods are good at revealing this diversity and reflecting on the implications when some of these feelings could be key to promoting less energy-intensive patterns of local living. Issues of pride, of progress, of boredom and of the various opportunities produced by the presence or absence of air-conditioning: all these could provide useful alternative starting points when studying how people live with this technology.

5.2 AIR-CONDITIONING CHANGES CULTURES

I've gotten used to always having and needing air-conditioning.

Such was the response of a university manager as he discussed everyday Doha life in his office at the Education City complex. The elision between 'having' and 'needing' was presented as unremarkable and unworthy of comment at the time. But the process was clear elsewhere in the interviews. One led to the other. He was resigned about how he had been subject to this process and how, as he openly admitted, he had become 'addicted' to air-conditioning.

All three of the groups in this study were able to reflect on how air-conditioning had partly made those who lived in Doha what they currently were. However, perhaps unsurprisingly, the older Qataris had the most to say about these matters. They could, after all, recall how lives had been lived very differently before the rapid spread of air-conditioning across Doha, with various other ways of managing the desert heat still in living memory. These included sleeping on rooftops in clothes that had been made wet in advance, the use of shading and palm leaves to manage airflow into and out of buildings, spending time in the sea during the hottest parts of the day, and blocks of ice being delivered to homes for families to use in a range of personal cooling strategies. Since they had lived through great change in terms of how local heat was handled in everyday Doha life, they were well placed to evaluate the relative benefits of the lifestyles that had emerged there after the arrival of air-conditioning.

A particular concern related to how family dynamics were taken to have changed. Before air-conditioning, families were understood to have spent much more time together as they collected in the coolest available spaces and enjoyed each other's company in the process. However, now that air-conditioning was supplied across a great diversity of environments in Doha, people had less need to congregate and younger Qataris were particularly taken to have started to disengage from family life. One older Qatari spoke of how her family was 'disintegrating' because of the air-conditioning. Another expressed her sadness about how she 'missed her daughter' who had somehow drifted away from the family towards unknown air-conditioned spaces elsewhere. The older Qatari men more commonly spoke of younger people being 'weakened' by air-conditioning in ways that seemingly combined both physical attributes and personal temperaments. They had been 'made lazy' because they could linger indoors without ever needing to take on the toughening

challenges presented by the local outdoor climate. As one of them directly stated, 'I would say that 80% of people have been taught laziness by air-conditioning.' This led to an ambivalence about their own situation when they were asked to reflect on what it had done to them. This had not often been so fully considered, but once they had effectively warmed to the topic, a sense of pride about how they had handled the climate previously came through, though it was also fair to say that they too had been taught new 'wants and needs' by the air-conditioner.

The younger Qataris, by contrast, knew much less about past responses to the local climate because they had grown up with air-conditioning and had not greatly questioned what they saw as an unremarkable backdrop to everyday life in Doha. They expressed some concerns about how it might make them sleepy, but were generally much more phlegmatic about how, as one plainly put it, other ways of living with the local climate had 'been deleted from the culture'. Accordingly, when they spoke of future climate adaptation in Doha life, the climates to which they were referring were more often indoors. Because of this, and in an inversion of the way in which the older Qataris sometimes worried about how younger generations might not be able to handle anything other than high levels of air-conditioning, the younger Qataris could worry about how not all older Qataris were able to adapt to the reality of life within air-conditioned spaces because some of them still preferred to experience more heat.

The expatriates in this study spoke much more in terms of their own personal biographies, rather than intergenerational changes or local collective cultures more generally. Still, by and large, they too acknowledged that air-conditioning was changing them. Some had noticed these changes, saying that 'my tolerance has definitely changed' or, more bluntly, 'air-conditioning makes me fat and lazy'. Others became alive to these matters as the conversations went on, ending by acknowledging how they had drifted towards new relations with ambient air that they might not have ideally wanted. As one put it, she would 'ideally like to live with less' but she 'didn't somehow'. In this respect, across the board, discussion of escaping air-conditioned spaces was discussed in terms of 'remembering' the value of doing so, of 'making an effort' so that something enjoyably different might happen.

All three sets of respondents were able, in interestingly different ways, to reflect on how air-conditioning had influenced everyday life in Doha. Indeed, these were exactly the topics that some were most eager to discuss in this study. Staging this kind of discussion was perhaps especially easy to do Doha since one group was comparatively new to this context and another had once lived there without any air-conditioning. But the point remains that if researchers hope to engage different groups with the idea of living with less, one potentially fruitful strategy would be to begin with how they feel about the changes they have already experienced. Many air-conditioning studies take snapshots of the present experience for people that are then presented to the reader as evidence of current preferences in particular places. It is left then for the researcher to situate those snapshots within a broader account of how life with the local climate may be evolving within them. However, there are many ways of exploring cultural change in this field and one of them would be to speak with some of those who have been experiencing it. Asking people to reflect on what air-conditioning has effectively 'taught them' could help researchers to see the local scope for living otherwise.

5.3 COMPARISON CAN BE INSTRUCTIVE

They were born under the air-conditioning, and they will stay under the air-conditioning.

It was unsurprising that conversation often drifted towards cultural comparisons in this study. The sample, after all, was comprised of three groups that were expected to have different perspectives on the value of local air-conditioning. This aspect was mentioned at the start of most interviews, and it often encouraged respondents to speculate about the differences that might be identified in this study. The above comment was the result from one of the older Qataris when reflecting on the experiences of younger generations there. His belief was effectively that it was 'too late' for younger Qataris because they could no longer cope without it.

Consistent with this thinking, it was the younger Qataris who proved most willing to admit to a personal dependence on air-conditioning. The older Qataris believed themselves to possess the skills to cope with less because they had developed them in the past. The expatriates felt that biographies in which more time had been spent outdoors elsewhere in the world made them especially eager to retain some connection to the local climate, even in the desert. It was therefore unsurprising to see that both the older Qataris and the expatriates, when taken as a whole, felt they were the group that could most easily live with less air-conditioning in Doha. It was also partly because, across the board in this study, respondents felt they were more likely to feel too cold than too hot in summer. In such a context, it was easy to position high levels of local air-conditioning as a response to the apparent needs of some other group that was presumed to like it more than you. After all, following that line of thinking, why would so much be supplied if no one really wanted it so cold?

Amongst the younger Qataris, what was especially interesting was how a desire for less was commonly spoken of in terms of individual idiosyncrasy. As a group, they collectively felt that they ‘loved the cold’, as discussed earlier. Individually, however, some mentioned how they did things that they felt were against this perceived generational culture—how they were ‘weird’ for using less air-conditioning in their rooms or for being especially excited about how social life might move outdoors in winter. Meanwhile, ‘Westerners’ were observed to particularly like spending time outside, which was often well received by the younger Qataris as a reminder of how this was possible and that they might feasibly follow suit. At the same time, older Qataris were noted to be more likely to complain of the cold in a way that reinforced a sense that they too wanted to be more connected to the local climate.

What is the significance of this? In the next section, the implications in terms of how certain ‘air-conditioning conversations’ could be helpful in Doha are more fully considered. For the moment, the point is simply that people could, and did, compare how different social groups related to air-conditioning in informative ways. Beliefs about what others might prefer, and why they might do so, have not often been a focus of attention in studies of air-conditioned lives since the ambition has often been to develop the fullest possible sense of how identified groups relate to this technology. Researchers may have also shied away from these matters after having decided upfront that this is a sensitive topic such that respondents might not wish to gossip about, and potentially judge, the ambient preferences of others. But it need not work in this way. Indeed, if anything in this study, these served as enjoyable topics to reflect on as respondents gradually pieced together a position on the ambient conditions that other groups may prefer based on what they had previously seen around them and spoken about.

5.4 DISCUSSION CAN DISAPPEAR

When you come here you must adapt—you can’t change the climate.

The above response from one of the expatriates was intriguing because it was not entirely clear at the time whether he was referring to the climate outside or indoors. ‘Weather’ was similarly sometimes discussed in ways that were initially assumed to refer to the outdoor environment, only to discover later in the interview that respondents were referring to the indoor conditions that were provided to them. In this instance, the response was immediately expanded upon with a discussion of how it was to live so much of his life in relatively cold spaces indoors. The climate that you ‘couldn’t change’ referred to local air-conditioning. He certainly had much more to say about adapting to the cold, rather than the experienced disorientation that followed his brief ‘hit of heat’ as he scurried from his car into one of the back entrances to the monumental building in which he conducted his research.

Attending in this way to how indoor and outdoor climates were linked by these respondents during the interviews facilitated an understanding of one reason why, even though many of them seemed to enjoy the opportunity to think through their relationship with air-conditioning, comparable discussions did not appear to be taking place often between themselves and the others with whom they lived in Doha. Across the board in these interviews, it was understandably

acknowledged that the desert conditions made this a hostile place to live, such that air-conditioning went unquestioned as a kind of technological saviour. If this was the cultural narrative, why would you linger over the local climate as an evidently negative aspect of Doha life in discussion? Better to quietly endure, and be broadly thankful for, the indoor cold than to make the challenging local climate a focus for attention.

In this way a discourse of determined endurance in the face of harsh summer conditions was transferred from the reality of hot climates outdoors that were impossible to change to indoor spaces that could feasibly be less cooled. High levels of summer air-conditioning were accordingly 'just something that everyone had to deal with', as one younger Qatari described it. This was even though all respondents reported feeling too cold in spaces outside the home in summer. Whilst excitement about the return of milder winter weather represented a more attractive conversation topic, especially amongst the expatriates, when it came to the cold indoor summers, 'you just had to bite the bullet' or, as another remarked, 'you have to deal with it, just like all the others do'. In this cultural context, the possibility of a more variable approach to ambient climate control was dismissed as a discussion topic. Everyone 'just dealt with' what they were given when, overall, air-conditioning was greatly valued.

As one younger Qatari mused with reference to certain known expatriates who had recently relocated from overseas, 'it was quite natural' that the 'newer ones' might mention the difficulties they had with the high levels of air-conditioning. The implication was that those who had lived there for longer did not. Another reason for this silence related to how, in the absence of more detailed knowledge, it was often assumed that the present situation could not change. There were, for example, rumours that had passed between some of the expatriates about how their buildings were very cold because 'the computers' or other technologies with which they shared the space needed them to be. Building managers had apparently, according to some, been contacted in the past but proved unable 'for some reason or another' to let the temperatures drift upwards. Such rumours made it seem less worth looking into the possibility of amending the situation by finding ways to reduce the air-conditioning. Linking back to the above cultural comparisons, it was furthermore suggested that other resident groups must prefer the cold such that questioning the currently high air-conditioning levels might be considered impolite and potentially selfish.

The idea of appropriate progress was sometimes gestured towards as another reason for not discussing this situation. Here the apparent 'gold standard' way of catering to building occupants was a 'cold standard' of significant air-conditioning, irrespective of any potential discomforts. And so, rather than discussing this situation too much, many individuals developed their own personal adaptation strategies. As mentioned, extra clothing was often at hand in summer. Some of the expatriates also used portable heaters in their offices. This was deemed by them to be less of a hassle than learning to adjust confusing thermostat settings or finding a way of speaking with someone who could change the temperature for them. In this way, the indoor cold gradually drifted out of their consciousness as a topic for public deliberation as the idea of actively debating the situation slowly disappeared. As one younger Qatari reflected, 'they want to make it as cold as possible, though I don't really know why'. Who 'they' were, however, was often hard for respondents to define—was it the university, the government, perhaps even the architect? Either way, someone at some point had decided to specify their thermal environments in certain ways. And then that was that.

Going beyond the suggestion that sustainability researchers could learn from speaking with identified groups of people in an open-ended way about their lives with air-conditioning, here the potential of a similar approach to exploring the extent to which air-conditioning was already being discussed within and between groups was seen. It might have been imagined that there would be a degree of cultural reticence about this topic in view of how its skirts sensitive issues related to sweating and the different responses of different bodies. This may also partly explain why this topic has often been tackled in a more removed way by researchers who keep these issues at arm's length by asking question about levels of personal comfort more than how and when people speak with one another about what they may collectively want. However, the

above analysis points to the value of taking on the challenge of promoting public ‘conditioning conversations’ when, in this case, a combination of factors encouraged these respondents to keep quiet about a situation that could be uncomfortable for all whilst at the same time being highly resource consumptive. Rather than seeing those who are often studied in this field as occupants to be catered to, or as capable individuals with adaptation skills that should be encouraged, they might also be usefully recast as citizens who could be invited into a productive collective debate about less energy-intensive local cooling.

6. CONCLUSIONS

The global spread of air-conditioning demands massive amounts of energy that continue to be generated in ways that often entail huge carbon emissions (IEA 2018). These emissions exacerbate climate change which fuels the demand for even more cooling (Tafazzoli & Sadoughi 2021). In some respects, Doha presents an excellent example of this vicious adaptation cycle in action. Doha is in a region where various physical features mean that global warming is already having particularly strong impacts (Pal & Eltahir 2016), and is a place where a large part of the great per capita carbon footprint is associated with space cooling in buildings (Indraganti & Boussaa 2018). So, have Doha’s more affluent residents already become ‘locked into’ to a fully air-conditioned life indoors (Winter 2016)?

The present study sought to understand whether this was the case by interviewing three groups who spent a great deal of their time in the company of air-conditioning. For them, life without this technology was now taken to be impossible in Doha. But, turning to whether air-conditioning should always be there, and if more is necessarily better, this project offers more hope for those aiming to disrupt this vicious cooling cycle. These respondents were stoic in the face of the cold more than craving more of it for themselves. Part of the problem related to how in many public spaces and workplaces a combination of factors dismissed the suggestion of a collective debate about the idea of living with less. In Doha, initiating a discussion about future provision, and including managers and landlords alongside those who spend time inside their buildings, could therefore be a good idea at this point. More widely, those focused on preventing the further international spread of air-conditioning might be encouraged by the suggestion that people may not always rush to shelter in bubbles of precise temperature control and can find it both unexciting and strange to be too fully disconnected from local climates and the stimulation of outdoor experience. In this sense, the ambivalence of heavily air-conditioned groups such as these could be exploited. In Doha, they had not yet entirely adapted to their current life of air-conditioning. And whilst the younger Qataris displayed some degree of collective bemusement about how they already felt unable to live without it, the Doha case provides a reminder both that local cultures of air-conditioning dependence can develop quite quickly and also that they might feasibly move in different directions.

Going beyond potential practical responses, this paper has also highlighted how qualitative social research methods can, by virtue of being sensitive to the idiosyncrasies of how local lives intersect with air-conditioning, reveal cultural dimensions that may warrant further examination in this field. Though these methods are comparatively uncommon in this area, they have the potential to identify original suggestions because of their openness to whatever themes emerge as important. This is not to downplay the value of other methods, but rather to emphasise what qualitative approaches can add. They could, for example, inspire surveys that go beyond collecting data on what temperatures are most comfortable for people to focus instead on how widespread some of the beliefs and concerns that were revealed in the present study are across different social groups and geographical contexts. Either way, given that alternatives to air-conditioning should be promoted as a matter of urgency, using qualitative methods to explore the changing ways in which people are already living with it could help to pinpoint how that is most effectively done in particular places.

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The author has no competing interests to declare.

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