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Older adults' accounts of the relationships between retirement timing and health: a descriptive qualitative analysis in Chile

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Abstract

Retirement timing can have important health implications. Little is known, however, about older adults' views on this issue and whether they consider it better to retire later, earlier, on time or anytime. This knowledge gap about older adults' views is particularly true outside North America and Europe. This qualitative study aims to examine older Chileans' ideas about the relationship between retirement timing and health and to explore gender and class patterns in qualitative themes identified, knowledge which may strengthen quantitative population-based approaches. Framework analysis was conducted on qualitative accounts from a purposive, non-random sample of 40 older Chileans in six focus groups, stratified by gender and class as marked by lifetime occupation. Transcriptions were coded by two independent reviewers (inter-coder reliability = 81%) according to four deductive categories of retirement timing as well as inductive coding of emergent themes. The content and sequence of codes were visually represented in MAXQDA's document portraits and illustrated with descriptive quotes. Results indicate that participants' views about when to retire in order to maximise health did not highlight retirement age or timing (later, earlier, on time, anytime). Instead, these older Chileans emphasised that the optimal retirement age depends on other conditions, such as employment quality, retirement income and gender. These views were patterned: lower occupational-class participants emphasised income and job hazards, higher-class males emphasised job satisfaction and higher-class females emphasised gendered patterns. Women and lower-class participants were relatively more favourable to earlier retirements than men and higher-class participants. Overall, qualitative analyses of lay perspectives from understudied country contexts complement and extend population-based models focused on timing or retirement age, suggest specific characteristics of retirement transitions that may moderate health consequences, and highlight class and gender differences in views of retirement timing. More research is needed using mixed-methods approaches and leveraging both purposive and random samples.

Keywords: age; class; focus group; gender; health; Latin America; retirement; stratification

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Introduction

Population ageing is associated with increased pressures for both governments and individuals to delay retirement (Bloom *et al.*, 2015). Individuals are living longer and spending more years in retirement, but retirement resources have not increased *vis-à-vis* the increases in life expectancy (Ellis *et al.*, 2014). Consequently, numerous countries around the globe have implemented policy reforms to promote longer working lives (Staudinger *et al.*, 2016). In this context of increased pressures to work longer, scholars have tried to develop better understanding of the health effects of retirement timing (Fisher *et al.*, 2016), though they have rarely assessed the direct perspectives of older adults on this issue (Ray, 2007; Winston and Barnes, 2007; Moffatt and Heaven, 2017).

The timing of retirement can have implications not only for retirement income and social security solvency, but also for individuals' health (Calvo *et al.*, 2013). Research on health effects of retirement began more than seven decades ago and has proliferated over time (Ekerdt, 2010). The bulk of this research has been conducted in specific high-income countries, largely within North America and Europe, and has paid more attention to the status of being retired than the timing of the retirement transition (Kim and Moen, 2002; Van der Heide *et al.*, 2013; Fisher *et al.*, 2016; Fleischmann *et al.*, 2020). Despite these limitations, prior research provides empirical evidence that can be organised into a top-down framework that promotes analyses of four competing approaches about when to retire in order to maximise health: later, earlier, on time or anytime (Calvo *et al.*, 2013). This four-part framework provides one foundation for our study.

In this study we follow recommendations from previous literature to explore the connection between retirement timing and health in underrepresented world regions, with attentiveness to variations across social groups and other factors that may interact with retirement timing in shaping health consequences (Calvo *et al.*, 2013; Fisher *et al.*, 2016). Our specific aims are to ascertain the views that older adults living in Chile have about the relationship between retirement timing and health – including their views about the four-part framework – as well as any themes that they consider important, and to explore gender and class patterns in these views. To address these aims, we utilise a descriptive qualitative methodological approach with a purposive, non-representative sample that can contribute to the further strengthening of quantitative population-based approaches by assessing direct perspectives of older Chileans. The shortcomings of large quantitative approaches and opportunities of small-N qualitative approaches (and *vice versa*) have been discussed extensively elsewhere (Mahoney, 2000; Open Science Collaboration, 2015; Ebbinghaus, 2016; Smith and Little, 2018; Smaldino, 2019; Field-Springer, 2020; Thomann and Martino, 2020; Wendt, 2020).

As the first country to privatise its pension system, Chile is a case study regarding old-age pension reform that has received extensive attention from other countries around the world (Calvo and Williamson, 2008; Madero-Cabib *et al.*, 2019) and is getting renewed attention due to recent major social unrest and protests against privatised and unequal pension and health systems, among other social justice issues (CNN International, 2019). In 1981, Chile replaced the old 'defined-benefit pay-as-you-go' pension system with a privately managed, fully funded

scheme based on individual retirement accounts that can be claimed at age 60 by qualifying women and at age 65 by qualifying men (Calvo *et al.*, 2010). Almost four decades later, workers in the informal sector of the economy and self-employed workers have virtually no coverage of contributory pensions, while the covered population of mostly former salaried employees receives average pension benefits of roughly US \$313 a month, one of the lowest among Organisation for Economic Co-operation and Development (OECD) countries (OECD, 2019a; Superintendencia de Pensiones, 2020). This amount is barely enough to cover basic needs and is wholly inadequate for older adults with more extensive needs such as treatment for dementia, representing only 30 per cent of the monthly cost per patient (Hojman *et al.*, 2017). Older Chileans with such costly health conditions often receive insufficient benefits from public health insurance (FONASA, Fondo Nacional de Salud or National Health Trust in English), end up paying more than a third of their overall health expenses if they choose to drop from the public insurance and obtain private health insurance (ISAPRE, Instituciones de Salud Previsional or Health Security Institutions in English; Bossert and Leisewitz, 2016) and find no coverage for dementia-related disease in the Explicit Guarantees Health system (GES for its acronym in Spanish). GES is a health priority-setting system that provides explicit benefits packages guaranteeing access, quality, timing and financing for 80 health problems to nearly all citizens (*see* Thumala *et al.*, 2017). Thus, the combination of insufficiency of average pensions, fragmented public and private health insurance, and significant health-care costs has created enormous challenges for older Chileans, who are living longer and have already reached an average life expectancy at birth of 80 years (OECD, 2019b). The average effective retirement age in Chile is 70, which is higher than legal retirement ages, as in many other countries where old-age pension benefits are low, and retirement is not mandatory (OECD, 2019a). These trends and characteristics of the pension and health systems in Chile suggest the need and value of research strategies to learn more about the direct views and experiences of older Chileans.

Gender differences in the legal retirement age in Chile are coupled with more precarious labour-force trajectories for women, who are more likely to be home-makers, provide care, work intermittently and be employed in jobs – often part-time – providing lower incomes than for men in similar positions (Abusleme *et al.*, 2014; Madero-Cabib *et al.*, 2019). Because in Chile life expectancy is about five years higher for women than men (OECD, 2019b), this means that women work less and save less for retirement than men, while having to finance longer retirement periods. Older women in Chile have traditionally taken the role of home-makers and care-givers in disproportionate ways relative to men, though new cohorts of women entering old age are increasingly combining housework and care-giving with paid work and other responsibilities, which poses high levels of stress on their lives (Thumala *et al.*, 2017). Because gender materialises in economic and social resources, the intersectionality with socio-economic status (SES) is salient in Chileans experience of ageing (Abusleme *et al.*, 2014). For individuals with lower SES, paid work is a material need, while for individuals with higher SES, lifetime resources enable retirement as an opportunity. These gendered and classed

experiences of ageing are similar to what has been documented in other Latin American countries (Sánchez Salgado *et al.*, 2010).

Assessing direct perspectives of a purposive non-representative sample of older adults living in Chile *vis-à-vis* dominant research models largely based on evidence from countries in North America and Europe, as well as exploring gender and class patterns in these views, has the potential to shed light on ways that quantitative population-based research approaches regarding retirement timing and health could be complemented, refined, expanded and strengthened (and *vice versa*) to account for inter-individual and cross-national variations in findings. This approach may also help to hone theoretical frameworks from which research questions and interpretations are derived, and guide decisions about policies and interventions that consider the views of older adults. Through qualitative descriptive inquiry, this study directly solicits in-depth lay understandings of retirement timing and health, an approach underrepresented in gerontological research, knowledge production and policy making (Ray, 2007; Shura *et al.*, 2011; Macnaghten, 2017; Kamberelis *et al.*, 2018; Shura and Dannefer, 2018; Field-Springer, 2020).

Health effects of retirement timing

One broad and useful framework to study connections between retirement timing and health in population-based research poses four competing approaches about when to retire in order to maximise health: later, earlier, on time or anytime (Calvo *et al.*, 2013). This framework has been used by researchers to tease out potentially complex patterns in the relationships between retirement timing and health, and it is useful to organise a review of recent empirical findings on this topic.

The first approach suggests that retiring *later* may be beneficial for health because work is a source of identity and resources (Alavinia and Burdorf, 2008; Dave *et al.*, 2008). This approach is supported by empirical work that shows that delaying retirement by only two years considerably increases retirement wealth (Munnell and Sass, 2008), which has implications for health promotion. Other studies found that working longer opens opportunities to remain physically and mentally active (Rohwedder and Willis, 2010), as well as socially engaged (Taylor and Bengtson, 2001), which supports health. Furthermore, research has identified multiple detrimental health outcomes and behaviours related to retirement (Kim and Moen, 2002; Dave *et al.*, 2008; Behncke, 2012), which suggest that delaying retirement may have health-preserving effects.

The second approach proposes that retiring *earlier* is more beneficial for health because work is a source of stress and risks (Westerlund *et al.*, 2009; Jokela *et al.*, 2010; Coe and Zemarro, 2011). This approach focuses on the negative consequences of work, suggesting that early transitions to retirement may be associated with better health outcomes. This is consistent with studies that find lower stress among retirees compared with working adults (Westerlund *et al.*, 2009; Coursolle *et al.*, 2010), as well as increased post-retirement opportunities for physical activity and exercise (Jokela *et al.*, 2010).

The third approach suggests that health may be optimised when retirement happens *on time*; that is, at or around culturally and institutionally expected ages. This may be because retirement is then congruous with the broader cultural and

institutional context including normative expectations (Bossé *et al.*, 1987; Börsch-Supan and Jürges, 2009). This approach is typically found in sociological lifecourse literature on transitions (Settersten and Hagestad, 1996; Dannefer, 2011). Lifecourse transitions in line with socially accepted norms may produce less stress and more peer support compared with 'off schedule' transitions (van Solinge and Henkens, 2007).

The fourth approach suggests that individuals could retire *anytime* without experiencing any health change. In this framework, the timing of retirement is argued to have no significant effect on health, as it is genes and personality that are assumed to shape adjustment to new situations (Butterworth *et al.*, 2006; van Solinge, 2007). Health is deemed to be strongly determined by personal dispositions, and largely independent from lifecourse transitions such as retirement. This approach is supported by research that shows unclear health effects of retirement (Mein *et al.*, 2003; Butterworth *et al.*, 2006).

Although no definitive study has proven one of these four approaches over the others, recent studies of high-income countries tend to confirm that early retirements have average detrimental effects on a variety of health outcomes (Zins *et al.*, 2011; Kuhntopf and Tivig, 2012; Van der Heide *et al.*, 2013; Van Der Noordt *et al.*, 2014). Although the direction of this causal relationship can be difficult to disentangle, some studies using an instrumental variable and panel data design identify causal effects going from retirement timing to health (Bonsang and Klein, 2012; Bonsang *et al.*, 2012; Mazzonna and Peracchi, 2016; Kajitani *et al.*, 2017). The benefits of later retirements, however, are more debatable, with some evidence suggesting that at later ages, continued work has no clear health benefits (Calvo *et al.*, 2013: 81–82).

Because existing evidence on the association between retirement timing and health is largely restricted to high-income countries in North America and Europe (Fisher *et al.*, 2016), studies conducted in other countries are essential to generate innovations in research models, to inform the generalisability of findings, to promote meaningful comparative research and, potentially, to offer new interpretations that may challenge and improve existing theory and empirical work.

Generally, few studies explore patterns related to these topics in Latin American countries (Fisher *et al.*, 2016). However, findings from two recent studies in Latin America are consistent with the postulate that retirements that happen too early are detrimental to health (León *et al.*, 2020; Allel *et al.*, [in press](#)). These studies also document substantial gender and class variations that have been largely overlooked in existing literature. The first study analysed panel data from the Chilean Social Protection Survey and found detrimental health effects of early retirements but documented important gender differences in the health benefit of continued employment: for women the protective effect of working persisted beyond the legal retirement age of 60 years, while for men prolonging work life after the legal retirement age of 65 was associated with increasingly lower levels of functional health (León *et al.*, 2020). The second study analysed panel data from the Mexican Health and Aging Study and documented differences in the health effects of retirement timing between older adults with varying years of education: early transitions into retirement were associated with worse health outcomes for older adults with no

formal education, while retirement timing had no association with health for older adults with some formal education (Allel *et al.*, *in press*).

While these quantitative findings may be revealing about the health consequences of retirement at the population level, diversifying the methods through which the relationship between retirement timing and health is explored can complement and further strengthen this area of research, as well as contribute to creative assessment and refinement of conceptual frameworks. Little is known about the views of older adults in Latin America, Asia or Africa about the relationship between retirement timing and health, and whether or how these views may complement research frames that have been largely applied to quantitative data from a limited set of countries. A few studies that utilise qualitative approaches to assess older adults' views and experiences of retirement are based on non-representative samples in the economic North and suggest the salience of health, economic resources, relationships and planning to the quality of the retirement transition (Winston and Barnes, 2007; Moffatt and Heaven, 2017), and the significance of career socialisation to perceptions and timing of retirement (Silver and Williams, 2018). These studies do not focus specifically on older adults' perceptions of the relationships between retirement timing and health. Alongside the creation of more quantitative evidence, it is important to garner older adults' accounts of the relationship between retirement timing and health, and to devote special attention to the missing voices of older adults living in underrepresented countries in research on topics that affect them (Ray, 2007; Shura *et al.*, 2011; Fisher *et al.*, 2016; Shura and Dannefer, 2018). This qualitative approach may in turn lead to the strengthening of quantitative, population-based research models.

Method

Participants and procedures

For this study, older adult focus group participants were invited through a non-random, purposive sampling process that was largely dependent on formal and informal networks connected to major recreational and service programmes that target older adults in the city of Santiago, Chile. These programmes were offered at municipal agencies, sport clubs, health-care facilities, neighbourhood committees, volunteer associations, trade unions and private non-profit institutions. In collaboration with the research team, officers of programmes and liaison contacts made information about this study available for potential participants and invited them to participate in focus groups. Participants who agreed to take part in the study signed an informed consent before data were collected. The study protocol and consent forms were approved by the Ethics Committee at Universidad Diego Portales and Fondo Nacional de Desarrollo Científico y Tecnológico (FONDECYT), Chile. Participants were provided with food and transportation but did not receive any direct compensation for participating in the study. The non-random, purposive sampling strategy was not utilised to achieve generalisability of findings (Ebbinghaus, 2016; Smith and Little, 2018; Mahoney, 2000; Thomann and Martino, 2020), but to gather qualitative perspectives of older Chileans about retirement timing and health, and to identify descriptive qualitative themes among these

perspectives (Field-Springer, 2020; Wendt, 2020). The methodology of focus groups has been shown to be useful in the exploration of experiences, points of view and perceptions of people directly impacted by a given topic, often health-related, in ways that anticipate public policy responses that are ongoing in their formulation and approach (Macnaghten, 2017).

The results presented are based on a total of 40 older adults (average age 72.6) who participated in six focus groups conducted between April and June 2015, in a meeting room in Santiago, Chile. The upper section of Table 1 provides basic descriptive information for the sample and across focus groups, which were stratified by gender and class. All participants were above the legal retirement ages in Chile (60 for women and 65 for men), and all but two participants were legally retired at the time of data collection (they were claiming retirement benefits). Class was defined according to the type of occupation that most accurately reflected an individual's job history: white-collar (including professional and managerial occupations), pink-collar (including clerical, sales and service occupations) or blue-collar (including occupations that involve physical building or maintenance, such as construction or mechanics), in a progression from higher to lower class (Calvo *et al.*, 2013). Each focus group included between six and eight participants. The duration of focus groups spanned from 78 to 109 minutes, with an average of 92 minutes.

Each focus group process began with a moderator who asked participants to discuss topics related to retirement timing and health. The moderator then introduced four frameworks regarding the impact of retirement on health (later, earlier, on time and anytime) by using a whiteboard to summarise the main features of each approach. After introducing and explaining these different views, participants were encouraged to discuss and choose which one of them best represented their views, and to provide any other position they felt inclined to share. Focus groups' dialogue continued until saturation (no new emergent qualitative themes: *see* Bowen, 2008; Mason, 2010; Saunders, 2018) was achieved and relevant dialogue waned. In a final close-ended question, participants were asked to state an ideal age of retirement to maximise health. For a full script of the moderator of the focus groups, *see* the Appendix. Although the main topic discussed was views on the health effects of retirement timing, the discussion sometimes diverted into unrelated topics that were not coded for the purpose of this study. The most common topics of discussion that were not directly part of participants' views about retirement timing and health, and thus were not coded, were about the pension and health systems in Chile generally, as well as their financial implications; others included reflections on the history of Chile's government. Hence, the duration of relevant, coded segments spans from 51 to 98 minutes per focus group, with an average of 74 minutes.

Focus groups are suitable for revealing interaction patterns in discourse and letting common narratives emerge (Stewart and Shamdasani, 2014). All six focus groups were audio-recorded and transcribed verbatim in Spanish. The transcriptions were analysed using the qualitative analysis software MAXQDA 11 to conduct framework analysis (MAXQDA, 2017). Framework analysis is a method to identify commonalities and differences in qualitative data (Gale *et al.*, 2013). Framework analysis of the focus group data was conducted to achieve two aims: (a) to identify and classify discourse with emphasis on the *deductive* themes of each of the four

Table 1. Description of the sample and the views on the optimal retirement timing to maximise health

	Blue-collar		Pink-collar		White-collar		All participants
	Male	Female	Male	Female	Male	Female	
Sample description:							
Number of participants	6	7	7	6	8	6	40
Mean age	73.6	68.2	76.0	70.5	73.5	73.8	72.6
Focus group duration (minutes)	99.0	78.0	87.0	79.0	109.0	101.0	92.2
Coded segments (minutes)	51.0	68.0	73.0	67.0	87.0	98.0	74.0
Views on optimal retirement timing:							
Total four frameworks (%):	31.0	27.1	30.1	48.0	18.4	6.3	26.8
Later	0.0	0.0	16.7	0.0	7.4	6.3	5.1
Earlier	31.0	27.1	4.3	48.0	11.0	0.0	20.2
On time	0.0	0.0	9.1	0.0	0.0	0.0	1.5
Anytime	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total emerging conditional views (%):	69.0	72.9	69.9	52.0	81.6	93.7	73.2
Performance	0.0	0.0	0.0	0.0	3.9	2.1	1.0
Health	7.7	1.7	15.6	13.1	0.0	4.2	7.1
Work satisfaction	0.0	0.0	3.9	0.0	27.3	0.0	5.2
Type of job	42.1	12.5	0.0	0.0	11.6	19.1	14.2
Family needs	3.9	1.8	3.9	4.3	0.0	0.0	2.3
Level of activity	0.0	0.0	15.5	4.3	11.6	0.0	5.2
Retirement income	15.3	51.5	31.0	30.3	11.7	2.1	23.7

Personal attitude	0.0	0.0	0.0	0.0	11.6	12.8	4.1
Gender	0.0	5.4	0.0	0.0	0.0	36.3	7.0
Retire gradually	0.0	0.0	0.0	0.0	3.9	17.1	3.5
Mean ideal retirement age	60.8	60.2	70.0	62.5	64.2	62.0	63.3

Notes: Percentages were calculated excluding non-specific and off-topic segments. The final column presents simple averages for all 40 participants.

frameworks presented to participants (later, earlier, on time and anytime), and (b) to identify and classify any *inductive* qualitative themes not explicitly part of these four frameworks that were presented as views of participants relevant to the relationship between the retirement transition and health. This analytic approach is consistent with attempts to achieve qualitative saturation via two objectives of focus groups (Saunders *et al.*, 2018): *a priori* thematic saturation (the degree to which our four pre-identified themes are exemplified in the data) and inductive thematic saturation (allowing for the emergence of new themes outside deductive categories).

Using MAXQDA 11's coding feature, all transcriptions were first coded according to the categories of the four frameworks and adding a fifth category labelled 'conditional view' to capture all emergent themes raised in discussions that were not directly related to the four deductive frameworks of timing of retirement. The code 'later' was used when participants expressed agreement with the idea of later retirements as a way of maximising health outcomes. Similarly, the code 'earlier' was used when participants expressed agreement with the idea of earlier retirements as a way of maximising health outcomes. The code 'on time' was used when participants expressed agreement with the idea of retiring at specific age ranges in order to maximise health outcomes. The code 'anytime' was to be used when participants expressed agreement with the idea that retirement timing has no effect on health outcomes, but no participants mentioned this. Finally, the emerging or inductive category 'conditional view' was used when participants noted that the health effects of retirement timing depended on other specific factors, such as retirement income, gender, the type of job or job satisfaction at the time of retirement, among others. For these conditional views, supplemental rounds of coding to identify distinct themes and classify them were conducted. All coding procedures were conducted separately by two independent coders, achieving a high inter-coder reliability of 81 per cent, meaning that the two coders 'agreed' in their initial coding of roughly eight out of ten segments. The research team discussed and made decisions together about the rest of the segments until all discrepancies were resolved.

For each focus group, we took advantage of MAXQDA's tools to describe coded segments. We plotted document portraits (*see Figure 1*), which are visual representations of the sequence of code categories across the transcriptions of each focus group's dialogue, relative to the total coded segments of each focus group. These portraits illustrate in a general way the prevalence, sequencing and relative time spent in discussion of each of the four frameworks as well as conditional, inductive themes, per each focus group. In addition to exploring relative presence and emphasis of all identified themes, we also selected sample descriptive quotes from focus group dialogue to illustrate the major conditional themes identified across focus groups. Quotes were translated into English aiming to convey the meaning of the Spanish verbiage.

Results

Two major findings emerge from descriptive analyses of themes within our focus group data. First, the four research frameworks together, each of which emphasises

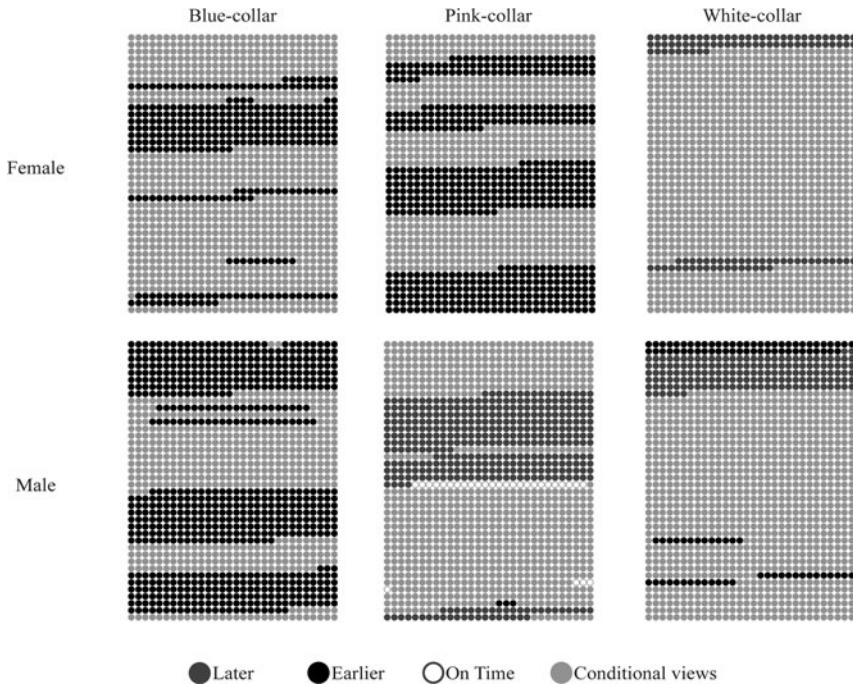


Figure 1. Document portraits summarising coded segments by focus groups.

retirement age or timing as a crucial way retirement may influence health (later, earlier, on time or anytime), only accounted for a small portion of the total accounts and dialogue within focus groups. This suggests that these four models, which have been productive for researchers conducting population-based studies largely in rich countries of North America and Europe, were not highly salient according to the views of our Chilean participants. The second major finding is that more than timing *per se*, participants' accounts and dialogue emphasised conditional views of the relationship between retirement timing and health: the most common narrative pattern across focus groups was that the optimal timing of retirement to promote health *depends* on additional factors extraneous to timing, such as savings, occupation and gender. It is important to note that although none of the patterns identified in this study is generalisable in any way due to the purposive and non-random sampling procedure, the findings contribute value to the overall body of research dedicated to broadening knowledge about health in relation to the timing of retirement by pointing out perspectives, experiences and questions that are not well represented or studied in mainstream research literature. In this section, we report each of these two findings, first presenting a descriptive visualisation of the focus groups' processes, and next providing richer qualitative examples of prominent conditional views through descriptive quotes across our focus groups.

Illustration of the overall descriptive, qualitative patterns within accounts and dialogue across all focus groups is provided in Figure 1. These graphical

representations reveal the thematic tendencies within and across groups as well as how they developed and changed over the course of the focus groups' dialogue. They include summaries of the qualitative code categories in each group (the four frameworks about retirement timing, and a fifth 'conditional view' theme that is represented by the lightest grey), the proportional lengths of time each thematic topic dominated discussion, and trajectories and transitions of qualitative themes over time in each focus group's process. The representation of the qualitative data in [Figure 1](#) flows like a written text, with initial commencement of each focus group beginning at the top left, jumping to the next line in a Z-shape and ending at the bottom right. Since coded segments had different lengths across focus groups, it is important to note that these portraits show a proportional view of all five coded categories over the total coded segments.

[Figure 1](#) shows our first major finding clearly: that the four frameworks (later, earlier, on time, anytime) are neither the dominant themes in terms of time spent in discussion, nor were they dominant in terms of the emphasis that participants placed on their importance. Of the four research frameworks, earlier retirements (highlighted in black) are the most prevailing category in terms of portions of focus group dialogue dedicated to this topic, especially among blue-collar focus groups and the pink-collar female focus group. Far fewer instances of focus group dialogue emphasised later retirement (highlighted in dark grey), and emphasis on later retirement was primarily present only in the white-collar focus groups and the male pink-collar focus group. The on-time category (highlighted in white) was barely mentioned, and segments suggesting that retirements that happen anytime can benefit health are entirely absent from the focus groups' narratives. On average, the four deductive themes representing the retirement timing frameworks accounted for 26.8 per cent of coded segments for all participants, while emergent conditional views accounted for 73.2 per cent of coded segments (*see* the lower section of [Table 1](#)). This is a major finding of this study, and is clearly illustrated with the information presented in the document portraits in [Figure 1](#): the notion that retirement timing (later, earlier, on time or anytime) is salient to health seems to have little resonance with the views of older Chilean adults who participated in this study, as conditional views are far more prominent in their accounts.

The second major finding is also evident in [Figure 1](#): conditional, emergent views rather than timing were the most common and discussed themes of focus group processes overall. Participants tended to view that the health effects of retirement timing are conditional or dependent on some other specific factor, context or experience. For the focus group of blue-collar men and the focus group of pink-collar women, emphasis and time spent discussing conditional views approaches parity with emphasis and time spent discussing early retirement; however, overall, sharing conditional views (highlighted in light grey) dominated focus groups' processes and emerged in the narratives of all focus groups. Some of the patterns of theme prevalence and emphasis vary according to class and gender composition of our focus groups, necessitating further investigation of potentially disaggregated and complex forces that shape views and experiences of this key lifecourse transition.

The inductive coding of conditional themes sheds light on the numerous perspectives and associations participants spontaneously shared about retirement

timing and health through the course of the focus group discussions. Participants suggested multiple factors that are extraneous to timing and that they perceived to be important influences on the relationship between the timing of retirement and health. Through the inductive coding processes for conditional themes, ten sub-categories were identified within focus group dialogue: work performance, health conditions, work satisfaction, type of job, family needs, level of activity, retirement income, individual attitude, gender and gradual retirement. One group of these sub-categories of conditional views points to conditions prior to retirement, including performance at work, health conditions, work satisfaction, type of job and family needs, as important when considering the relationship between retirement timing and health. A second group of emergent sub-categories identifies conditions after retirement, such as level of activity and income, that are understood by participants as salient to retirement timing and health. A third group of sub-categories explores individual characteristics, such as personal attitudes towards retirement and gender, and how they influence retirement and health. Finally, one category relates to the speed at which individuals transition from work to retirement. [Table 2](#) provides summary information about these ten specific sub-categories of conditional views that emerged from the analyses, as well as quotes from the data that illustrate each of these conditional views.

Retirement income was by far the most discussed conditional view (see [Table 1](#)). In illustration, the following quote was coded as the emergent conditional theme of retirement income:

If you're retired and you don't have enough money you won't be able to treat health problems properly. (Blue-collar male)

Although prompted with the idea that we were evaluating health specifically and not financial status, participants insisted on the importance of retirement income to understand how retirement timing matters for health, and how income impacts health through the quality of health-care access. Retirement income was overall important, but it seemed to be slightly less of a concern among higher occupational-class groups.

Three of the ten inductively derived themes from the conditional views of participants directly relate aspects of one's work as crucial to retirement timing and health: type of job, work performance and work satisfaction. Job characteristics and other features of social class were emphasised across focus groups as very relevant to the relationship between retirement timing and health. The quote below emphasises individual characteristics together with occupational-class characteristics as moderating the health effects of retirement timing:

It depends on the person. It depends on the person's job, you can't compare a miner with an office worker! (Pink-collar female)

Focus group conversations frequently pointed to occupational differences as salient to retirement timing and to health. Sometimes, specific hazards that are part of some occupations were mentioned in detail, as it was argued that some work activities tend to be more harmful for health than others. For example:

Table 2. Conditional view code sub-categories: factors that influence the relationship between health and retirement timing

Sub-code	Description of the idea that participants expressed their agreement with
Pre-retirement work performance	The way someone is performing in their job moderates the relationship between retirement time and health outcomes (e.g. 'I will continue as long as I feel I'm doing my job well. Otherwise I would feel like a drag. That would make me feel bad.')
Pre-retirement health conditions	Pre-retirement health moderates the relationship between retirement and health outcomes (e.g. 'There are people that have many health problems when they're 60. For them, to work until they're 65 or more is not recommendable.')
Pre-retirement work satisfaction	Having satisfaction working moderates the relationship between retirement and health outcomes (e.g. 'I've been lucky; I've really enjoyed my job. I don't want to quit.')
Pre-retirement type of job	The kind of occupation moderates the relationship between retirement time and health outcomes (e.g. 'It depends on the job; some jobs can be physically exhausting.')
Pre-retirement family needs	Specific family needs moderate the relationship between retirement time and health outcomes (e.g. 'My wife needs me to be at home with her, to help her.')
Post-retirement level of activity	How active a person is after retirement moderates the relationship between retirement time and health outcomes (e.g. 'It depends on how much activity you have. If you retire and you only stay home watching staring at the ceiling, you will get depressed.')
Post-retirement income	The amount of income you get when you retire moderates the relationship between retirement time and health outcomes (e.g. 'If you're retired and you don't have enough money you won't be able to treat health problems properly.')
Individual attitude	The personal attitude toward retirement moderates the relationship between retirement time and health outcomes (e.g. 'It is much more important what I am, how I see the world, how I see life, the rest is circumstantial.')
Individual gender	Gender moderates the relationship between retirement time and health outcomes (e.g. 'Men need to retire later because they get depressed when they have nothing to do')
Gradual retirement	Retirement maximises health outcomes when it is a gradual process, modulated according to each person needs (e.g. 'Being able to start retirement early and decide if I want to keep working full-time or part-time depending on how I feel.')

It depends on the job; some jobs can be physically exhausting ... there are people who are exposed to breathing toxic chemicals and others. (Blue-collar male)

This quote illustrates a patterned theme of discourse that related features of particular occupations as a key condition relevant to the relationship between retirement timing and health. Importance given to type of job also varied across class. This category appeared more often in lower occupational-class groups, in which

individuals mentioned more often that the effects of retirement timing on health might depend on the intensity of physical labour or other stresses in the current job.

Conditional views were structured by gender and type of occupation (see Table 1). Higher occupational-class males tended to focus more on work satisfaction, while higher occupational-class females tended to focus more on gender. The following two selected quotes from upper-class participants (white-collar) in our focus group data reveal some of the classed and gendered differences in emergent conditional themes, which although not generalisable, suggest that social position may be relevant to which conditional views were shared in focus group discussion:

I've been lucky; I've really enjoyed my job. I don't want to quit. (White-collar male)

When women retire, they revive, flourish, they make friends, go out. Men on the other hand immediately become older adults. (White-collar female)

The quotes above also illustrate that even with similar social-class standing, men and women sometimes emphasised different conditional factors as major considerations relevant to retirement timing and health (e.g. job satisfaction and gendered activity patterns, respectively). Together, these patterns of responses by our participants suggest that social class and gender matter in the study of retirement timing's relationship to health in direct and intersecting ways.

Gender emerged in our analyses as a major influence on and in views: not only were views about the four frameworks and conditional views in the focus groups stratified by gender in meaningful ways, but gender itself was raised as a factor that is important to consider when examining the relationship between retirement timing and health. Gender and social class also clearly intersected in our analyses. Female and lower occupational-class groups leaned relatively more towards preference for earlier retirements than males and higher occupational-class participants. Conversely, males and higher occupational-class individuals tended to be relatively more favourable towards later retirements. Although these findings are not generalisable, they suggest that further research could benefit from more attentiveness to complex nuances related to gender, class and the experience of the retirement transition.

Discussion

This study examined the views of 40 older adults in Chile about the relationship between retirement timing and health, and explored patterns in these views by gender and type of lifetime occupation as a marker of class. Although the study sample was purposive and small rather than random and generalisable, several findings deserve discussion and point to areas for further consideration and research. Limitations of the study must also be acknowledged.

The views of study participants diverge from the major premise in other bodies of research that retirement timing measured by age is crucially salient to health (Fisher *et al.*, 2016). The focus on timing or age as influential on the health consequences of retirement has been fruitful in quantitative population-based studies

largely restricted to countries in North America and Europe (Zins *et al.*, 2011; Bonsang and Klein, 2012; Bonsang *et al.*, 2012; Kuhntopf and Tivig, 2012; Van der Heide *et al.*, 2013; Van der Noordt *et al.*, 2014; Mazzonna and Peracchi, 2016), which debate whether retirements that happen later, earlier, on time or anytime have better average consequences on health (Calvo *et al.*, 2013). Our study points to the high salience perceived among some older Chileans of factors extraneous to and more important than age, especially social class and gender, when they consider the connection between the timing of the retirement transition and health. Although a divergence in findings across studies using different methodological approaches and exploring different national contexts is not entirely surprising, this first major finding of our study raises important questions and considerations about some of the research models that dominate this area of inquiry. Namely are they sensitive enough to model and address the complexity and prominence of social class, gender and other characteristics raised as of primary importance by our research participants? Also, do dominant research models that have been productive for population-based researchers in the global North reify timing as measured by age, and thus reify age, to such an extent that the exploration of age overshadows other, possibly more primary social forces, that are operant within and at work upon shaping retirement transitions in the global South? For example, the most prominent patterns in our study suggest a reconsideration of the reduction of social class and gender to controls in multivariate models and pose questions about the possibility of intersectional moderating effects and potentially important sub-group differences.

Our study adds value to the body of research on retirement timing and its connections to health in several ways: by expanding the country contexts of focus, by diversifying the methods used, by eliciting the direct perspectives within a purposive sample of older adults about this relationship, and by documenting that social class and gender are perceived by them as more influential on health outcomes than retirement timing or age *per se*. Factors such as economic resources, planning and career socialisation have been documented as relevant to older adults' views about retirement in prior qualitative studies conducted in northern contexts, though none of these studies focuses specifically on older adults' perceptions of the relationships between retirement timing and health (Parry and Taylor, 2007; Winston and Barnes, 2007; Moffatt and Heaven, 2017; Silver and Williams, 2018).

Participants in our study often were reluctant to choose one of the four top-down conceptual models (later, earlier, on time or anytime), as they did not represent their views on the relationship between retirement timing and health. Participants almost never mentioned the importance of retiring on time, within socially acceptable retirement age windows in relation to health effects (Bossé *et al.*, 1987; Settersten and Hagestad, 1996; van Solinge and Henkens, 2007; Börsch-Supan and Jürges, 2009; Dannefer, 2011). This may have been because retirement decision-making seemed private and idiosyncratic to them, rather than socially patterned. However, their average ideal retirement age (63.3) falls notably between the female (60) and male (65) legal retirement ages in Chile (Calvo *et al.*, 2010; Madero-Cabib *et al.*, 2019), and diverges more significantly from the average effective retirement age of 70 in Chile (OECD, 2019a). This finding should be interpreted with caution because perceptions are not consequences; most individuals may not be very aware of the effects

documented in previous literature, but this does not make the effects less real. Keeping this caveat in mind, it is plausible that individuals were indifferent to the on-time retirement category because the notion of cultural-institutional timing was unfamiliar to them in the form that academics articulate it; that is, cultural-institutional age scripts may exist and be influential systematically, despite not being recognised as such by the people acting those scripts (Mayer and Müller, 1986; Settersten and Hagestad, 1996; Dannefer and Uhlenberg, 1998; Kohli, 2007). Further, the idea that retirement timing is irrelevant for health and that individuals can retire anytime with health benefits (Mein *et al.*, 2003; Butterworth *et al.*, 2006; van Solinge, 2007) did not have clear resonance among participants' views. Instead, when they spoke about any of the four frameworks, participants polarised towards arguing in favour of either later (Taylor and Bengtson, 2001; Kim and Moen, 2002; Alavinia and Burdorf, 2008; Dave *et al.*, 2008; Rohwedder and Willis, 2010; Behncke, 2012) or earlier transitions (Westerlund *et al.*, 2009; Coursolle *et al.*, 2010; Jokela *et al.*, 2010; Coe and Zemarro, 2011). Most frequently, however, many participants shared conditional factors that they view as salient to the relationship between retirement timing and health.

In our study, social class stood out as a set of factors deemed especially important to post-retirement health in ways that suggest angles for further, more nuanced exploration of its various potential influences on retirement transitions. Post-retirement income was viewed as having utmost importance to maximise health in relation to retirement timing. Recent criticism of the Chilean pension system providing insufficient pension benefits may have influenced participants' awareness of monetary issues (*The Economist*, 2016). Pre-retirement employment quality, including job type and work satisfaction, also emerged as an important factor that participants used to explain the relationship between retirement timing and health. From a practical perspective, retirement income and employment quality were deemed important to retirement timing's relationship to health disproportionately among lower occupational-class participants, as they often voiced their concerns about affordability of health care and the negative physical consequences of stressful work. Conversely, higher occupational-class participants tended to convey a more subjective perspective on work that goes beyond practical conditions to include job satisfaction. Although our sample does not allow generalisation of these patterns, our findings suggest that domains of post-retirement health may be dependent on the conditions of the job from which one retires, and the resources and challenges that the job entailed. These findings suggest that quantitative modelling could do more than control for occupation and income in the exploration of relationships between retirement timing and health: careful modelling of various dimensions of social class (*e.g.* occupational status, job-related stresses and hazards, job satisfaction, retirement income, SES resources for health maintenance and promotion) as mediators and moderators would be necessary to test whether our participants' views have broader salience, including how these patterns may vary across country-specific contexts. This emphasis on socio-economic characteristics related to retirement health is consistent with recent research on mental health and retirement among British civil servants (Fleischmann *et al.*, 2020), the influence of work complexity on post-retirement cognitive function in a Swedish study (Andel *et al.*, 2016), the moderating role of job complexity on post-retirement cognitive decline

in Japan (Kajitani *et al.*, 2017) and the moderating effect of education on the detrimental health effects of early retirements in Mexico (Allel *et al.* 2019.,). More studies are needed, however, that can test and show influences of various dimensions of social class on varied dimensions of health regarding the retirement transition. Future research may benefit from inclusion of not only individual-level social class characteristics, but also societal events such as economic recessions (Hessel and Avendano, 2018) and major changes in health and pension policy that affect the aged, as well as biomarkers associated with stress that have been found to pattern according to SES at retirement transition (Chandola *et al.*, 2018).

Gendered and classed views apparent in our study suggest a need for further research that can identify disaggregated, heterogeneous patterns of views and experiences of retirement timing in relation to health. In our study, women and lower occupational-class adults were more favourable towards early retirement in order to promote health, while male and higher occupational-class adults were more favourable towards later retirement. Part of this gendered pattern of views may relate to the gender-stratified retirement policy in Chile, which allows women to retire five years earlier than men (Calvo *et al.*, 2010; OECD, 2019a). The burden of combining paid work with housework and care-giving may also influence gendered patterns of views (Abusleme *et al.*, 2014; Thumala *et al.*, 2017). One small qualitative study suggested that older women's experiences of work in Chile tend to combine housework, care-giving and often paid work outside the home, in ways that are perceived to accelerate deleterious aspects of ageing for women and in ways that are not congruent with the opportunities of some women in younger cohorts (Sánchez Salgado *et al.*, 2010). Although the gendered experience of ageing in Chile cannot be oversimplified to a male-work *versus* female-home dichotomy, older women are more likely to be home-makers than men (Galkutė and Herrera, *in press*). This, in turn, results in gender differences in social, economic and cultural resources, some of which bear on experiences of autonomy or isolation (Abusleme *et al.*, 2014). Our findings suggest that additional research that is designed to detect potentially complex patterns within and across gender and class sub-groups may be truer to the subject matter than merely controlling for these social statuses in analyses based on central tendencies, which is what many population-based studies tend to do (Van der Heide *et al.*, 2013; Fisher *et al.*, 2016; León *et al.*, 2020; Allel *et al.*, *in press*). More intentional modelling, including sub-group analyses by gender and by class, may provide stronger explanations of inter-individual variance in the health effects of retirement timing.

It is not surprising that the most prominent themes that emerge from findings in this study point to the prominence of social determinants of health and quality of life across the lifecourse and into later adulthood, such as social class and gender, which have been studied and articulated in depth elsewhere specifically regarding the Chilean social context (*e.g.* Herrera *et al.*, 2011; Rojas and León, 2013; Abusleme *et al.*, 2014; Calvo, 2016; Thumala *et al.*, 2017). These studies suggest that although quality of life for older adults in Chile has been improving in recent years, poor health, dependency and financial difficulties remain significant concerns related to later life (Herrera *et al.*, 2011). Health is highly salient to aspirations to work and decisions to not work among older Chileans (Herrera *et al.*, 2011). Both health and SES are found to stratify access to retirement as an opportunity,

as approximately half of older Chileans report not having sufficient money or having just enough money to get by (Herrera *et al.*, 2011), making paid work a need in later life for a significant portion of older Chileans (Abusleme *et al.*, 2014), while higher SES older Chileans enjoy benefits of relatively increased levels of education (Herrera *et al.*, 2011) and lifetime resources that enable a view of retirement as an opportunity (Abusleme *et al.*, 2014). Ageing and health policies including pension policies in Chile contribute to the ways social determinants of health and quality of life play out for older Chileans (Calvo, 2016; Thumala *et al.*, 2017).

Our qualitative findings suggest additional questions for further consideration that the study itself cannot answer. To what extent is the domination of conditional views among our participants driven by country-specific factors in Chile? Would replication of our qualitative design in other country contexts reveal similar or different themes as prominent within views of sets of older adults on this topic? Despite the limitations of a small, non-random, purposive sample, our study design allows identification of qualitative, descriptive accounts of individuals whose perspectives may point to context-specific considerations that other research models may not have explored. There is need for additional research to compare and contrast explicitly quantitative and qualitative research findings across country contexts to clarify further the divergences our study reveals.

We acknowledge that the results of our study have limitations. Our data are qualitative and descriptive in nature, derived from a non-representative sample of community-engaged older adults in one specific Latin American country, and thus should be interpreted without intention to generalise from them. Although there is need for in-depth qualitative studies on this topic with varying samples of older adults in multiple social and national contexts, as well as more comparative and cross-national studies (Calvo *et al.*, 2013; Van der Heide *et al.*, 2013; Fisher *et al.*, 2016), our study can only be considered one starting point. Although direct measures of health status and functional ability of participants were not assessed for this study, due to the participant recruitment strategies it is likely that older adults with considerable social connections and resources were well represented, and that other older adults including those with poorer health, limited social networks and limited mobility were likely to have been underrepresented. Further research is needed to ascertain purposefully views of intentionally diverse samples of older adults on these topics, especially in understudied country contexts – diverse in terms of health, retirement status, social class, region of the country and other social statuses, including but not limited to diverse religion, gender, sexual orientation and marital status. Notwithstanding the non-representative sample and the inability to generalise these findings, this study has value because it elicits and analyses the perspectives of older adults in a region of the world that is underrepresented in research about retirement timing and its relationship to health, research topics salient to them and their lives (Ray, 2007; Blair and Minkler, 2009; Shura *et al.*, 2011; Shura and Dannefer, 2018). Deliberate inclusion of these underrepresented voices may lead to further refinements and innovations in research. In terms of methodological considerations for future research on older adults' perspectives on retirement timing and health, it could be fruitful to replicate this qualitative design while omitting *a priori* descriptions of the four frameworks, or saving these descriptions until after emerging themes are encouraged.

In sum, a more complex view of health consequences of the retirement transition is needed that includes myriad data sources, research designs and methodologies within and across more than just a few North American and European countries. Systematic attention to the views, experiences and voices of those for whom retirement and health are salient, and lived experiences, ought to have a larger influence within this body of research. This study provides one model of how to contribute such value to ongoing and important international efforts in research on retirement transitions and health. Our findings draw attention to the need to consider the interplay between gender, class and specific characteristics of the retirement transition (including timing) more explicitly and systematically in future research and policy discussions about retirement and health. Inclusivity of study designs that explore or can be sensitive to cross-country variations is paramount. Careful consideration of these complex factors may result in contributions of at least three kinds: empirical (*e.g.* explaining inconsistent findings in previous literature, detecting nuanced differences in patterns across sub-groups and countries), theoretical (*e.g.* refining the frameworks from which research questions are derived, offering new interpretations of findings that open pathways for theoretical development) and practical (*e.g.* designing policies and interventions that work in practice to promote health and other resources in retirement).

In conclusion, timing should be considered together with other specific circumstances in which the retirement transition unfolds, including but not limited to markers of social class, gender and national context, to better understand potentially heterogeneous patterns of health outcomes, and to inform retirement decisions and policies that work in practice and not just in theory. There is an important place for qualitative and small-N research in the overall growth of knowledge and dialogue of research in these areas (Ray, 2007; Winston and Barnes, 2007; Macnaghten, 2017; Moffatt and Heaven, 2017; Kamberelis *et al.*, 2018; Field-Springer, 2020; Thomann and Martino, 2020; Wendt, 2020). Formulating more nuanced research questions, challenging understandings based on national or regional averages, and refining theoretically driven hypotheses are at least as important as generalising findings and reducing methodological errors for minimising false statistical inferences. Promoting varied methodological approaches can have implications not only for how research on retirement and health is conducted and knowledge is produced, but also for which constituent voices are represented within policy discussions about how to improve health and labour-force transitions more broadly in late life.

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References

- Abusleme MT, Arnold M, González F, Guajardo G, Lagos R, Massad C, Sir H, Thumala D and Urquiza A (2014) *Inclusión y exclusión social de las personas mayores en Chile*. Santiago: SENAMA, FACSO Universidad de Chile, Flacso Chile.
- Alavinia SM and Burdorf A (2008) Unemployment and retirement and ill-health: a cross-sectional analysis across European countries. *International Archives of Occupational and Environmental Health* **82**, 39–45.
- Alle K, León AS, Staudinger UM and Calvo E (2019) Healthy retirement begins at school: education explains differences in the health outcomes of early transitions into retirement. *Ageing & Society*. Available online doi:10.1017/S0144686X19000928.
- Andel R, Finkel D and Pedersen NL (2016) Effects of preretirement work complexity and postretirement leisure activity on cognitive aging. *Journals of Gerontology: Psychological Sciences and Social Sciences* **71B**, 849–856.
- Behncke S (2012) Does retirement trigger ill health? *Health Economics* **21**, 282–300.
- Blair T and Minkler M (2009) Participatory action research with older adults: key principles in practice. *The Gerontologist* **49**, 651–662.
- Bloom DE, Chatterji S, Kowal P, Lloyd-Sherlock P, McKee M, Rehel B, Rosenberg L and Smith JP (2015) Macroeconomic implications of population ageing and selected policy responses. *The Lancet* **385**, 649–657.
- Bonsang E and Klein T (2012) Retirement and subjective well-being. *Journal of Economic Behavior & Organization* **83**, 311–329.
- Bonsang E, Adam S and Perelman S (2012) Does retirement affect cognitive functioning? *Journal of Health Economics* **31**, 490–501.
- Börsch-Supan A and Jürges H (2009) Early retirement, social security, and well-being in Germany. In Wise DA (ed.), *Developments in the Economics of Aging*. Chicago, IL: University of Chicago Press, pp. 173–202.
- Bossé R, Aldwin, CM, Levenson MR and Ekerdt DJ (1987) Mental health differences among retirees and workers: findings from the normative aging study. *Psychology and Aging* **2**, 383–389.
- Bossert TJ and Leisewitz T (2016) Innovation and change in the Chilean health system. *New England Journal of Medicine* **374**, 1–5.
- Bowen GA (2008) Naturalistic inquiry and the saturation concept: a research note. *Qualitative Research* **8**, 137–152.
- Butterworth P, Gill SC, Rodgers B, Anstey KJ, Villamil E and Melzer D (2006) Retirement and mental health: analysis of the Australian National Survey of Mental Health and Well-being. *Social Science and Medicine* **62**, 1179–1191.
- Calvo E (2016) Does the Chilean pension model influence life satisfaction? A multilevel longitudinal analysis. In Rojas M (ed.), *Handbook of Happiness Research in Latin America*. New York, NY: Springer, pp. 415–441.
- Calvo E and Williamson JB (2008) Old-age pension reform and modernization pathways: lessons for China from Latin America. *Journal of Aging Studies* **22**, 74–87.
- Calvo E, Bertranou F and Bertranou E (2010) Are old-age pension system reforms moving away from individual retirement accounts in Latin America? *Journal of Social Policy* **39**, 223–234.
- Calvo E, Sarkisian N and Tamborini CR (2013) Causal effects of retirement timing on subjective physical and emotional health. *Journals of Gerontology: Psychological Sciences and Social Sciences* **68B**, 73–84.
- Chandola T, Rouxel P, Marmot MG and Kumari M (2018) Retirement and socioeconomic differences in diurnal cortisol: longitudinal evidence from a cohort of British civil servants. *Journals of Gerontology: Psychological Sciences and Social Sciences* **73B**, 447–456.
- CNN International (2019) Chile extends curfew again as violent unrest paralyzes one of Latin America's biggest cities. CNN International, 22 October. Available at <https://edition.cnn.com/2019/10/22/americas/chile-protests-inequality-curfew-intl-hnk/index.html>.
- Coe NB and Zemarro G (2011) Retirement effects on health in Europe. *Health Economics* **30**, 77–86.
- Coursolle K, Sweeney M, Raymo JM and Ho JH (2010) The association between retirement and emotional well-being: does prior work–family conflict matter? *Journals of Gerontology: Psychological Sciences and Social Sciences* **65B**, 609–620.

- Dannefer D** (2011) Age, the life course, and the sociological imagination: prospects for theory. In Binstock RH and George LK (eds), *Handbook of Aging and the Social Sciences*. New York, NY: Academic Press, pp. 3–16.
- Dannefer D and Uhlenberg P** (1998) Paths of the life course: a typology. In Bengtson V and Schaie KW (eds), *Handbook of Theories of Aging*. New York, NY: Springer, pp. 306–326.
- Dave D, Rashad I and Spasojevic J** (2008) The effects of retirement on physical and mental health outcomes. *Southern Economic Journal* 75, 497–523.
- Ebbinghaus B** (2016) When less is more. *International Sociology* 20, 133–152.
- Ekerdt DJ** (2010) Frontiers of research on work and retirement. *Journals of Gerontology: Psychological Sciences and Social Sciences* 65B, 69–80.
- Ellis CD, Munnell AH and Eschtruth AD** (2014) *Falling Short: The Coming Retirement Crisis and What to Do About It*. New York, NY: Oxford University Press.
- Field-Springer K** (2020) Reflexive embodied ethnography with applied sensibilities: methodological reflections on involved qualitative research. *Qualitative Research* 20, 194–212.
- Fisher GG, Chaffee D and Sonnega A** (2016) Retirement timing: a review and recommendations for future research. *Work, Aging and Retirement* 2, 230–261.
- Fleischmann M, Xue B and Head J** (2020) Mental health before and after retirement – assessing the relevance of psychosocial working conditions: the Whitehall II prospective study of British civil servants. *Journals of Gerontology: Psychological Sciences and Social Sciences* 75B, 403–413.
- Gale NK, Heath G, Cameron E, Rashid S and Redwood S** (2013) Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology* 13, 117.
- Galkutė M and Herrera MS** (2020) Postretirement work from a gender perspective: in-depth analysis of the Chilean case. *Educational Gerontology*. doi:10.1080/03601277.2020.1808308.
- Herrera S, Rojas M, Campos F and Fernández B** (eds) (2011) *Chile y sus mayores: Resultados segunda encuesta nacional calidad de vida en la vejez (2010)*. Santiago: Caja Los Andes, Pontificia Universidad Católica de Chile, SENAMA.
- Hessel P, Riumallo-Herl CJ, Leist AK, Berkman LF and Avendano M** (2018) Economic downturns, retirement and long-term cognitive function among older Americans. *Journals of Gerontology: Psychological Sciences and Social Sciences* 73B, 744–754.
- Hojman D, Duarte F, Ruiz-Tagle J, Troncoso P, Budnich M and Slachevsky A** (2017) The cost of dementia in an unequal country: the case of Chile. *PLOS ONE* 12, e0172204.
- Jokela M, Ferrie JE, Gimeno D, Chandola T, Shipley MJ, Head J, Vahtera J, Westerlund H, Marmot MG and Kivimäki M** (2010) From midlife to early old age: health trajectories associated with retirement. *Epidemiology* 21, 284–290.
- Kajitani S, Sakata K and McKenzie C** (2017) Occupation, retirement and cognitive functioning. *Ageing & Society* 37, 1568–1596.
- Kamberelis G, Dimitriadis G and Welker A** (2018) Focus group research and/in figured worlds. In Denzin NK and Lincoln YS (eds), *The SAGE Handbook of Qualitative Research*. Thousand Oaks, CA: Sage, pp. 692–716.
- Kim JE and Moen P** (2002) Retirement transitions, gender, and psychological well-being: a life-course, ecological model. *Journals of Gerontology: Psychological Sciences and Social Sciences* 57B, 212–222.
- Kohli M** (2007) The institutionalization of the life course: looking back to look ahead. *Research in Human Development* 4, 253–271.
- Kuhntopf S and Tivig T** (2012) Early retirement and mortality in Germany. *European Journal of Epidemiology* 27, 85–89.
- León AS, Staudinger UM and Calvo E** (unpublished) Gender differences in the association between retirement timing and functional health in developing countries.
- Macnaghten P** (2017) Focus groups as anticipatory methodology: a contribution from science and technology studies towards socially resilient governance. In Barbour RS and Morgan DL (eds), *A New Era in Focus Group Research: Challenges, Innovation and Practice*. London: Palgrave Macmillan, pp. 343–363.
- Madero-Cabib I, Biehl A, Sehnbruch K, Calvo E and Bertranou F** (2019) Private pension systems built on precarious foundations: a cohort study of labor-force trajectories in Chile. *Research on Aging* 41, 961–987.

- Mahoney J** (2000) Strategies of causal inference in small-N analysis. *Sociological Methods and Research* **28**, 387–424.
- Mason M** (2010) Sample size and saturation in PhD studies using qualitative interviews. *Forum: Qualitative Social Research* **11**, 3, 8.
- MAXQDA** (2017) *MAXQDA 11 Highlights*. Available at www.maxqda.com/download/New-Features-in-MAXQDA-11.pdf.
- Mayer KU and Müller W** (1986) The state and the structure of the life course. In Sorensen AB, Weinert F and Sherrod LR (eds), *Human Development and the Life Course*. Hillsdale, NJ: Lawrence Erlbaum Associates, pp. 217–245.
- Mazzonna F and Peracchi F** (2016) Unhealthy retirement? *Journal of Human Resources* **52**, 128–151.
- Mein G, Martikainen P, Hemingway H, Stansfeld SA and Marmot MG** (2003) Is retirement good or bad for mental and physical health functioning? Whitehall II longitudinal study of civil servants. *Journal of Epidemiology and Community Health* **57**, 46–49.
- Moffatt S and Heaven B** (2017) ‘Planning for uncertainty’: narratives on retirement transition experiences. *Ageing & Society* **37**, 879–898.
- Munnell AH and Sass SA** (2008) *Working Longer: The Solution to the Retirement Income Challenge*. Washington, DC: Brookings Institution Press.
- Open Science Collaboration** (2015) Estimating the reproducibility of psychological science. *Science* **349**, aac4716.
- Organisation for Economic Co-operation and Development (OECD)** (2019a) *Pensions at a Glance 2019: OECD and G20 Indicators*. Paris: OECD Publishing.
- Organisation for Economic Co-operation and Development (OECD)** (2019b) *Health at a Glance 2019: OECD Indicators*. Paris: OECD Publishing.
- Parry J and Taylor RF** (2007) Orientation, opportunity and autonomy: why people work after state pension age in three areas of England. *Ageing & Society* **27**, 579–598.
- Ray M** (2007) Redressing the balance? The participation of older people in research. In Bernard M and Scharf M (eds), *Critical Perspectives on Aging Societies*. Bristol, UK: Policy Press, pp. 74–88.
- Rohwedder S and Willis RJ** (2010) Mental retirement. *Journal of Economic Perspectives* **24**, 1, 119–138.
- Rojas M and León D** (eds) (2013) *Gerontología Social*. Santiago: Pontificia Universidad Católica de Chile.
- Sánchez Salgado CD, Orozco Mares I and Oneto Piaze L** (2010) Análisis y perspectivas de las construcciones sociales de la vejez en áreas rural/urbana de México, Chile y Puerto Rico. *Ageing Horizons* **9**, 3–18.
- Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, Burroughs H and Jinks C** (2018) Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality and Quantity* **52**, 1893–1907.
- Settersten RA and Hagestad GO** (1996) What’s the latest? II: Cultural age deadlines for educational and work transitions. *The Gerontologist* **36**, 602–613.
- Shura R and Dannefer D** (2018) Participation of long-term care residents in culture change: still a challenge and opportunity. Paper presented at the Annual Meeting of the American Sociological Association, Aging and Life Course Section, Philadelphia, PA, August.
- Shura R, Siders R and Dannefer D** (2011) Culture change in long-term care: participatory action research and the role of the resident. *The Gerontologist* **51**, 212–225.
- Silver MP and Williams SA** (2018) Reluctance to retire: a qualitative study on work identity, intergenerational conflict, and retirement in academic medicine. *The Gerontologist* **58**, 320–330.
- Smaldino P** (2019) Better methods can’t make up for mediocre theory. *Nature* **575**, 9.
- Smith PL and Little DR** (2018) Small is beautiful: in defense of the small-N design. *Psychonomic Bulletin and Review* **25**, 2083–2101.
- Staudinger UM, Finkelstein R, Calvo E and Sivaramakrishnan K** (2016) A global view on the effects of work on health in later life. *The Gerontologist* **56**, 281–292.
- Stewart DW and Shamdasani P** (2014) *Focus Groups: Theory and Practice*, Vol. 20, 3rd Edn. Thousand Oaks, CA: Sage.
- Superintendencia de Pensiones** (2020) *Statistics and Reports: Number and Average Pension Benefits by Type of Pension*. Available at www.pensiones.cl.

- Taylor BA and Bengtson VL** (2001) Sociological perspectives on productive aging. In Morrow-Howell N, Hinterlong J and Sherraden MW (eds), *Productive Aging: Concepts and Challenges*. Baltimore, MD: Johns Hopkins University, pp. 120–144.
- The Economist** (2016) The perils of not saving. *The Economist*. Available at <http://www.economist.com/news/americas/21705850-pioneering-system-now-need-reform-perils-not-saving> (Last accessed August 27).
- Thomann E and Martino M** (2020) Designing research with qualitative comparative analysis (QCA): approaches, challenges, and tools. *Sociological Methods and Research* **49**, 356–386.
- Thumala D, Kennedy BK, Calvo E, Gonzalez-Billault C, Zitko P, Lillo P, Vilagra R, Ibáñez A, Assar R, Andrade M and Slachevsky A** (2017) Aging and health policies in Chile: new agendas for research. *Health System Reform* **3**, 253–260.
- Van der Heide I, Van Rijn RM, Robroek SJ, Burdorf A and Proper K** (2013) Is retirement good for your health? A systematic review of longitudinal studies. *BMC Public Health* **13**, 1180.
- Van der Noordt M, Jzelenberg HL, Droomers M and Proper KI** (2014) Health effects of employment: a systematic review of prospective studies. *Occupation and Environmental Medicine* **71**, 730–736.
- van Solinge H** (2007) Health change in retirement: a longitudinal study among older workers in the Netherlands. *Research on Aging* **29**, 225–256.
- van Solinge H and Henkens K** (2007) Involuntary retirement: the role of restrictive circumstances, timing, and social embeddedness. *Journals of Gerontology: Psychological Sciences and Social Sciences* **62B**, 295–303.
- Wendt M** (2020) Comparing ‘deep’ insider knowledge: developing analytical strategies for cross-national qualitative studies. *International Journal of Social Research Methodology* **23**, 241–254.
- Westerlund H, Kivimäki M, Singh-Manoux A, Melchior M, Ferrie JE, Pentti J, Jokela M, Leineweber C, Goldberg M, Zins M and Vahtera J** (2009) Self-rated health before and after retirement in France (GAZEL): a cohort study. *The Lancet* **374**, 1889–1896.
- Winston NA and Barnes J** (2007) Anticipation of retirement among baby boomers. *Journal of Woman and Aging* **19**, 137–159.
- Zins M, Gueguen A, Kivimäki M, Singh-Manoux A, Leclerc A, Vahtera J, Westerlund H, Ferrie JE and Goldberg M** (2011) Effect of retirement on alcohol consumption: longitudinal evidence from the French Gazel cohort study. *PLOS ONE* **6**, e26531.

Appendix: Focus group moderator script

Question 1 [This question is used as a warm-up, and also to focus the discussion on health from the start]: ‘I would like us to start off by talking about the topic of health. I would like to know more about the main health issues that you are experiencing right now, the main health issues that you have experienced recently, and your main concerns about your health in the future’.

Question 2 [This question is presented with the aid of a whiteboard that had the four frameworks on retirement age written in a summarised version]: ‘So why are we talking about health in the first place? Well, right now one of the big scientific discussions in the academic world is about the best timing to retire, when thinking about our health. The big question is: at what age should we retire to maximise the benefits for our personal health? When trying to answer this question, scholars have proposed different views, which can be summarised in four main points of view:

- (1) The first view proposes that ‘the earlier you retire, the better’. This idea is that since work is a source of stress, the earlier we retire, the less exposed we are to that stress; and since we are less stressed, we have better health.
- (2) The second view proposes that ‘the later you retire, the better’. The idea here is that it is better for people to work until they are older, because they remain more active and socially engaged, which is good for their health. This view also proposes that retiring at an older age allows people to accumulate more wealth, which can also be good for their health outcomes.
- (3) The third view proposes that retirement should happen ‘on time’. The idea here is that there are specific moments in life that are ideal to retire in order to benefit our personal health. These moments depend on our culture, our values and the people that surround us. For example, if I

retire around the same time that all my peers are retiring, I may feel better because I'm culturally 'on time', and have better health as a consequence.

- (4) The fourth view suggests that people could retire 'anytime'. What this view proposes is that the moment you retire has no effect on your health, so it doesn't really matter when you do it.

So, after thinking about these four perspectives what we're interested in is asking you: from your personal perspectives, when do you think it is best to retire to maximise your health? Which of these four propositions makes more sense to you and why? [From here, the moderator's role was to prod continued and inclusive discussion in the focus group on topics related to their views of retirement timing and health, and to welcome any and all ideas overtly. When no new relevant topics were raised and discussion waned, the moderator thanked the group and closed the process. The moderator did not impose a specific notion of health. Participants brought broad and varied understandings of health, ranging from chronic conditions and pain to mental health and functional limitations.]

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