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Inhabitants' and professionals' social representations of health determinants in a disadvantaged urban area in France: A qualitative analysis

Représentations sociales des déterminants de santé dans une zone urbaine défavorisée en France : analyse qualitative auprès d'habitants et de professionnels

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Abstract

Background and objective. – Access to care in French disadvantaged urban areas remains an issue despite the implementation of local healthcare structures. To understand this contradiction, we investigated social representations held by inhabitants of such areas, as well as those of social and healthcare professionals, regarding events or behaviours that can impact low-income individuals' health.

Method. – In the context of a health diagnosis, 288 inhabitants living in five disadvantaged districts of Aix-les-Bains, as well as 28 professionals working in these districts, completed an open-ended questionnaire. The two groups of respondents were asked to describe what could have an impact on health status from the inhabitants' point of view. The textual responses were analyzed using the Alceste method.

Results. – We observed a number of differences in the way the inhabitants and professionals represented determinants of health in disadvantaged urban areas: the former proposed a representation mixing personal responsibility with physiological, social, familial, and professional aspects, whereas the latter associated health issues with marginalization (financial, drug, or alcohol problems) and personal responsibility. Both inhabitants and professionals mentioned control over events and lifestyle as determinants of health.

Discussion. – The results are discussed regarding the consequences of these different representations on the beneficiary – healthcare-provider relationship in terms of communication and trust.

Résumé

Contexte et objectifs. – En France, l'accès au soin dans les zones urbaines défavorisées reste problématique malgré l'implantation de structures locales dans ces quartiers. De façon à comprendre cette contradiction, nous proposons une étude sur les représentations sociales qu'ont les habitants, les travailleurs sociaux et les professionnels de santé d'une zone urbaine défavorisée, des événements et comportements qui peuvent influencer la santé des personnes à bas revenus.

Méthode. – Dans le cadre d'un diagnostic santé, 288 habitants de cinq quartiers défavorisés d'Aix-les-Bains, ainsi que 28 professionnels travaillant dans ces quartiers, ont répondu à un questionnaire. Les répondants devaient décrire ce qui pouvait avoir une influence sur l'état de santé des habitants. Les réponses textuelles ont été analysées en utilisant la méthode Alceste.

Résultats. – Les résultats indiquent des différences dans la façon dont les habitants et les professionnels se représentent les déterminants de santé dans ces quartiers défavorisés. Les premiers construisent des représentations articulant la responsabilité individuelle avec des facteurs

physiologiques, sociaux, familiaux et professionnels, alors que les seconds articulent la responsabilité individuelle avec des questions de marginalisation (problèmes financiers, consommations problématiques). Habitants et professionnels évoquent la question du contrôle sur les événements et le style de vie comme influençant l'état de santé.

Discussion. – Les résultats sont discutés au regard des conséquences qu'ont ces différences de représentations sur la relation bénéficiaires de soins – professionnels en termes de communication et de confiance.

1. Introduction

The link between socioeconomic status and health has been known for decades, but its social, political, and economic consequences make the question of health inequalities [1] a current major concern for public health policies [2–8]. The extensive literature on this topic shows that poverty is regularly associated with poor health status and, consequently, with a higher prevalence of disease or injury and lower life expectancy [9,10]. This negative impact has been found for a large number of communicable and chronic diseases (e.g., AIDS, diabetes in association with obesity and nutrition, depression) and among different populations (e.g., according to age or ethnic characteristics) [11–19]. Moreover, the prevalence of health problems among low-income people is closely related to their use of healthcare structures [20]. Actually, they tend to underuse primary care structures and to resort to healthcare structures for acute health problems [21,22]. Consequently, the use of healthcare structures is an important issue for public health actors.

Even though the World Health Organization considered the French healthcare system as one of the best performers in the world, inequalities between citizens persist in this country [23–26]. In France, research has related the inappropriate use of emergency services to the fact that low-income people feel less concerned with their health, are less informed about diseases and healthcare procedures, and show limited trust in the medical system [24,27]. These results are consistent with the population health perspective that suggests that ''major determinants of health status, particularly in countries at an advanced stage of economic development, are not medical care inputs and utilisation but cultural, social, and economic factors at both the population and individual level'' [28]. The current research tries to shed some light on this paradox using social representations theory [29,30].

In fact, a first step in understanding how low-income people use the healthcare system lies in determining how they represent their own health. Here, the social representational perspective is the best approach. Social representations are described as lay knowledge that people construct to understand and organize their social environment. Actually, in their everyday life, people do not use rational and logical rules to function. Instead, they construct representations of their environment that are anchored in the values and beliefs of the social groups they belong to [31]. These representations guide their actions in society and assist them in anticipating and justifying practices and behaviours [32]. Research on the social representations of health indicates [33] that the lay knowledge that people construct about illness and health depends on their social and cultural background and that it governs their attitudes and behaviours toward health [34–36]. For example, results concerning diabetes indicate that the negative social representations held by low-income women about healthcare services interfere with their treatment adherence [37]. The first objective of the present study was therefore to explore, in the French context, the lay knowledge that low-income people construct about health determinants (factors or actions that contribute to good or poor health).

Research has also reported that the role played by this lay knowledge in people's health-related practices is mostly underestimated by professionals [38]. However, the mismatch between social representations held by care beneficiaries and professionals on health topics may affect the care relationship and may have a concrete impact on satisfaction with care. This negative impact has specifically been attested for stigmatizing health issues (HIV, psychiatric disorders, drug use, etc.) or when patients belong to stigmatized social groups (e.g., lesbians or gays or ethnic minorities) [39–42]. Therefore, the second objective of this study was to explore to what extent low-income individuals and professionals working with them share similar social representations concerning factors that influence health when living in insecure socioeconomic conditions.

2. The present study

To our knowledge, only one study has compared low-income individuals' and professionals' social representations of health determinants [43]. More precisely, using interviews and focus groups, the authors compared representations held by women from different socioeconomic backgrounds and by healthcare professionals about reproductive healthcare. Among other results, they found that professionals used standard images of poverty to describe low-income people's representations. In the current study we adopted a similar approach by comparing professionals and low-income people's social representations about the same topic – health determinants in a poverty context – and by focusing on the way each group anchors these representations in social patterns. To conduct the study, we took advantage of a healthcare evaluation related to the French government priority program [44], which aimed to assess the health status and needs of the inhabitants of five specific urban districts in a French city (Aix-les-Bains), to create appropriate proximity healthcare structures. These districts were chosen by

officials because they met the following criteria: low incomes and educational levels, high unemployment rate, poor health status, and late access to healthcare structures. The study did not pose any risk to the physical and moral integrity of the participants and thus was not submitted to review by an ethics committee.

3. Methods

3.1. Population and data collection

The study investigated two types of respondents: inhabitants of the five districts and social and healthcare professionals working within these districts. During data collection, a total of 6126 people (including children and adults) lived in these districts in 2250 households. The survey targeted households rather than individuals. As a consequence, 2250 questionnaires, with a stamped return envelope, were sent or directly placed in the mailbox of each household. The invitation to fill out the questionnaires included the names of all the adults living in the household. Although all the households of the districts were contacted, we did not control for who answered the questionnaires (among the adults) in the households. It should therefore be considered that convenience sampling was used to select inhabitants. At the same time, all the professionals working in the districts with inhabitants (including social workers, educators, and nurses) were invited to fill out the survey. Because homeless or institutionalized individuals were not included in the inhabitant panel as defined for the healthcare evaluation, professionals working specifically with these people were not included in the study. A total of 75 professionals received the questionnaire at work.

3.2. Procedure and materials

The participants were instructed to fill out the questionnaire individually. The sections of the questionnaire dedicated to the measurement of social representations are described below.

We presented participants with a free association task traditionally used to assess social representations [45,46], including health-related social representations [47]. We asked the participants to write everything that came to mind spontaneously when they thought about health determinants to access the most commonly shared elements representing these determinants for them. However, the instructions given to inhabitants or professionals differed: the inhabitants were asked to write about "everything that could explain their good or poor health status," whereas professionals were asked to write "everything that could explain a good or poor health status," answering as if they were inhabitants of these districts.

We also collected respondents' sociodemographic information (inhabitants: age, gender, occupation, marital status, self-reported health, and number of persons living in the household; professionals: age, gender, institution, and work experience). The data were analyzed with computer-assisted technology focused on the use of active vocabulary (the Alceste method). This analysis strategy was preferred over manual qualitative

analyses because we collected sequences of words with limited contextual elements for interpretation, which are essential for traditional thematic content analysis. A computer-assisted textual analysis was therefore best suited to the data for reliable and valid (representative of all material) corpus coding [48,49].

3.3. Computer-assisted analyses: the Alceste method

Social representations are socially constructed through interactions and conveyed in symbols, images, and common discourses circulating in society on particular topics. Investigating how language is used by different social groups is a particularly valuable way to study and compare social representations held by these groups [50]. The Alceste method [51,52] has repeatedly been described as a highly relevant tool to study social representations for all types of textual material [46]. Actually, it aims at highlighting "lexical worlds" [52,53] that organize the discourse and thus helps identify "shared meanings" that form social representations [52]. More precisely, the Alceste method consists of extracting word classes form the corpus using hierarchical descending cluster analyses based on oppositions between words in the discourse. Specifically, Alceste creates a dictionary of the corpus from the lemmatized words (words that are reduced to their roots: e.g., health, healthy, and healthier are lemmatized to health +) and separates active words (nouns, adjectives, verbs, and adverbs) from passive words (articles and connectors). The corpus is then divided into elementary contextual units (ECUs; approximately a sentence, or 30–50 words), which are grouped into lexical classes as a function of the co-occurrence of words composing these ECUs (e.g., different ECUs that contain "health" and "costs" are included in the same class). Only classes that contain more than 5% ECUs are considered. Finally, two hierarchical descending cluster analyses are performed in parallel, varying the lengths of contextual units to confirm the stability of the classes. If the two hierarchical analyses result in the same classification, a final classification is extracted using only the overlapping contextual units of the two analyses. Each class of words extracted using this method is related to a specific theme, which must be interpreted by the researcher. To help with the interpretation, the program assigns a Chi^2 value for typical words and anti-typical words (words that are significantly not associated with a given class) [48,54]. Moreover, it assigns a chi^2 value for grammatical categories that are over- or underrepresented in the different classes extracted. This informs about three different "subjective postures" adopted by respondents [55,56]: actor (overrepresentation of verbs or person and temporal markers), observer (overrepresentations of adjectives, adverbs, nouns or under representation of person markers) or patient (overrepresentations of discursive relations and demonstrative or assertive vocabulary). Another advantage of the Alceste method is that it allows the introduction of influential variables in the analysis and an examination of the association between the modalities of these variables with classes (based on a chi^2 statistic). In the current study, we were interested in the differences between the representations of inhabitants and professionals. Therefore, the

type of respondent was entered as an influential variable so that we could investigate the association between each class found by the hierarchical descending analysis and the type of respondent (inhabitant or professional) [57]. In addition, age categories, gender, self-reported health status, and occupation were entered in the analysis.

Complementary to these analyses, we conducted crossed sorting analyses (with the Alceste software), which allowed us to observe word frequency according to the respondent type (inhabitant vs. professional) and thus to identify the specific vocabulary they used. Word frequency was computed from the dictionary of all the words used in the corpus. Then these frequencies could be studied for each respondent type (determined by a chi^2 test) using overrepresented and underrepresented vocabulary. For a given type of respondent, the more the distribution of a lexical form differed from a random distribution, the more this form was considered to be specific of these respondents [58,59].

4. Results

4.1. Respondents' characteristics

Among the inhabitants, 210 women and 78 men, ranging in age from 18 to 91 years (M = 46.3, SD = 17.9) returned the questionnaire (response rate, 12.8%). We observed an overrepresentation of women (53.5% women in the parent population). This overrepresentation could be explained by a selection bias (women are more likely to respond to a health questionnaire in the household) and by the fact that, in these districts, single-parent households (most often headed by women) [60] could account for up to 27% of households. Twenty-eight professionals (88.5% of them women; M_{age} = 42.4, SD = 15.01) answered the questionnaire (response rate, 37.7%). The response rates for the survey were relatively low, limiting the statistical representativeness of the sample. The sociodemographic characteristics of the participants are described in Table 1.

4.2. Perceived determinants of health

Analyses were conducted with the Alceste software (4.7 version with standard analyses). A total of 6645 words were analyzed, of which 1044 appeared only once in the corpus. These single words accounted for 15.7% of the total corpus, which indicated a quite poor and redundant vocabulary. This was confirmed by the vocabulary richness index provided by the software (96.41%). Single words accounted for 14.4% of the inhabitants' corpus and 28.3% of the professionals' corpus, suggesting more diversity in the professionals' answers. Alceste classified 73.8% of the corpus into eight lexical classes; therefore, a representative amount of the corpus was considered to have been classified. Table 2 provides a summary of the eight lexical classes with typical words, anti-typical words, and the most representative sentence of the class. The hierarchical descending cluster analyses (Fig. 1) revealed that two determinants of health organized the respondents'

Table 1
Respondents' characteristics.

	Inhabitants (n = 288)		Professionals[a] (n = 28)	
	n	%	n	%
Gender				
Male	78	27.1	3	11.5
Female	210	72.9	23	88.5
Missing			2	7.1
Age				
18–24	37	12.8	2	7.7
25–44	85	29.5	12	46.2
45–64	115	39.9	11	42.3
65–84	39	13.5	1	3.8
≥ 85	5	1.7	0	0.0
Missing	7	2.4	2	7.1
Inhabitants' occupation				
Employed	135	46.8		
Retired	47	16.3		
Unemployed	21	7.3		
Living on welfare	51	17.7		
Without outcomes	34	11.8		
Inhabitants' marital status				
Married	65	22.5		
Partner	21	7.3		
Single	96	33.3		
Divorced	69	23.9		
Widower (widow)	27	9.3		
Missing	10	3.5		
Inhabitants' self-reported health status				
Good	144	50.0		
Fair	81	28.1		
Poor	57	19.8		
Missing	6	2.1		
Inhabitants' household size				
1–3 persons	213	73.9		
4–6 persons	58	20.1		
≥ 6 persons	3	1.0		
Missing	14	4.9		
Professionals' work experience				
0–2 years			6	21.4
3–5 years			8	28.6
≥ 6 years			10	35.7
Missing			4	14.3

[a] Missing data meant that the type of institution professionals' worked in (e.g. clinics, social services) could not be reported. For anonymity reasons, professionals were reluctant to give this information.

discourse: physiological determinants (two classes), which comprised 23.6% of the total ECUs, and psychosocial determinants of health (six classes), which comprised 76.4% of the total ECUs.

4.2.1. Physiological determinants of health

Two lexical classes referred to physiological determinants of health. These classes were significantly associated with the inhabitants' answers, particularly retired inhabitants who

Table 2
Classes extracted by Alceste: Most typical[a] words, anti-typical words, and typical elementary contextual units (ECUs) for each class.

Typical words	Anti-typical words	Typical ECUs
Class 1: chronic illnesses and health problems (15.73%)		
Back; cancer+; deny; diabetes; grave+; illness+; surgery+	Food; good; lack; life; make; work+	"…The consequences of a serious illness and its recurrence, the operation itself and the major postoperative treatment" (female, 54 years old, unemployed)
Class 2: Poverty (11.99%)		
Financial+; health; lack; money; person+; problem+; trouble+	Good; I; I've; sleep+; sport+;	"Various accumulated problems that would warrant requests for care are not considered a priority. Denial of certain health problems plus economic insecurity" (professional)
Class 3: work and family (16.85%)		
Family; friend; mood; schedule+; stress+; tired+; work+	Be able to; care+; eat+; year+; food	"Fatigue, stress, work schedules, family life" (female, 45 years old, working) "To feel good: morale, family, work" (male, 23 years old, working)
Class 4: Physical activities and food habits (11.99%)		
Day+; drink+; eat+; fruit+; practic+; smok+; vegetable+	Illness+; life; problem+; stress+; work+	"I pay attention to what I eat, no raw meat, for example, I eat fruit and vegetables for vitamins and fiber. I'm very careful with personal hygiene, to what I touch in the street, etc., I adapt my clothing to the weather, no flip flops when it rains, I don't smoke, I don't drink, I don't go to nightclubs" (female, 23 years old, unemployed)
Class 5: lifestyle (11.61%)		
Food; good; hygiene+; life; luck+; sport+; tobacco	I; illness+; stress+; too much; well	"I'm lucky to have inherited good health. A relatively healthy lifestyle allows me to preserve it: no alcohol, no smoking, sleep respected, simple food, even if not organic, low fat and especially a well-balanced diet" (male, 62 years old, working)
Class 6: aging (7.87%)		
Consequence+; heavy+; illness+; pain+; state; treatment+; year+	Good; hygiene+; sport+; work+	"First I would cite the disadvantages caused by my old age and more precisely a progressive disease, arthritis, that I have been stricken with" (female, 75 years old, housewife)
Class 7: lack of personal control over health (14.98%)		
I have; sick; health+; little+; moment+; part+; possibl+	Bad+; illness+; hygiene+; life; sport+	"I think I'm in good health, but nothing is guaranteed. I'm a smoker and I know I don't always eat well and it's true that I should have a medical check-up to make sure that I'm really in good health" (female, 23 years old, unemployed)
Class 8: addictions and problematic consumption (8.99%)		
Alcohol+; bad+; cigarette+; consumption+; drug+; food+; prevent+	Good; I; I have; health; work+	"Alcohol, tobacco, drugs, poor diet, no concept of welfare, poor hygiene" (professional)

[a] Typical words (or anti-typical words) or extracts presented have the highest χ^2 in their classes; + Lemmatized form of a word (words with the same root); words are ordered alphabetically; all χ^2(d.f. = 1) > 3.84; all $Ps < 0.01$
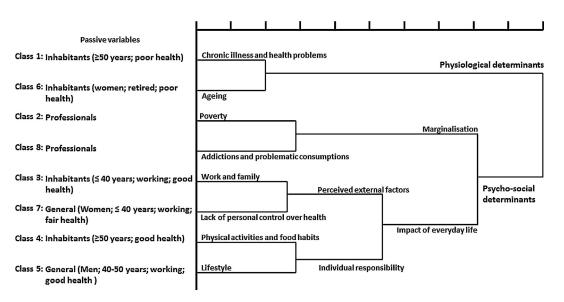

Fig. 1. Tree graph of the hierarchical descending cluster analysis performed by Alceste on the corpus about social representations of health determinants for inhabitants and professionals.

reported a poor health status. The first class accounted for 15.7% of the classified ECUs and concerned chronic illnesses and health problems. The respondents referred to chronic health problems, illnesses, hospitalizations, or surgeries they had experienced. Typical words were, for example, "depression," "(breast) cancer," "back pain," and "diabetes." Auxiliaries ("to be" and "to have") and person markers (e.g., "I", "my") were significantly overrepresented in this class (respectively, $\chi^2 = 5.0$, $P < .05$, and $\chi^2 = 4.0$, $P < .05$), indicating that respondents producing such answers assumed an actor posture. The second class accounted for 7.9% of the classified ECUs and concerned aging as the principal cause of health degradation. The respondents (mainly women) talked about health degradation due to problems accumulated over time. No concrete health problems were put forward compared to the first class (only the generic term "illness"). Pain, difficulties, and treatments were also addressed. No positive aspects were listed.

Physiological determinants were significantly less represented in the professionals' answers whether for the chronic illnesses ($\chi^2 = -3.7$, $P < .05$) or the aging ($\chi^2 = -2.8$, $P < .05$) lexical classes. Auxiliaries ("to be" and "to have") and numbers were significantly overrepresented in this class (respectively, $\chi^2 = 5.0$, $P < .05$, and $\chi^2 = 4.0$, $P < .05$).

4.2.2. Psychosocial determinants of health

Six classes were related to psychosocial determinants of health, and the hierarchical descending cluster analyses indicated that these classes were organized into two clusters.

First, two classes were related to marginalization and health (21.0% of classified ECUs) and were significantly associated with professionals' answers (the inhabitants' answers were significantly less associated with this class). First, professionals linked health issues to poverty (11.9% of ECUs). According to typical words or sentences, health was not considered a priority, in contrast to money, which determined decent food and housing conditions. Demonstrative pronouns (e.g. "this") were significantly overrepresented in this class ($\chi^2 = 6.0$, $P < .05$). Health issues were also linked to addictions and problematic consumption (8.9% of ECUs) and particularly to drug and alcohol consumption, as well as poor hygiene and housing. A lack of healthcare structures and difficulties in accessing care were also brought up. These classes were characterized by the under representation of words indicating a reference to the self ("I": all $\chi^2 > -3.70$, $P < .05$; "I have": all $\chi^2 > -2.86$, $P < .05$; "me": for poverty only, $\chi^2 = -3.72$, $P < .05$), which could indicate that respondents did not mention personal experiences. Actually, we found that personal markers were significantly underrepresented in the addictions and problematic consumption class ($\chi^2 = -9.0$, $P < .01$). Adjectives and adverbs were significantly overrepresented in this last class ($\chi^2 = 15.0$, $P < .001$). These two elements indicated that respondents who explained health by addiction and problematic consumption adopted an observer posture.

Second, four classes were related to the impact of everyday life (55.2% of classified ECUs), so labelled because of words such as "daily," "regular," and "normal." This cluster was much more complex since it was itself composed of two different subclusters differentiating between the roles of external factors and individual responsibility in one's health status.

External factors were associated with two lexical classes: work and family (16.8% of classified ECUs) and lack of personal control over health (14.9% of classified ECUs). Working inhabitants (professionals' answers are significantly less associated with this class) under 40 years old and benefiting from good self-reported health status described work and family as both risk (e.g., by producing stress) and protective (e.g., by providing a satisfying economic situation or social support) factors for health. Health problems mentioned in this class were related to stress, depression, and fatigue. Lack of personal control was mentioned by both professionals and inhabitants (mainly working women, younger than 40 years old and self-reporting a fair health status) in relation to unavoidable and recurrent incapacitating health issues (migraine, poor immune system, insomnia, etc.). Demonstrative pronouns were significantly overrepresented in this class while nouns were significantly underrepresented (respectively, $\chi^2 = 11.0$, $P < .001$ and $\chi^2 = -20.0$, $P < .001$).

Individual responsibility focused more on healthy behaviours and particularly on physical activity and eating habits (11.9% of classified ECUs) and lifestyle (11.6% of classified ECUs). The lexical class related to physical activity and eating habits was mainly associated with healthy and 50-year-old inhabitants' answers. The answers concerned concrete behaviours or activities, whether healthy (e.g., good eating habits, sports activities) or unhealthy (e.g., smoking). Among the five most representative words of this class, five were verbs ("to smoke": $\chi^2 = 43.7$, $P < .001$; "to eat": $\chi^2 = 37.8$, $P < .001$; "to do" (sports): $\chi^2 = 37.0$, $P < .001$; "to drink": $\chi^2 = 31.1$, $P < .001$). This was confirmed by the fact that verbs, as a grammatical category, were overrepresented in this class ($\chi^2 = 35.0$, $P < .001$), which indicated that respondents who spoke about physical activity and eating habits occupied an actor posture. Official recommendations broadcast in the media (e.g., eating five fruits and vegetables per day) were also found in this class. Interestingly, the inhabitants mostly mentioned their inability to follow these recommendations. No health problems or diseases were directly mentioned. The lexical class related to lifestyle as a determinant of health was associated with both professionals and inhabitants' answers (in particular working men between the ages of 40 and 50 years reporting good health status). This class addressed heredity and immunity. In fact, heredity was described as determining a basic health status that people had the responsibility to preserve or improve by engaging in healthy habits. In this class, the words "I" ($\chi^2 = -4.3$, $P < .05$) and "my" ($\chi^2 = -2.84$, $P < .05$) were significantly underrepresented. Typical extracts revealed that answers were short and enumerative sentences (e.g., "way of life", "lifestyle," or "good eating practices"). It was therefore difficult to know whether participants were referring to effective behaviours, beliefs, or a normative view of a healthy lifestyle. Personal markers and auxiliaries were underrepresented in this class (respectively, $\chi^2 = -6.0$, $P < .05$

Table 3
Positive and negative specificities of inhabitants and professionals (Lexico Analysis).

	Terms overrepresented (positive specificities)	Terms underrepresented (negative specificities)
Inhabitants	I And Am My Me A In	Of life Caring Money Alcohol Of health Problems Food Low Causes Treatments To Housing Lack People Conditions Or Not The
Professionals	Lack Drug The Conditions Not People Treatments Causes Money Bad Problems Food Of health To Housing Alcohol Of life Caring	In A And

Frequency of each word $\geq$ 10; all coefficients $P < .05$.

and $\chi^2 = -6.0$, $P < .05$); nouns were overrepresented ($\chi^2 = 9.0$, $P < .01$). This result indicated that respondents were both actors and observers.

The same analyses were conducted on the two corpuses (inhabitants and professionals) separately and showed very close results, except for the lack of control over health class, which did not emerge from the analyses once the corpus was divided.

The crossed sorting analysis (Table 3) conducted on the inhabitants' and professionals' corpuses separately showed differences in the type of words they used. For inhabitants, the analysis indicated more underrepresented than overrepresented words. The reverse was observed among professionals. This result is consistent with the fact that the inhabitants produced less lexical variety in their responses than the professionals. Moreover, according to the analysis, specific words were highly contrasted in the two groups: the words that were underrepresented in the inhabitants' responses appeared to be overrepresented in the professionals' responses and vice-versa, which supports the hypothesis according to which the two groups differed in the way they referred to health determinants. The inhabitants were more prone to overusing expressive markers (e.g., "I," "my," and "me"), whereas the professionals overused generic markers (e.g., "to," "the," "people"). This could suggest that the inhabitants anchored their responses in personal experiences, whereas professionals referred to generic situations. It also confirmed the previous analysis, regarding the specific association of words such as "I" with inhabitants' responses. On their part, professionals tended to overuse terms associated with marginalization (e.g., "drug," "money," and "housing") or health (e.g., "caring," "treatment," and "of health"), words that were underrepresented in the inhabitants' responses. These results were again consistent with the classification analysis, since they suggested that addiction and marginalization were specifically mentioned by professionals, and supported the idea that inhabitants and professionals did not focus on the same elements to describe which factors could have an impact on low-income people's health status.

In summary, the two sets of analyses suggested that the inhabitants and professionals' responses differed in their lexical specificities and associations. Among the eight classes extracted by the Alceste method, four were significantly typical of inhabitants' answers, two were significantly typical of professionals' answers, and two were shared by the two groups. Two classes referred to physiological factors inducing health deterioration: illness and aging. These classes were essentially brought up by inhabitants facing health issues. In addition to physiological factors, psychosocial factors such as work, family, social relationships, ability to control one's eating habits, and physical activities, as well as beliefs about lifestyle, were described by inhabitants and to a lesser extent by professionals as the most important determinants of health status. In parallel, professionals raised marginalization as a health risk. These findings were confirmed by the specific words used by the two groups.

5. Discussion

The quality of interactions between healthcare beneficiaries and professionals is an important factor in the medical care of low-income people [61]. To our knowledge, however, few studies have paid attention to the processes underlying these interactions, and more particularly to the correspondence of the social representations of health between the two groups. This question lies at the core of the current study. We asked inhabitants of five economically disadvantaged districts of a French city, as well as social and healthcare professionals working in these districts, to write what came spontaneously to mind when they thought about health determinants of low-income people. Lexical analysis with the Alceste method was applied to the data collected.

Analysis of the responses revealed that two types of health determinants reflected the representations of the respondents: physiological and psychosocial factors. The results showed that

respondents who cited health as being determined by physiological factors, illness, or aging were those who reported worse health status than those who explained their health status as being due to everyday life events. Moreover, everyday life factors were more prominent in the respondents' (mostly inhabitants) answers than illness and aging. More globally, these results suggest that inhabitants do not pay attention to health problems until they experience them. They are consistent with research in the French context reporting disinterest on the part of low-income people concerning prevention and health questions, and the difficulty that authorities face in implementing primary prevention interventions in this population [62,63].

We expected that inhabitants would propose determinants that were related to their everyday lives, and we found such links in the perceived external factors classes. Among the answers were working conditions, unemployment, social isolation, problematic consumption, eating habits, i.e., their social context. If we know that the social context influences inequality in access to care [64–67], the results suggest that the respondents are aware of this influence and represent it as resulting from an accumulation of complicated life situations. In other words, health problems are viewed as the consequence of a spiral of recurrent difficult events. This representation was associated with the perception of a loss of personal control over events, another crucial variable known to negatively influence the health habits among low-income people [68,69]. In contrast, self-efficacy was positively associated with physical activities: in two classes, volition and effort were described as key determinants of good health status. The two overlapping classes between professionals and inhabitants touched on these questions of self-efficacy and self-determination, which could suggest that these aspects are part of shared knowledge about health.

The originality of the current study lies in the investigation of representations from two different groups: inhabitants and the professionals who work with them. We expected the professionals to use a standard view of poverty to represent low-income people's health determinants. Actually, the specific vocabulary used by the professionals was essentially related to marginalization. In contrast, inhabitants mentioned life conditions, working conditions, social relationships (family and friends), loss of control, physical activity, food quality, etc. This differentiation recalls the difference drawn by Cambois [70] between social inequalities and marginalization in health. From this perspective, health disparities between individuals in a given population are differentiated from health problems associated with a specific group. In our corpus, we observed that the professionals' representations of low-income people's health determinants were anchored in the representations of a precise group: individuals in social breakdown. In other words, the professionals extended their representations of a specific group (including representations of health issues experienced by the members of this group) to the entire population of the districts. Since professionals included in the study do not work exclusively with marginalized people (among all the professionals, only four also worked with young men living in a workers' hostel), this result cannot be explained by an overrepresentation of marginalization concerns in their work. We conclude that professionals explained health issues among low-income people by referring to a prototypic group (marginalized people), whereas low-income people did not refer to a group (based on socioeconomic status, ethnicity, gender, etc.) but rather to a sum of factors arising from their everyday lives.

In light of this discussion, we have to consider several limitations of the present study. The first concerns selection biases for inhabitants. Because the participants had to fill out a questionnaire, inhabitants who did not speak or write French (to a large extent immigrants and illiterate individuals) could not participate, whereas these people have the lowest incomes and more problems with healthcare structures. However, accessing this population would have required specific support (e.g., interpreters) that we did not have. The second limitation concerns the substantial missing data in professionals' sociodemographic information. Professionals thought that job-related information compromised the survey's anonymity and were thus reluctant to provide this information. Moreover, we did not ask them about representations of health determinants for themselves. It would have been useful to compare these representations with those of the inhabitants. Another limitation concerns the fact that our analysis strategy focused more on the semantic aspects of answers provided by respondents than on the semiotic aspects. This choice was made based on the desire to highlight the components of everyday thinking used by inhabitants and professionals to represent health issues experienced by low-income people. Syntactic aspects would have provided less information on these components. We therefore opted for the pragmatic analysis of the results obtained with the Alceste method, as recommended in social representation studies [71]. The last limitation is related to the generalization of the study and the representativeness of the sample. The constraints we had concerning the sampling, and the fact that results concerned only one city, make it impossible to generalize the results. Further studies should involve similar areas in different cities to overcome this limitation.

Despite these limitations, these results have practical implications for healthcare access. They suggest a discrepancy between inhabitants and professionals' representations of what can have an impact in low-income people's health. More precisely, inhabitants' lay perceptions are not confined only to health and illness topics, which is coherent with classical research on social representations of health [72,73]. As for the professionals, they view health issues as consequences of a marginalization process. If professionals are considered the first and essential contacts inhabitants have concerning their health issues, as well as for questions of promoting good health and prevention, this discrepancy could be problematic. The fact that inhabitants' and professionals' representations do not overlap could lead to communication failures and decrease the trust inhabitants have in the healthcare system and thus have an impact on adherence to health advice [74]. Actually, past research has shown that beneficiaries felt the gap, reporting that their beliefs and experiences were not shared by professionals

[75]. It is therefore essential for professionals to know more about the knowledge and beliefs people have built around health issues. As underlined in community-based and health literacy perspectives, professionals' training should focus on communication skills because communication between professionals and healthcare beneficiaries is a key element in understanding and influencing the way people use the healthcare system [76]. However, since knowing and understanding inhabitants' representations is crucial for communicating about health topics and identifying health needs, training should also make professionals aware of the gap between their own representations and those of the people they serve.

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

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