

Djebnounge BRAHIM, Boulamaiz HOUCINE

Laarbi Tébessi University, Department of Earth Sciences and Universe, Route de Constatntine, 12002 Tébessa, Algeria; e-mail: brahim.djebnounge@univ-tebessa.dz; houcine.boulamaiz@univ.tebessa.dz

Inequalities in the environmental quality of the neighborhoods of an Algerian border town (case of Tébessa Extreme East of Algeria)

Brahim D., Houcine B. **Nierówności w jakości środowiska w sąsiedztwie algierskiego miasta przygranicznego (przykład Tébessa we wschodniej Algierii)**. Algierskie miasta, a zwłaszcza miasta graniczne, przeszły znaczące zmiany na wielu płaszczyznach. Stały się zróżnicowane przestrzennie, społecznie heterogeniczne i złożone. Są też trudne do zarządzania, złożone ekonomicznie, ze słabymi warunkami do życia pod względem ekologicznym. Przyjmują bezładny układ przestrzenny i są pod presją różnych nacisków, które wpływają dogłębnie na jakość środowiska mieszkańców. Pomimo tego w Algierii środowiskowy wymiar działań rozwojowych jest często pomijany, spychany na dalszy plan. Pytania o jakość – zarówno środowiskową jak i życiową – są także istotne i prowadzą do refleksji na temat zachowania, praktyk społeczno-przestrzennych i strategii interesariuszy. Celem tego badania jest ocena nierówności środowiskowych rozwoju miast i ich konsekwencji na jakość życia codziennego w dzielnicach miasta Tébessa, położonego we wschodniej Algierii, przy granicy z Tunezją. W celu zbadania tych zjawisk przeprowadzono ankietę terenową w pięciu dzielnicach miasta, zasadniczo różniących się pod względem położenia geograficznego, wieku mieszkańców i typów mieszkań. Szczególną uwagę zwrócono na postrzeganie jakości życia przez ich mieszkańców i atmosferę miejską tych dzielnic. Przedstawienie statystyczne i kartograficzne wyników badań pozwala na zobrazowanie działań mieszkańców badanych obszarów miejskich, jakie należałoby przeprowadzić w każdej dzielnicy w celu poprawy jakości życia. W czasach, gdy kwestia jakości życia jest głównym elementem planowania i projektów rozwojowych oraz zrównoważonego rozwoju, zarządzanie miastami oraz związane z nimi problemy muszą być ukierunkowane na społeczne zapotrzebowanie na wygodę, dobre samopoczucie i postęp społeczny.

Брагим Д., Гоуцине Б. **Неравенства качества окружающей среды возле алжирского пограничного города (на примере г. Тébесса в восточном Алжире)**. Алжирские города, особенно пограничные, протерпели существенные многоплановые изменения. Стали пространственно дифференцированными, общественно гетерогенными. Они сложно управляемы, экономически сложны, отличаются плохими условиями жизни с точки зрения экологии. Характеризуются также хаотической пространственной планировкой, они под давлением различных факторов, влияющих на качество среды обитания жителей. Несмотря на это, в Алжире экологический аспект проектов развития часто исключается, отодвигается на задний план. Существенны также проблемы по экологическому качеству и качеству жизни – они наводят на размышления по поведению, общественно-пространственным практикам и стратегии заинтересованных сторон. Цель настоящего исследования – оценка экологических неравенств развития города и их влияния на качество повседневной жизни в отдельных кварталах г. Тébесса, расположенного в восточном Алжире, на границе с Тунисом. Для изучения данных явлений мы опросили в пяти кварталах города, принципиально отличающихся друг от друга по географическому положению, возрасту жителей и типам квартир. Особое внимание было уделено восприятию качества жизни жителями и городской атмосфере данных кварталов. Статистическая и картографическая презентация результатов исследования позволяет изобразить деяния жителей городских территорий, какие нужно бы провести в каждом квартале для улучшения качества жизни. В настоящее время, когда вопрос качества жизни является главным элементом планирования и устойчивого развития,

управление городами и связанные с ним проблемы должны быть направлены на социальный спрос на удобства, хорошее самочувствие и общественный прогресс.

Brahim D., Houcine B. **Altafawut fi fi jawdat albiyyat li'ahya' madinat hududiat jazayiriat dirasat halat madinat tbst- 'aqsa alshrq aljazayirii**

التفاوت في جودة البيئية لأحياء مدينة حدودية جزائرية دراسة حالة مدينة تبسة أقصى الشرق الجزائري

shahidat almudun aljazayiriat wakhasatan albldat alhududiat taghyirat malhuzat min jmye aljhat. laqad 'asbahat mjzat mkanyana, waghayr mtjanst ajtmaeyana wmrkbt, wmeqdt aqtsadyana wyseb 'iidaratiha waghayr salihatan lileaysh min alnnahtat albyyy. 'iinahum yatakhidhun shklaan mkanyana fwdwyana, wyeawn min dughut la hasr laha tuathir ealaa aljawdat albiyyat lskanha hataa fi 'akthar abeadha hmymyt, wamae dhk ghalbana ma yatimu hjb albued albiyyi l'ijra'at altanmawiat fi aljzayr. 'asyilat jawdat albiyat wanaweiatan alhayat hi 'aydaan dhat silat wtwjh altafkir fi alsuluk walmumarasat alajitmaeiat almkanyt wastratyjyat 'ashab almslh. alhadaf min hadhih aldirasat hu taqyim altfawtat albiyyat llnmw alhdry walewaqb ealaa naweiatan alhayat alyawmiat fi manatiq madinat tbst, wahi baldat hududiat mae tunis fi shrq aljzayr. tahqiqaan lihadhih alghayat, tama 'iijra' astbyan mydany (msh) fi khms manatiq min almadinat, mtbaynt bishakl 'asasiin min hayth almawqie aljughrafi walemr wanawe alskn. ytm 'iyla' aihitimam khasin ltswr naweiatan alhayat waljw alhdry lihadhih al'ahya' min qibal skanha. 'iina altamthil al'ihassy warasm alkharayit linatayij almsh yajeal min almmkn tasawur mmarsat alsukkan fi al'ahya' almdrwst, wtwjyh 'iijra'at altanmiat almuhadadat alty yjb altawsiat biha likuli hayi litahsin naweiatan hayatihim fi albiyat alhdry. fi waqt takun fih mas'alat jawdat alhayat fi samim altakhtit wamasharie altanmiat wbedana qwyana liltanmiat almustadamat, yjb 'an tahdif muealajat wa'iidarat mdnna walmashakil almurtabitat biha 'iilaa alaistijabat liltalab alajitmaeii alrrahat walrfahyt waltaqadum alajitmaey.

Keywords: Tébessa, environmental quality, sustainable development, correspondence factor analysis (CFA)

Słowa kluczowe: Tebessa, jakość środowiska, rozwój zrównowagony, analiza odpowiedniości (CFA)

Ключевые слова: Тебесса, качество окружающей среды, устойчивое развитие, анализ пригодности (CFA)

alkalimat almuftahiata: Tibassa, jawdat albiyat, altanmiat almustadamat, tahlil eamil altatabuq (CFA)

Abstract

Algerian cities and especially border towns have undergone remarkable change on all sides. They have become spatially fragmented, socially heterogeneous and composite, economically complex and difficult to manage and ecologically unliveable. They take an anarchic spatial configuration, and suffer countless pressures that affect the environmental quality of its inhabitants even in its most intimate dimension, and yet the environmental dimension of development actions is often overshadowed in Algeria. Questions of environmental quality and quality of life are also relevant and guide reflection on the behaviour, socio-spatial practices and strategies of stakeholders. The objective of this study is to assess the environmental inequalities of urban growth and the consequences on the quality of daily life in the districts of the town of Tébessa, a border town with Tunisia in eastern Algeria. To this end, a field questionnaire (survey) was undertaken in five districts of the town, fundamentally differentiated in terms of geographical location, age and housing typology.

Particular attention is paid to the perception of the quality of life and urban atmosphere of these neighbourhoods by their residents. The statistical and cartographic representation of the survey results makes it possible to visualize the practices of the inhabitants in the neighbourhoods studied, and to guide the specific development actions to be recommended for each neighbourhood to improve their quality of life in an urban environment. At a time when the question of quality of life is at the heart of planning and development projects and a strong dimension of sustainable development, the treatment and management of our towns and the problems associated with them must be aimed at responding to the social demand for comfort, well-being, and social progress.

Introduction

However, quality of life is a founding element of both political and societal concerns, it is one of the current urban issues at a time when the environmental question is at the heart of develop-

ment and development projects, this notion questions as much as it motivates, it allows measurement, comparison, observation and communication and therefore remains a major urban issue.

Even if the difficulty is real, urban geography must make room for the debate on quality of life and make its way on this issue.

The analysis of the quality of life of the inhabitants of the districts of the town of Tébessa starts from the experience and the point of view of the citizen. So far, this is the only approach that allows us to understand the different dimensions of the living space and the perceived space of the residents of the city neighbourhood. The aim of the survey on inequalities in the quality of life in the districts of the town of Tébessa to account for the interrelations that exist between the social situations of individuals and their districts.

Each of these individuals is confronted with problems of quality of life linked, at least in part, to the living environment (green spaces, services, shops and facilities), environmental quality (such as cleanliness, noise environment, etc.) and the quality of the environment (such as the environment) the urban atmosphere (calm, security and aesthetics) and the social universe which is also linked to the quality of social relations (with neighbours, the tribe, the Arch and conviviality) and the economy (unemployment, deregulation and precariousness of work, reduction in purchasing power).

These influence several fields at the same time: living conditions, social integration and the environment, three dimensions or spheres of sustainable development. The acceleration of the urbanization process has in many cases had a significant impact on the organization of the urban territory (urban sprawl, over-densification of neighbourhoods, proliferation of slums) [uncontrolled urbanization]. Accessibility to adequate housing and local services. The quality of the living environment (degradation of buildings, diversion from the primary use of green spaces, urban pollution, insalubrity, etc.). Living conditions of the inhabitants (unemployment, underemployment, public service deficit, urban violence).

Under countless internal and external pressures, the town loses its attractiveness, and has become a carrier of poverty, isolation, pollution and violence (BARBARINO-SAULNIER, 2005).

Yet the issue of quality of life is a relatively marginalized field for researchers and local actors. The social demand for living well, well-being or comfort in the town should now be part of the current urban issues at a time when the question of life is at the heart of development and sustainable development projects. This means that quality of life should reappear as a major concern for politicians, civil society and academic researchers (BAILLY, 1995).

For Algeria, the balance is relatively unsatisfactory: uncontrolled urbanisation, absent or marginal town planning, inadequate housing, abusive and speculative use of communal land reserves, overloading of public facilities and utilities, speculation and property rents, inappropriate industrial locations, competition over utilities (water), pollution, increase in the level of unemployment and the frequency of acts of aggression. All these aspects are all the more negatively felt as there is a lack of solidarity and proximity policy at the neighbourhood level. The situation is all the more alarming as we note a weakening of traditional social reference points (the tribe where the Arch, the family, the school, the State, associations, trade unions), the emergence of new behaviours focused more on individual material interests than on collective interests, and the absence of an effective associative relay, for the care of young people.

Often, the authorities have shown little imagination; they resort to occasional actions leaving young Algerians in disillusionment and disappointment and pushing them to make attempts to cross over to the other shore of the Mediterranean (the appearance of a new phenomenon: the Harragas¹).

¹**The Harragas:** (singular harrag) is an illegal migrant who hits the North African Sea, with some (boats) to illegally reach the other side of the Mediterranean. It is a native word of North African Arabic (Algeria), (in Arabic: The Harga is the action of "burning papers; passport identity card, laws").

Society in crisis, society in mutation, society in strong growth: on what values should we build our future? At a time when the Algerian population tends to impose itself as predominantly urban, thinking about the quality of life in the city is a challenge. A laboratory for social integration, a place for expressing the diversity of individual aspirations, a place for building a common future, the city focuses on major contemporary challenges.

The methods and purpose of the work

The objective of this work is to construct a reading grid based on criteria for evaluating the quality of the living environment and living conditions of the population in the neighbourhoods of Tébessa, an inner city in eastern Algeria.

Given that the notion of quality of life is not limited solely to the quality of the environment and built or strictly material conditions, but to intangible conditions that are part of the dream, aspirations and projects of citizens, the grid should include two sets of criteria: one designed to measure material conditions and the other to assess the level of satisfaction of inhabitants.

To construct the object of research, it has been to give voice to the subject, to the individual to give meaning to the quality of daily life and justify the exercise of its evaluation. This search for meaning can only be done through representations of society, to propose the individual "the inhabitant" as the actor who structures our territory (districts of the city of Tébessa) to give substance to this notion of the environmental quality and living environment of the inhabitants of the districts and to the indicators and criteria, to identify and evaluate them. Individual representations thus constitute the subjective bases necessary for the objective assessment of the residential living environments of the inhabitants.

Quality of life is mainly used to evoke the link between the inhabitant and his living space and refers to various notions ranging from: the preservation of the environment, improving

living conditions, the enhancement of living spaces. This concept also takes into account social problems such as: security, employment, meeting health, education, cultural and recreational needs. This means that the entries are multiple: each one of us could approach the quality of life according to his own perception, his scale of values, his sentimental attachments. This means the difficulty of finding a common denominator to objectively conduct an analysis on the quality of life, the living environment and environmental quality. For the present communication, the entry by the representations and perceptions of the inhabitants of five districts of Tébessa was privileged, it is a way of giving voice to the inhabitant to give meaning to the quality of daily life and justify the exercise of its evaluation.

In order to explain the inequalities within the towns' neighbourhoods, a questionnaire was undertaken in five neighbourhoods selected according to the following criteria:

- the geographical location of the neighbourhoods in relation to the historic centre
- the date of creation of the districts,
- the typology of the habitat,
- the urban morphology of neighbourhoods,
- the physical condition of the buildings.

Each of the study areas is characteristic and refers to several specific structural, economic and social problems. To fill the lack of information necessary for our study and in particular the delimitation of the districts, fields of our investigations, we proceeded by a superposition of the maps of the districts of the city of Tébessa provided by the council (APC) and the map of the districts of the ONS². This method allowed us to calculate the number of inhabitants per study area (CHRISTOPHER, 1998).

Study area

The city in the extreme east of Algeria is a part of Tébessa province that covers 138 hectares and 237 273 inhabitants in 2019 (fig. 1, photo 1).

² ONS : ONS Algerian National Statistical Office.

A questionnaire survey was undertaken during the first quarter of 2020 in these five districts of the city, fundamentally differentiated in terms of geographical location, age of creation and housing typology. This survey is motivated by the fact that particular attention is paid to the perception of the quality of life that the inhabitants of the city's neighbourhoods have. The individual representations are compared with the physical data of the neighbourhoods (DIENER, SUH, 1997).

The questionnaire was therefore chosen as a means and tool to apprehend the quality of life by considering living environments, local territories, the relationship to space and everyday life. The questionnaire is constructed and intended to help us identify individual practices and representations related to their implications

on the structures and functioning of urban districts. From the answers to the questions, the image of the place will be indirectly deduced by the degree of sensation and gratification of the inhabited place (determined in part by the psychological and sociological characteristics specific to each individual and each group).

Through the questionnaire and interviews, one enters personal life in search of identification of the preferences, priorities and aspirations of the inhabitants. To assess quality of life, questions were included in the questionnaire relating to the demographic, socio-economic and socio-cultural characteristics of the inhabitants. The properties of the dwelling (location, size and comfort level), outdoor living environment (green spaces, services, shops, equipment, cleanliness), urban atmosphere (sound environment,

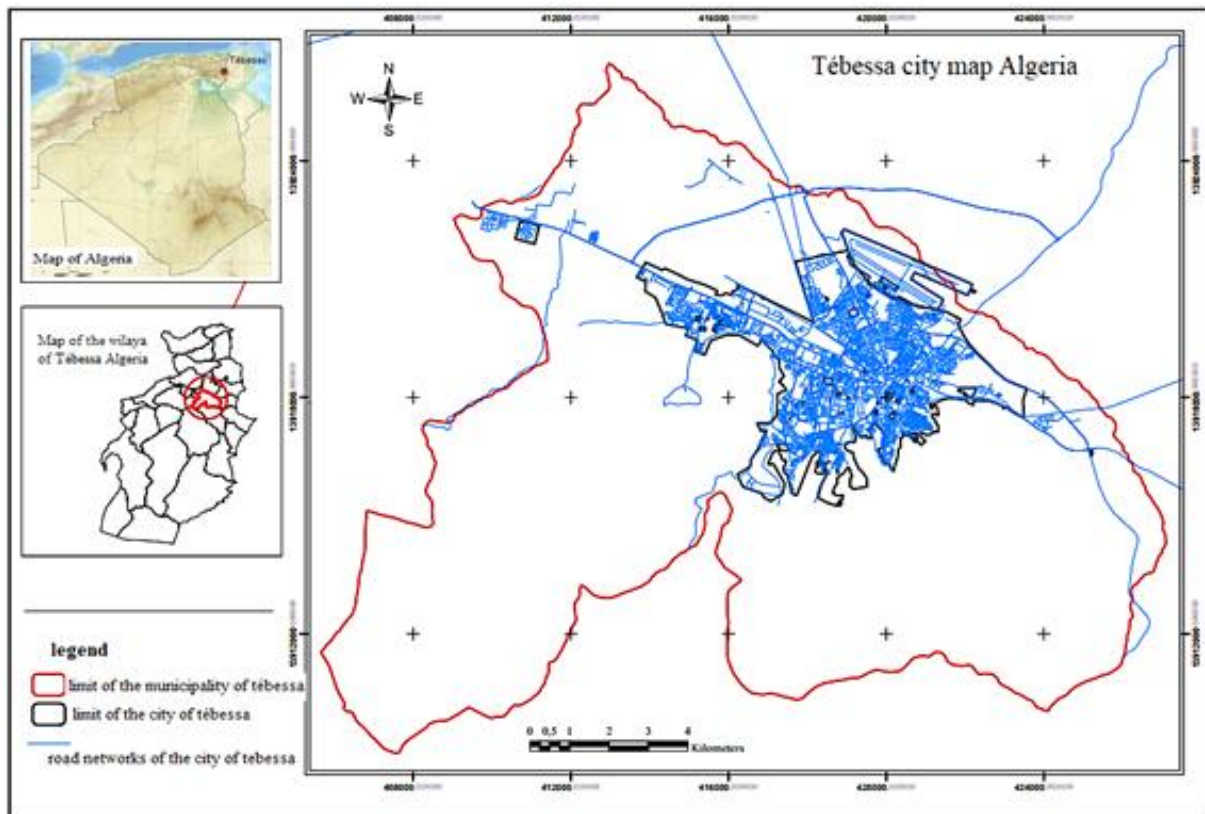


Fig. 1. The geographical location of Tébessa city
 Rys. 1. Położenie geograficzne miasta Tébessa (Tibissa)
 Рис. 1. Географическое положение г. Тébесса



Photo 1. Caracalla Tébessa triumphal arch – Thevest Algeria (source: www.leguidetouristique.com)

Fot. 1. Łuk triumfalny cesarza Karakalli (Caracalla) w Tebessa (d. Theveste)

(źródło: www.leguidetouristique.com)

Фот. 1. Триумфальная арка римского императора Каракалла в г. Тебесса (б. Theveste)

(источник: www.leguidetouristique.com)

calm/tranquillity, aesthetics, security), world of social relations (social ties – with neighbours, the Arch, tribe, solidarity/ conviviality). All these aspects intervene with more or less force in determining the quality of the environmental framework, living conditions, and social integration, three dimensions or spheres of sustainable development (GUMUCHIAN, 1989).

During the conduct of the survey, it was not possible to systematically follow the established order of questions. Indeed, the discussion frequently led to debate on unexpected topics and issues. This distance was not experienced as a failure of the questionnaire and the interview, but on the contrary as a success, since it made it possible to explore unforeseen themes and thereby enrich knowledge. The comparison of identical questions with different households made it possible to verify the sincerity and objectivity of certain information.

Particular attention was paid to the examples, stories and experiences cited by the inha-

bitants interviewed, which skilfully illustrate and understand certain mechanisms. The limitations of the method are related to the subjective dimension that remains general to the object of study – quality of life. How to correctly grasp and interpret expressions of emotion, frustration, even pretension? Thus, the analysis of the quality of life of the inhabitants of the districts of the town of Tébessa starts from the experience and the point of view of the citizen. This approach is considered relevant for understanding the different dimensions of the living space and perceived space of residents of these districts. The statistical and graphical representation of the survey results makes it possible to visualize inequalities in the quality of life of the neighbourhoods studied, and thus to point to neighbourhoods where specific development actions would be recommended to improve the quality of life.

Outcome and discussion

Relationship graphs are used to simultaneously test statistical relationships among a given set of variables. Relationship graphs explore the links between a large number of variables independently of the type of answers to cross (closed open-ended or numerical questions), relationship graphs will allow us to directly access the probability of the existence of the link and therefore the essential information. This method

is innovative, because to cross process according to traditional approaches, the process is relatively long from data to knowledge. First of all, we must identify the case in which we are among the 3 possible situations (closed x closed, closed x digital or digital x digital),

Relation graphs are a "data mining" or data mining tool, in the sense that they will allow us to access more quickly the essential information (significant relationships) contained in a vast data set.

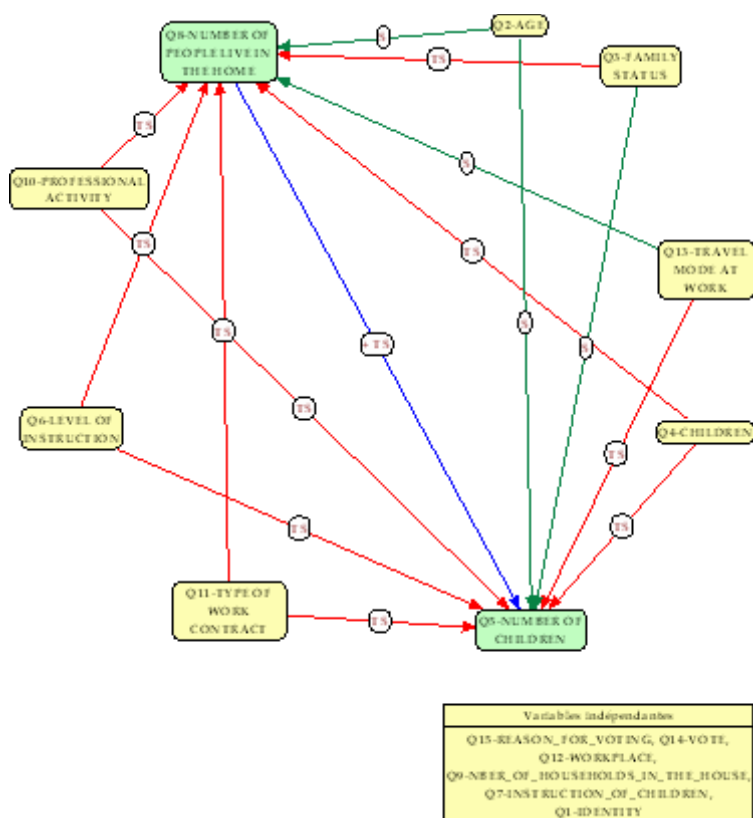


Fig. 2. The main relationships of the symbols of significance socio-professional part for the study districts of structuring variables

Rys. 2. Główne powiązania istotnych wyznaczników społeczno-zawodowych dla zmiennych strukturalnych obszaru badań

Рис. 2. Основные связи существенных общественно-профессиональных показателей для структурных переменных исследуемой территории

The dominant relations in this graph (fig. 3) which represents the socio-professional part of the surveyed population are immediately qualified thanks to an abbreviated symbol which indicates us in:

- TS: relationships that are very significant, for $p < 1\%$, 99% or more safe,
- S: significant relationships, for $1\% < p < 5\%$, 95–99% safe,

The relationship graph shows that the indicator the number of people living in a house and the number of children per family are the most closely related to other indicators such as

socio-professional activity and place of work. This shows the specificities of Algerian families in general and especially the customs in eastern Algeria where the family is very conservative.

This reflected in the behaviour of parents who demand that married sons, must stay with the big family and not leave the home in any circumstances, especially the mother, who believes that the husband somehow acquires the husband who is her own son, a kind of selfishness in the mother. In the Physical Environment Part of the Living Environment (housing, neigh-

borhoods) the relationship graphs allow to quickly and automatically explore the relationships between the variables in order to identify the most significant ones.

The proposed options give the possibility to find the main relationships, to explain a variable or to locate groups of variables close to TS, S, PS, NS. The types of relationships that may exist between variables are noted by the initials:

- TS: very significant relationships, for $p < 1\%$, 99% or more safe,
- S: significant relationships, for $1\% < p < 5\%$, 95–99% safe,
- PS: not very significant relationships, for $5\% < p < 15\%$, only 85–95% safe,

- NS: non-significant relationships, for $p > 15\%$, less than 85% safe.

The results brought a certain number of significant elements which confirm the hypotheses of studies (the quality of life of the studied districts of the town of Tébessa are the reflection of social inequalities). In order to translate the relationships established previously into useful and more precise information, the most striking elements within the significant relationships are observed.

The results of the relationships graph (fig. 3) show that the respondents' relationships in the questionnaire enter (Q25 – How do you assess the state of the building in which you live?) and the other variables are very significant (TS).

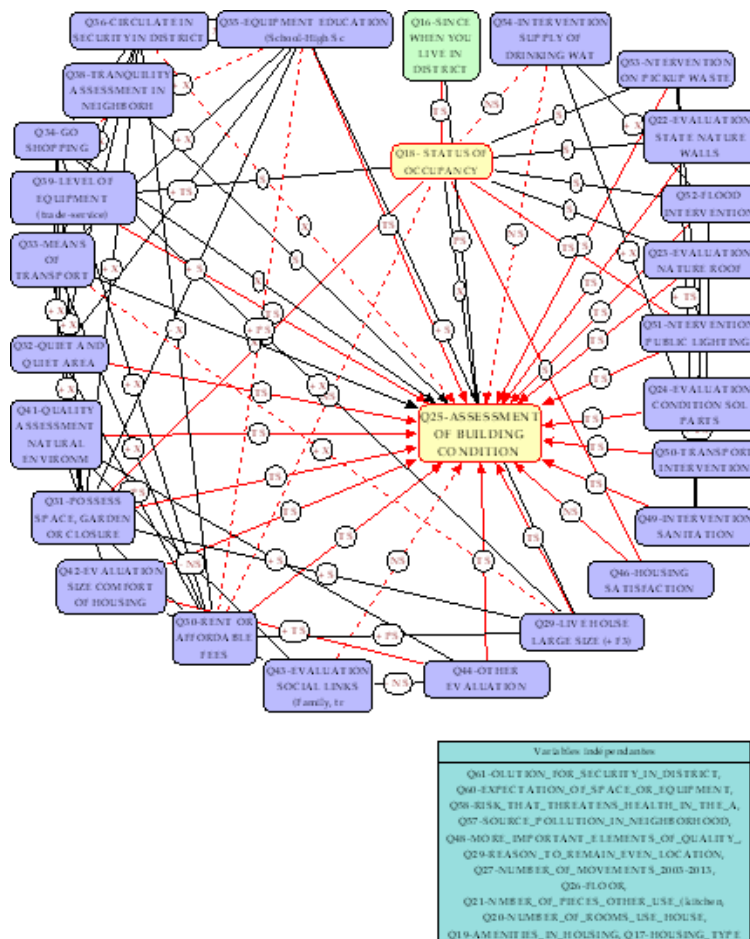


Fig. 3. Relationship graph: identification

Rys. 3. Wykres zależności: identyfikacja

Рис. 3. График зависимостей: идентификация

This indicates that the inhabitants of Tébessa's districts seek to obtain a certain convenience inside the place of residence (gas, elec-

tricity, internet sanitary etc.) the city is located in an area of the high plateaus very cold in winter and very hot in summer.

Data crosstabulation by correspondence factorial analysis

To process the survey information, a factor analysis of the AFC (Multivariate Statistical Analysis) correspondence data that processes the contingency tables is performed on all the questionnaire data using the SPHINX plus2 statistical software. For our part, we conducted a correspondence factor analysis (CFA) for all the data in the questionnaire. The matrix columns analysed correspond to the quality-of-life indicators and the rows to the five study neighbourhoods. The analyses focused on the inequalities in the quality of life of the population surveyed in the districts of the city of Tébessa. The partition into cloud groupings of points obtained with the AFC was done on the basis of a distribution of the indicators on the factorial plane.

The questionnaire survey conducted among households in five very different neighbourhoods according to the type of housing in Tébessa provides a better understanding of the representations and practices of the inhabitants. In-depth perceptions provide information on housing satisfaction. The degree of satisfaction reflects the way in which housing meets the needs of a household under certain constraints, such as location or location, which is a subjective notion to be interpreted with the spatialization of the neighbourhood. The responses of the households surveyed to this question indicate more or less widespread satisfaction. Four out of five neighbourhoods exceed the average in terms of the location of inhabited housing. Nevertheless, a spatial disparity in the satisfaction rate should be noted. In the precarious neighbourhood of Entour (Texas) 76.47% of the population surveyed said they were not satisfied and felt "not satisfied" in their housing.

Conversely, satisfaction is shared by 65.79% of those surveyed in the "700 dwellings" district and 59.55% in the Ennasr residential district (Sada). These results show a differentiated attachment to the inhabited space and its environment. These perceptions of inequality appear

to be related to the location of housing. The relationship and relationship to residential space is a complex phenomenon and the degree of satisfaction varies according to the relevance considered between each person's needs and the housing situation. This relationship between the inhabitant and his home, the way he lives it on a daily basis and the emotional value he praisers are all elements that intervene in the complex system of quality of life. The perception of the habitat and the involvement of the inhabitants in the restricted and intimate place of the housing suggest the importance of the principal residence in the definition and evaluation of the quality of daily life.

These geographical disparities result in part from the urban morphology of the neighbourhoods studied.

The location of the dwelling

The relations that the head of household surveyed maintains with his dwelling and the place where he is, are a specific form of the relations between man and his environment. The link to housing comes first from the construction of a territoriality. Housing thus represents the privileged space that covers human behaviour aimed at the appropriation of places by the family or the tribe in general. It thus appeared necessary to ask the inhabitants about the qualities of life in particular about the way in which each inhabitant perceives the location of his housing. To do this, we asked residents to define satisfaction with the location of the housing they currently occupy.

Statistical processing and the crossing of variables

The value of the concept of inequality in the social component of neighbourhoods lies in the fact that it has very close links with a large number of crucial socio-economic problems. By its nature, inequality refers to issues of distribution and social cohesion. If we consider, for example,

a household as poor when it does not have sufficient resources to participate in the various activities considered normal nor to have living conditions widely approved by society, we are referring directly to a concept of social inequality. Physical space tends to reproduce, on a residential level, the hierarchies observed in social space. It also reflects the inequalities that characterize the latter's behaviour, in a spatial form. Thus, they are not only individuals who are distributed differently in space, but also economic, social or cultural indicators.

From the beginning, the ages of the heads of households to be interviewed were determined, since the questionnaire was administered to heads of households over 20 years of age (adult ages in Algeria plus the two years of national service) (ROGERSON, 1998).

The characteristics desired by the inhabitants of the five neighbourhoods

A factor analysis (AFC: Correspondence factor analysis) of the different variables listed attempts to establish associations and construct correlations between the different modality's desirable by the inhabitants in the neighbourhoods for this question (fig. 4). What should be the characteristics of the neighbourhood in which you would like to live?

- Q29. Living in a large house or apartment (type F3 and above).
- Q30. Living in a house or apartment (if rented) with affordable rent or fees.
- Q31. Being able to own a space or a garden or a fence.
- Q32. Being able to live in a quiet and quiet neighbourhood.
- Q33. Power to reach downtown quickly by public or private transportation or on foot.
- Q34. Shopping every day in my neighbourhood.
- Q35. That my children can go to school without fear in my neighbourhood.

Q36. Being able to walk in the evening or outside of work hours without fear in my neighbourhood.

The two axes (axis 2) represent (96% of the information: axis1 83% on axis F1 and 13% on axis F2 of the variance the classification of the various criteria used makes it possible to obtain homogeneous classes according to a method of association between the various methods.

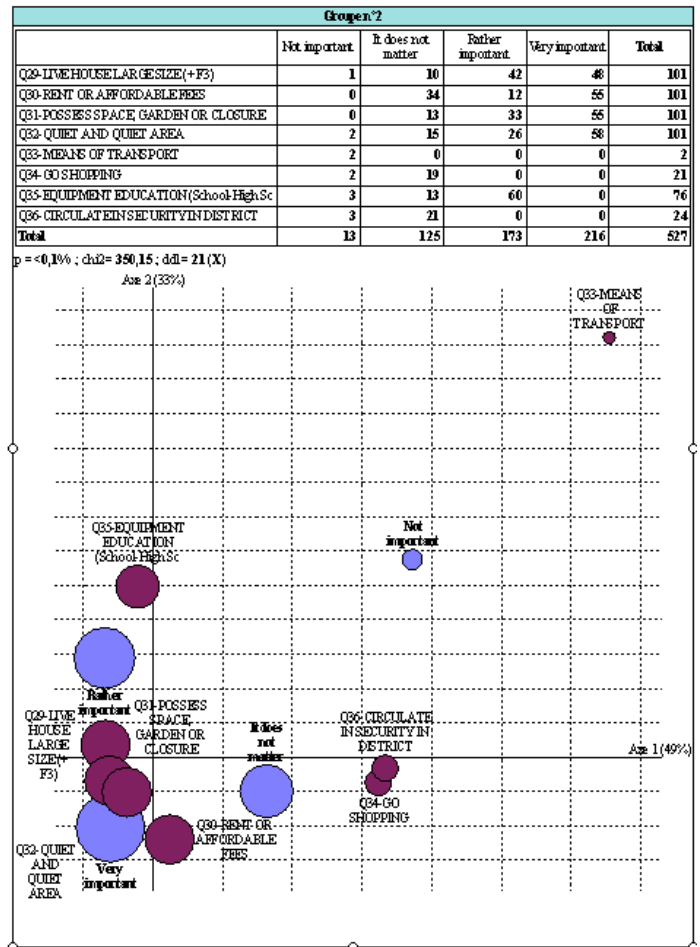


Fig. 4. The characteristics of the neighborhood in which you will love to live

Rys. 4. Charakterystyka okolicy, w której lubisz mieszkać

Рис. 4. Характеристика местности, где тебе нравится проживать

A first distribution, on the positive part to the right of the factorial plane formed by axes F1 and F2, corresponds to the aspirations of the respondents in the study neighbourhoods structured by the 'fairly important' elements to be able to live in a large housing unit (Q29) (ty-

pe F3 and above whose rent (or costs) are affordable (q30).

At the top left is the second group that is determined in the graph where the feeling "Never mind" emerges, to shop every day in the neighborhood (Q34), and own a garden (Q31).

At the centre of the factorial plan are the 'very important' feelings of the inhabitants who live in the rapid accessibility to the city centre (Q33) by a means of transport (public or private) and see a calm and quiet district (Q32) concerns the issue of accessibility which is a concern for residents of these places.

The overall assessment of the quality of daily life (fig. 5):

How do you currently evaluate your residential living environment?

- 38. The tranquillity of your neighbourhood.
- 39. The level of trade and service equipment in your neighbourhood.
- 40. The aesthetic aspect of your neighbourhood.
- 41. Natural environmental quality.
- 42. The size and comfort of the home.
- 43. Your social ties with your neighbourhood (family, Arch).
- 44. Others.

The current evaluation of the quality of daily life makes it possible to correlate the criteria and to synthesise them. This allowed the elements to be grouped into three groups:

1 – The first group is located at the top of the factorial plane axis 1; axis 2 and is characterized by the "rather unsatisfied" elements of everyday life. The proximity of these elements to the indicator (Q39, Q40, Q42, Q44) means an overrepresentation in terms of housing comfort, neighbourhood aesthetics, facilities and services, tranquillity.

2 – In contrast to this group are the elements evaluated as 'completely satisfied' and 'very good' in the living environment overrepresented by the quality of the environment, as well as the social ties presented by the presence of the family and belonging to the Arch.

3 – Between these two groups lies the centre of the factorial plan characterised by 'rather satisfied' opinions on the evaluation of the quality of life. The main concern of the respondents lies a little in the concern for tranquillity in the city which is an essential element for the inhabitants.

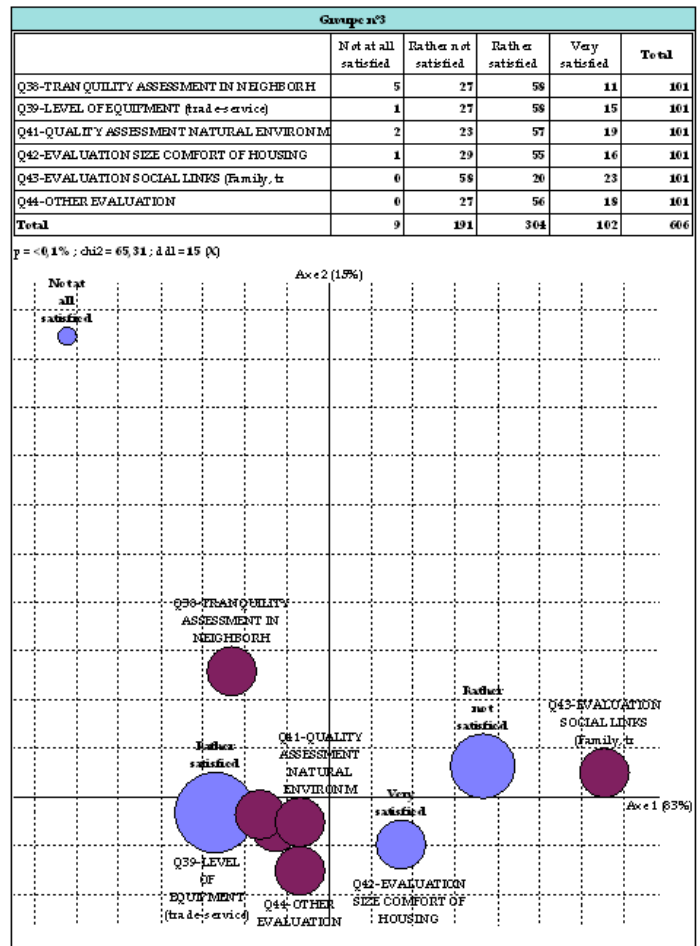


Fig. 5. Evaluation of the residential living environment of the study areas

Rys. 5. Ocena środowiska mieszkaniowego na badanym obszarze

Рис. 5. Оценка жилищной среды исследуемой территории

The global evaluation of the quality of daily life is well represented with 86% of information on axes F1, and 12% on axis F2 (almost 100%). This method of evaluating the quality of life proposes a reference base for the analysis of the perceptual system of the city's actors. By directly questioning the people who think, do and live in the city on the criteria they deem necessary to evaluate the quality of daily life, the

approach makes it possible to identify the current concerns of the inhabitants. A broader view of the foundations of quality of daily life provides information about society itself. Only, this one is not frozen, it evolves. The quality-of-life criteria presented correspond to particular and cyclical perceptions marked by a specific temporality and shaped by a specific geographical context as they make it possible to identify the criteria deemed necessary for the evaluation of the quality of daily life. These indicators reflect representations of a society. They therefore make it possible to grasp what is important for the inhabitants and to grasp what gives meaning to their daily lives. Satisfaction of the population surveyed in terms of local authorities taking charge.

Q – your opinion on the intervention of the services concerned (commune, prefecture, state; fig. 6):

49. With regard to sanitation.
50. Vis-à-vis transport.
51. Vis-à-vis the public lighting.
52. Opposite floods.
53. With regard to the collection of waste.
54. With respect to the A E P (drinking water supply).

On axis 1.61% of the variance is concentrated and axis 2.28%. The two axes represent the phenomenon with 86.95% inertia in the fields of sanitation, transport, public lighting, floods, waste collection and water supply.

As far as the perception of the households surveyed with regard to the intervention of the services concerned (the town hall, Daria, Wilaya) is concerned, almost only one group emerges with 'very often' and 'occasionally' coverage in terms of sanitation, public lighting, floods, waste collection and drinking water supply. This means the major concern of the local authorities to take into account the daily concerns of the inhabitants of the neighbourhoods surveyed.

The considerable effort of local authorities to ensure citizen's concerns and daily care to solve all their problems in neighborhoods and aiming to improve the citizen's living environment and conditions However, these are ans-

wers on many questions, leading to question about the role of local communities in the development of citizens' living environment. Do the APCs fulfil their duties towards the inhabitants? Are they doing their jobs properly?

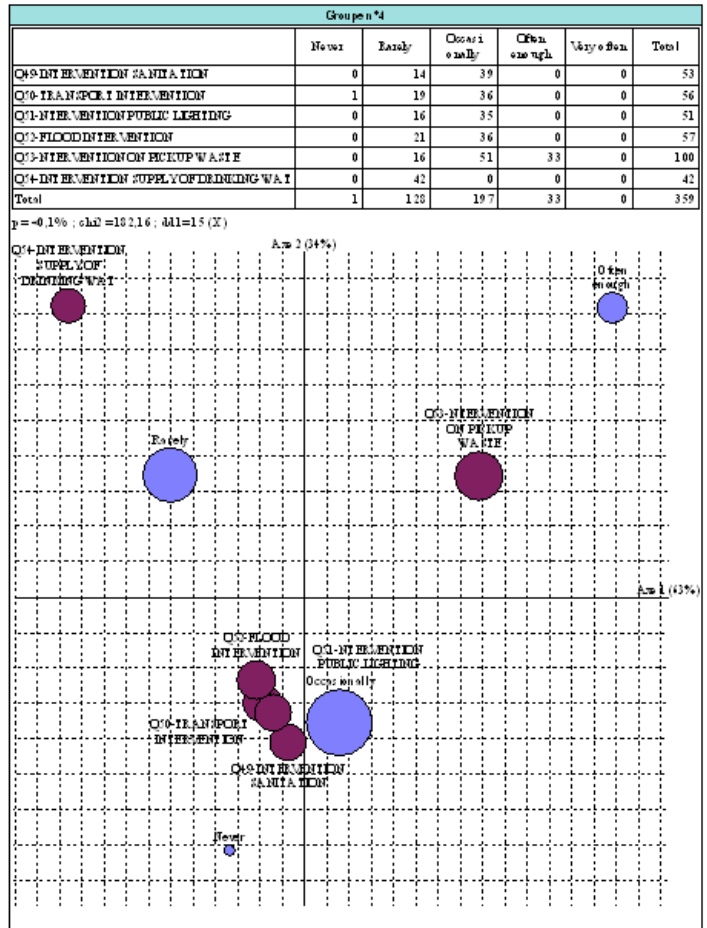


Fig. 6. Evaluating the residential living environment of the study districts

Rys. 6. Ocena środowiska mieszkaniowego badanych dzielnic

Рис. 6. Оценка жилищной среды исследуемых кварталов

Conclusion

There are major inequalities in the environmental quality in the neighbourhoods studied and a relatively negative assessment by the population of the quality of life in their respective neighbourhoods. The reasons for dissatisfaction differ from one neighbourhood to another: insecurity, sanitation, access to local services and facilities. These findings are the result of a lack of coordination between housing, housing and environmental policies.

The well-being and development of populations is a much-desired objective but not easy to achieve as the constraints, issues and conflicts that decision-makers must face are so important. The search for a better quality of life is often implicitly mentioned in state discourse and policies. In the words of the inhabitants of the city of Tébessa, quality of life remains dependent on harmonious and balanced urban development and an improved environment. The improvement of a certain number of indicators, such as safety, tranquillity and the availability of facilities and services, are likely to respond positively to the wishes and desires of the people we interviewed, whom we believe to be representative of the population of the town of Tébessa.

Seen as places favouring solidarity and conviviality between the inhabitants of the neighbourhoods, favouring exchange, recreation, relaxation and play, green spaces seem to favour social ties. The development of facilities and services in the town is also a priority. Based on accessibility, local shops and sanitation, education and bringing administrative services closer to citizens can contribute to improving the quality of life and street furniture.

The notions of safety and tranquillity are transversal to the proposed action. It is thus hoped to integrate them as a major concern in local policy. The objectives of tranquillity also have their place in urban planning and housing policy. In parallel to the development of the living environment by the fight against noise (squatted streets by the vendors), the local authorities must opt for a policy likely to ensure a better care of the inhabitants.

Cited and non-cited literature

- Authier J. Y., 2002: "Living in the district and city life: residential reports of people in old city centers," *Space and society*. No. 108–109: 88–131.
- Bailly A., 1981: *The geography of well-being*. Presses Universitaires de France, Paris: 239 p.

- Bailly A., 1995: Representations in geography. In: Bailly A., Ferras R. & Pumain D. (ed.): *Encyclopaedia of Geography*. Paris, Economica: 369–381.
- Bailly A., Ferras R., Jean-Paul., Herve Guerin., Gumuchian. Represent space. The imaginary space in school. Paris, Anthropos: 29–43.
- Barbarino-Saulnier N., 2005: Quality of life in urban diagnosis. The case of the city of Lyon. PhD in Geography and Urban Planning, University of Lyon.
- Boujrouf S., Hassan E., 2008: "Toponymy and territorial reorganization in Morocco: Figures, sense and logic. *Political space* No. 5 (02-2008)
- Christopher D. , 1998: "Territory, quality of life and social well-being," 4th Congress Wallonia to the Future.
- Diener E., Suh., 1997: Measuring quality of life: economic, social and subjective indicators. *Social Indicators Research*: 189–216.
- De Souza O., Diab Y., Morand D., 2004: Development of a system of indicators for sustainable conservation of the urban sites of historical interest applied to the Brazilian sites. XXII Meeting of Civil Engineering University, Marne-la-Vallee, France, 3 and 4 June 2004.
- Gumuchian H., 1989: "Representations in geography: definitions, methods and tools." In Yves.
- Hougas A., HAdd D., 2007: Management of municipal solid waste, if the city of Khenchela. Memory Engineering, Department of Management University Mentouri Constantine.
- Joradp. <http://www.joradp.dz/HFR/Index.htm>.
- Ons., 2009: *Www.ons.dz* statistical service.
- Pdau of Khenchela, El Hamma and N'SIGHA, 2008: Revision. "LDS" interdisciplinary studies office for assistance and advice Bordj Bou Arreridj.
- Rogerson R. J., 1998: "Quality of life and the global city." *International Conference on Quality of Life in Cities*.
- Stéphane G., 2014: *Surveys and Data Analysis with Sphinx* Pearson Edition London, UK.

Received: 09 January 2021

Wpłynął do redakcji: 09 stycznia 2021

Поступила в редакцию: 09 января 2021