Why in Barcelona? Understanding the attractiveness of metropolitan region for creative knowledge workers

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Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union

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ACRE

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EXECUTIVE SUMMARY

This report summarises the main findings of the survey to creative and knowledge workers and graduates. Firstly, the report offers a descriptive analysis of the main outcomes of the survey. The questionnaire asked creative and knowledge-based workers about their satisfaction with their city and environment. The results bring to light the relevance of soft factors in the Barcelona Metropolitan region (BMR from now on), and their influence on the choices made by creative workers. Namely, on their decision on living and/ or working in the area. Besides, the main outcomes of the survey will be analysed in depth in order to establish their connection to the current state of policies and strategies in the city region.

Chapter 1 offers a brief description of the BMR, and an overview of creative and knowledge-based activities in the region. The network of cities that forms the BMR includes more than 4.4 million inhabitants and 162 municipalities in an extension of 4,320 square kilometres. The region still has a strong industrial profile, with a multi-centric organisation of its industrial activity. The economic basis of this multi-centric shape is a highly-diversified economy, where, traditionally, the small and medium cities played a significant role through industrial specialisation. However, within each core, each municipality, there is also a spill-over effect of industrial activity towards smaller municipalities. The transformation of the economic basis of the model from industrial into a services-oriented economy is relevant to understand the current strategies to improve regional competitiveness and creativity. Nowadays the BMR is considered a dynamic European economic area; in the first half of the 2000s the regional economy grew steadily as both its GDP and labour market reflect. At great extent, growth was based on low innovation and low productivity pattern, with little investment in R&D. In the context of a major European industrial region, that means loss of competitiveness in front of a global context where new industrial regions emerge.

Chapter 2 describes the elaboration of the questionnaire, the construction of the sample and the fieldwork process in the Barcelona case study. We detail the methodology of surveying and problems regarding the data collection. The ACRE survey sample in the BMR involved 200 questionnaires; 150 workers in creative and knowledge intensive sectors; 50 graduates who were representative of all branches of science. The creative sectors included were *i)* computer games, software, electronic publishing; *ii)* architecture and *iii)* radio and TV. The knowledge intensive sectors were *i)* R&D and higher education; *ii)* law and other business; *iii)* ICT and *iv)* finance. The sample was designed taking into account both territorial representativity and population. The majority of interviews were conducted “face to face”.

Chapters 3 and 4 are the core of the report where the most relevant results are examined; from the description of basic data to more complex analysis. Chapter 3 describes basic features: demographic structure of the sample, basic residential and employment features, satisfaction (with the city, the working environment and the living environment. Chapter 4 deals with the importance of soft factors.

1 INTRODUCTION

1.1 The Barcelona Metropolitan Region

1.1.1 Current main features of the region

Although there has been a recent economic transformation to a service-oriented economy, the BMR is one of the main industrial regions of Spain (Oliver, 2006). In fact, the region still has a strong industrial profile, with a multi-centric organisation of its industrial activity. The economic basis of this multi-centric shape is a very diversified economy, where traditionally the small and medium cities played a significant role through industrial specialisation. The city of Barcelona has played – especially since the last decade – a central role in the economic development of the whole region. The so-called polycentric-networked city model (Trullén, 2003) is distinctive of Barcelona and is considered a determinant factor for the success of the city in terms of industrial development. The network of cities that forms the BMR includes more than 4.4 million inhabitants and 162 municipalities in an extension of 4,320 square kilometres.

The transformation of the economy – from industrial into service-oriented – of the BMR started at the time of the Spanish transition, a period when the collective effort was focussed on the reintroduction of democracy after Franco's death. The process continued well into the 1980s when economic and political transformations went hand in hand. The decade started under a severe economic recession which was part of the global economic restructuration from Fordism to flexible capitalism. Since the regime continued to promote industrial Fordist development in the Barcelona area until its very end, the transformations that were underway elsewhere occurred in Spain at a much later date.

1.1.2 Historical development

The transformation and challenges of BMR during the 1980s and 1990s are absolutely related to the industrial development of the city during the nineteenth and twentieth centuries. This industrial development brought about huge demographic and social changes in Barcelona. At the beginning of the nineteenth century, the establishment of textile companies in Barcelona and in adjacent cities such as Sabadell, Terrassa and Mataró effected migratory movements from the Catalan countryside to the cities. Besides Barcelona organised two universal expositions (1888 and 1929). These events drove the expansion of the city and attracted population from the Spanish rural areas. Immigrants came to work in the construction sector and were later on absorbed by the industries of the area. The social instability of the 1930s in Spain, with a clear social polarisation and strong forces against modernisation, resulted in the Spanish Civil War which was won by the fascist side. After the war, the country suffered a huge crisis and the new regime started a fierce repression against civil and democratic society. The Catalan and Basque regional governments were suppressed and Franco created a centralised administration in accordance with fascist ideology.

The 1950s saw the return to economic and social development in the country. The allied victory in 1945 forced the regime to moderate its fascist postulates and to give more autonomy to the economic forces. The economic growth of the 1950s was a key factor in the configuration of the BMR since new large companies demanded spaces and the price of land rose. Consequently the inner city factories moved to the periphery in a process that finished in the 1980s. There, new and larger companies in line with the Fordist model of industrial development were established. This process started to shape the Barcelona Metropolitan Region into its current aspect.

The fast growth in the 1950s generated again a massive exodus from the Spanish countryside to the cities. Barcelona and Madrid were the main destination of the rural population. Barcelona and the cities of the first ring underwent a radical transformation. The new arrivals settled in the peripheral areas of Barcelona and in the surrounding cities. Lack of infrastructures and housing, as well as lack of attention from the authorities, created deprived neighbourhoods with self-constructed, sub-standard housing.

1.1.3 Economic development under democracy (1980-1990)

After Franco's decease, Spain started a process towards democracy. In 1977 a new democratic constitution was approved, and in 1979 the regional government of Catalonia (the *Generalitat de Catalunya*) returned from exile and was legalised. During its consolidation in the beginning of the 1980s, the new democratic institutions had to face an economic recession. The recession was a consequence of the oil crisis and the old industrial model of the country[1]. The consequences of the recession were not only economic but also social for the industrial adjustment generated a high rate of unemployment and social unrest. Between 1970 and 1985 the city of Barcelona lost 25 per cent of jobs, mainly in the industry and construction sectors. However, the service sector grew 12 per cent, thus initiating a trend which would be consolidated in the future (*Dinàmiques metropolitans de l'àrea de la Regió de Barcelona, 1996, p.108*).

Apart from the economic problems, the BMR had to cope with basic problems related to urban and transport infrastructures and the catering for social needs. Due to the rapid industrial development of the 1960s there were entire neighbourhoods with vast deficits not only in equipments but also in housing quality and infrastructures. Some neighbourhoods lacked sewer systems and/or public transport facilities. Thus, in the first years of democracy, Barcelona city council adopted some measures aimed at the regeneration of neighbourhoods and undertook small interventions in the city. These initiatives were imitated by many city councils of the area. Besides, the Region as a whole was facing problems, such as transport facilities and waste treatment, that municipalities on their own could not solve. In the 1970s,

[1] The industrial transformation of Spain did not occur during the 1970s due to political instability and the isolation of the regime from the international economy.

the political authorities had already realised that the consolidation of the Metropolitan Region required major coordination between municipalities. In 1974 a metropolitan government – named *Consorci de la Regió Metropolitana de Barcelona* – with the participation of all the municipalities was created. With the arrival of democracy the reinstituted *Generalitat de Catalunya* abolished it[2]. Only the strictly necessary partnerships of coordination (transport, waste and water) were retained.

In socio-demographic terms, the migration inflows from rural areas to the metropolitan region ceased from the mid 1970s onwards. At the same time Barcelona and the big cities surrounding it started to lose population in favour of other municipalities located in the BMR. Consequently, cities of the second metropolitan ring such as Sabadell, Terrassa, Mataró and Granollers started to grow. This phenomenon went hand in hand with industrial relocalisation for, in the same period, companies of the industrial sector moved progressively to cities and industrial sites of the metropolitan region. The relocalisation process created new empty spaces in the inner city and, as we shall see later on in this chapter, the availability of space was key to the strategy for knowledge-based activity started in the 1990s. Gradually, companies and industries located in the periphery and forced population to relocate as well. As a result cities with stagnated population started to grow from 1980 to the present. The role of the regional government was essential in helping the consolidation of this pattern of mobility. The transport and communication model developed by the *Generalitat de Catalunya* reinforced the trend and originated changes in land prices and in the location of activities. This model was dependant, at a major extent, on private transport and generated territorial inequalities with a concentration of high-income classes in some municipalities (Herce, 2005). In short, the process of relocalisation of companies was followed by an intraregional population movement of workers. The territorial model of the regional administration reinforced and diversified internal movements: new cities and towns well connected with the city through railways and roads grew in population, attracting higher income classes.

1986 was a key date for Barcelona for two different reasons. Firstly, Spain became a member of the European Community. Secondly, and decisive for the city's development, the Olympic committee chose Barcelona as the organiser of the 1992 Olympic Games. Both facts had a tremendous effect on Barcelona and its economy. The European membership created the conditions for the liberalisation and internationalisation of the Spanish economy. In this context, the economy of the BMR widened its scope: from an industrial region oriented to the Spanish internal market, it became a European city oriented to external markets.

The nomination of Barcelona for the organisation of the 1992 Olympic Games gave the city a strategic objective that would regard urban renewal as a priority. The main idea was to improve regional infrastructures and to internationalise the city. The city council used the nomination to promote urban regeneration and to create new neighbourhoods. With the Olympic Games the city acquired a new global public image. Barcelona gained international visibility and became attractive as global city. Since then the city started to attract tourism and capital, and to improve its position among European cities in terms of quality of life and place

[2] In 1987 the metropolitan government was abolished because it was considered a counter power to the political project of *Generalitat de Catalunya*. The later was ruled by the Catalan, right nationalist party *Convergència i Unió*, whereas the municipalities of the metropolitan region were under the control of the Catalan socialist party.

to create a business. As a consequence of this process the economy of the city became more and more service-oriented. Meanwhile, the economy of the metropolitan region remained mainly industrial with heavy industries such as automobile and textile still playing a central role. During the second half of 1980s the Spanish economy experienced a huge development that affected Barcelona and its metropolitan region strongly. Citizens became particularly active in and engaged with the preparations for the Olympics at that time. The city rediscovered the potential of voluntary activity and that fact was a key element for the success of the Olympic Games of 1992.

1.1.4 Recent developments: the role of strategic planning (1990-2006)

The 1990s were a period of consolidation of the main trends initiated in the BMR in the previous decade. The social and economic transformations continued and intensified. In the first place we must acknowledge the success of the 1992 Olympic Games as a factor of transformation. The Games created an image of Barcelona as a global city, a place where to live and to locate a business, as well as a place to visit. This last fact, that is, becoming a demanded tourist destination, intensified the transformation of the economic profile of the city towards service-oriented activity.

In geographical terms, the territorial model created in the 1980s was consolidated: the main features of this model were the displacement of population to the peripheral area of the region and the intensive use of private transport. Although public transport was still the most used mean of transport[3], the public administrations continued to create and maintain transport infrastructures based mainly on roads and highways. Therefore intraregional mobility increased and became the main characteristic of the territorial model. Barcelona lost population in favour of the region, but the number of people who worked in Barcelona increased.

The main social transformation of the decade was an ageing population process, typical of advanced capitalist countries. It affected strongly the whole region but was especially noticeable in the city of Barcelona. This ageing process did not stop until the end of the nineties due to the arrival of international migration to the region. Another shift was in the field of education. Education levels increased during the 1990s through the improvement of the education system and, above all, through the increase of people with a university degree. During the 1980s and 1990s public investment in R+D grew. New universities, such as Universitat Pompeu Fabra, were created, whereas the existing universities offered new degrees and grew in staff and students. That growth stagnated in the mid-nineties.

Regarding the economic dimension, in the early 1990s the BMR suffered a new economic recession that affected the traditionally strong industrial sectors of the region fiercely, that is, textile and automobile industries. In Barcelona the employment tax decreased roughly 18 per cent between 1991 and 1994, whereas new service activities appeared. In spite of the recession, other cities in the area saw an employment increase during the decade due to

[3] As we shall see later, lack of infrastructures in intraregional railway is having significant consequences for the current economic development of the city.

industrial relocalisation to the periphery. At the same time the construction sector started to grow and became one of the most relevant economic sectors in the next decade. Moreover, services consolidated as the new dominant sector in the city and as an emerging sector in the whole region. But the transformation of the economy was not only based on a shift from industry towards services. During the 1990s several knowledge-intensive activities started to emerge in the BMR.

Therefore, the trend started in the1980s, that is, the growth of services in the city and the maintenance of the industrial activity in the region, intensified. This trend transformed the geographical distribution of industrial activity radically. As a result, nowadays the region presents a clear dual profile. On the one hand there is the city of Barcelona with a well-established service-based economy where the creative industries are growing rapidly. On the other, there is the outer region, where industrial activity still plays a key role.

During the second half of the 1990s, discourses and strategies encouraging the area to become a “knowledge region” appeared. These policies will be analysed comprehensively in section 1.3.

1.1.5 Current situation

Nowadays the BMR is considered a dynamic European economic area on account of its advanced industrial and tertiary activities (Trullén, 2001 #4). In the first half of the 2000s the regional economy grew steadily as both its GDP and labour market reflect (Oliver, 2006). Nevertheless, that growth was based at great extent on low innovation and LOW productivity pattern, with little investments in R&D (Vives, 2004). In the context of a major European industrial region, that means loss of competitiveness in front of a global context where new industrial regions emerge.

In fact, the BMR is still one of the most significant industrial regions of Spain and the main contributor to Spain’s export capacity (Trullén, 2001). This industrial sector is weak in the inner city, where service-oriented companies locate, but still relevant in the outer region. Although the external demand has decreased, the internal markets have expanded, and investments in construction have grown (Oliver, 2006). Besides, recent economic growth has been sustained at great extent by non-industrial economic activities, namely services and construction. In fact, the building sector and the housing market are key elements to understand recent economic growth in Spain. Since the mid-90s this sector has been growing dramatically and nowadays accounts for a significant part of total GDP. As the second most important urban agglomeration of the country, Barcelona and its metropolitan region are strongly affected by this trend. As we shall see in section 1.4, creative professions related to the building sector, e.g. architecture have gained in relevance in Barcelona. Another growing sector in the 1990s was tourism. Barcelona has been defined as a leisure-based city with tourism and cultural industries as its main asset and income source (Vives and Torrens, 2004a). The emergence of this sector accounts for part of the growth in the service sector in the city. Barcelona received one million and a half visitors in 1990, whereas in 2006 the figure was six million. However visitors’ expenditure has not increased in the same proportion. The fact that Barcelona has been included in the network of low-cost flights explains partially the above developments.

To sum up, in the present decade the BMR is consolidating the shift of its economic basis, with decreasing traditional industrial sectors and new emerging activities. The region presents a dual profile. The city of Barcelona has a consolidated service-oriented economy sustained at great extent by tourism and intensive knowledge activities. The outer region is industrial and the industries there are being transformed into knowledge-based industries with a focus on innovation. In order to consolidate the competitiveness of the city region, public and private actors are playing a determinant role in promoting creative and knowledge polices. In the next section we will outline these policies in depth.

1.2 Creative knowledge policies in the Barcelona Metropolitan Region

Barcelona, as many other metropolitan regions, is setting in motion a wide range of policies aimed at promoting innovation and creativity. These policies aim for the consolidation of the process initiated in the past decade, when knowledge and creativity became the main pillars of economic development. The purpose is to transform the productive system based on low productivity into one sustained on quality and innovation. The different public bodies of the BMR have been involved in this general objective. Moreover, the authorities have created new bodies or agencies with specific objectives, for example institutions aimed at promoting entrepreneurship or innovation, or institutions with the aim of coordinating different municipal authorities in the creation of infrastructures.

What characterises the Barcelona strategy is the long tradition of collaboration between different public bodies to arrange coordinated projects and a successful implementation of urban strategy. In this sense, the Olympic Games represented a turning point for the city for, then, an environment of collaboration between different administrations and public bodies and between these administrations and citizenship was created. It is not possible to understand the current regional strategy on innovation without the past experience of the Olympic Games and later developments. We must understand the current initiatives on innovation in a context of strategic planning, that is, cooperation between public and private institutions in the definition of mid-term objectives for the city.

In fact, the long tradition of collaboration between public and private institutions was formalised through a new institution thanks to the Olympic Games. In 1988 the Barcelona Strategic Plan was created. This organisation is a partnership formed by public and private actors such as Barcelona city council, the Barcelona Chamber of Commerce, Industry and Shipping, and the Barcelona University amongst others. The partnership plays the role of a lobby and a think tank (interview Strategic Metropolitan Plan) that recommends a common strategy for the economic and social transformation of the city. The three first strategic plans, approved in 1988, 1990 and 1999 established strategies for the city of Barcelona so that the city would benefit from the Olympic event and its repercussions. Although it was in the Olympic context that Barcelona started to practice strategic planning, new plans are being made with the aim of improving the economic and social system of the city to compete with other European cities. Hence, the policy of strategic planning has created a mechanism of governance that is sustained on consensus and cooperation between public and private actors. This procedure is becoming a key element for the common strategy of the whole metropolitan region.

In 2003 the new Metropolitan Strategic Plan was approved. The main objectives of the plan are to improve productivity throughout innovation and knowledge and to improve social cohesion as well. Culture plays a key role in the later aspect. The environmental dimension is also being taken into account. This multidimensional approach allows for a long-term strategic vision of the territorial development in many different aspects, such as transport facilities, infrastructures, culture and education. The role of public bodies in improving competitiveness and innovation relies at great extent on the creation of infrastructures and generation of spaces and environments that knowledge and creative companies can find attractive. Public bodies are promoting also the fostering of the local knowledge resources of the region, improving education and training, promoting innovative entrepreneurship, upgrading research and advancing collaboration between public and private institutions.

One of the most relevant elements of the whole strategy is the creation of the 22@ district. The old industrial district of the city –Poblenou– is undergoing an urban renewal process in order to condition it for the establishment of knowledge and creative industries. The new district under construction is already attracting creative and knowledge capital –mainly ICT, video and cinema, and research–, and several local companies have been established there (Oliva, 2003). Moreover, universities such as *Universitat de Barcelona, Universitat Pompeu Fabra* and *Universitat Oberta de Catalunya* are present in the district. A similar future project is the Biopol in l'Hospitalet, which aims at attracting companies in the field of biomedical research. The project is already in its initial phase and urban renewal of former industrial districts of the city neighbour to Barcelona is under way. Apart from the above projects, Barcelona city council is promoting a centre for design in the city and the different universities have created or improved recently their technology and science parks to attract ICT companies and to strengthen public-private cooperation in research.

One pillar of the whole strategy on innovation and creativity in the region is the improvement of the knowledge base through the generation of knowledge. That is, the upgrading of education levels of population to improve human capital, the increase in the expenditures on R&D&I and the interaction between public and private research centres. In the same vein, the most relevant institution is Barcelona Activa –created in 1986– whose aim is to improve entrepreneurship and activate human capital, Barcelona Activa plays a key role in assessing and funding innovative entrepreneurs and is nowadays a referent at European level.

Regarding policies to improve creativity and innovation, we must underline a particular characteristic in the model of economic development of Barcelona and its metropolitan region, that is, productive diversification. That means that strategies are directed to reaching specialisation in a varied set of sub-sectors. The most strategic sector for the BMR is formed by the cultural industries. The sector includes an oriented profile in book, music and audiovisual production, as well as artistic-oriented activities such as stage arts and visual arts. Both autonomous and municipal authorities have created institutions to promote and reinforce the cultural sector for it is seen as one of the strengths of the region. In line with the general strategy, a cultural strategic plan has been implemented/ designed for the city of Barcelona in order to coordinate all the cultural policies and objectives.

As far as knowledge-intensive activities are concerned, the strategy is to take advantage of the traditional industrial diversification of the region to modernise the strategic sectors in order to incorporate them into the knowledge economy. Some examples are the chemical sector which has developed and consolidated a pharmaceutical industry; publishing, which is nowadays one of the most technologically advanced industries of the tertiary sector; and the food industry that has gained relevance in recent times and is nowadays a flagship of the Barcelona city council. In the same way, the historically most relevant industrial sector of Barcelona, the textile industry is evolving towards design and research on new materials and techniques. Finally, the architecture sector in the BMR has become a global referent due to its significance in the Olympic urban renewal process, and because of the substantial growth in the construction sector during the second half of the 1990s.

1.2.1 Future challenges in economic and creative development

As it has been assessed thus far, the city's strategy to tackle economic transformation has been based on the "knowledge city" discourse since the second half of the 1990s. Nevertheless the transformation of the region into a knowledge society faces several challenges:

Taking advantage of the polycentric nature of the BMR: the characteristic network of specialised cities of the Barcelona Metropolitan region, formed mainly by small family enterprises, can, potentially, hinder the economic transformation into a 'knowledge economy'. As it is known, small industries have more problems to innovate and change its productive basis than larger companies. Nevertheless, the former enjoy other advantages such as the embeddedness in the territory. In the case of Barcelona Metropolitan Region, the small entrepreneurs of the Metropolitan region have not placed their bets on innovation until recent times. As a result, there has been a transformation both in economic specialisation and in city centres. The former dominant industrial activities are weakening whereas other activities are growing in relevance. In the same way, some traditional industrial cities are becoming nowadays deprived areas whereas new flourishing economic centres are emerging in the region. In the social dimension there are also important challenges to face. The Region is receiving significant international migration inflows which are creating new social needs and demands. Besides, the ageing local population has created also new needs in the same aspect.

New infrastructures and upgrading existent infrastructures: The region must address challenges on infrastructures to allow the model to consolidate. From 2001 onwards, new internal and external transport facilities are being built whereas old infrastructures are being improved. Some examples of these new infrastructures are the High Speed Train or the new airport terminal. According to city managers the infrastructures mentioned above will connect the region to global markets, and new spaces will attract companies and creative and knowledge talents. Besides, the renewal of ICT infrastructures is under way.

Unification of indicators and concepts: There is a lack of common definition of concepts between the different actors that participate in the common strategy. In this sense there are different definitions of what the creative sector is and differences in the indicators to evaluate its evolution. Hence, the establishment of common criteria in indicators and concepts is necessary for the clarification of a common strategy.

A coherent public sector with one-direction objectives towards a knowledge and creative city: There is a need for clear and consistent institutional coordination so that unique concepts and strategies can be defined. It is necessary to establish leadership and to choose what sectors are strategic and are of desirable promotion (Ruíz, 2004).

Targeting upmarket tourism: As has been outlined above, tourism to Barcelona is increasing and tourism related industries are gaining relevance. The growth can, though, go in an undesired direction if the visitors are only attracted by the sun and the beach. The sector will only contribute to the innovation and knowledge economy if the city becomes attractive on account of its culture and creative resources. Current strategies are directed to attract "high-quality tourism" by creating new amenities and services.

A more stable housing market: The growth of the construction sector has resulted in high and constantly rising house prices. This has become the major problem all over Spain, and particularly in Barcelona. In Barcelona city, prices have trebled since 1990 and there are no prospects of immediate deceleration. Although the drive of the housing market has slowed down and the number of transactions has decreased, there is a significant part of population that has problems of housing affordability. The rising prices affect not only low-income social groups but also new social groups that have to live in sub-standard accommodation (Tatjer and García, 2006). For these reasons, public intervention is needed to face the challenge that overpricing in the housing market poses. New schemes of housing policy, especially for selected collectives such as young people, are being currently put into practice.

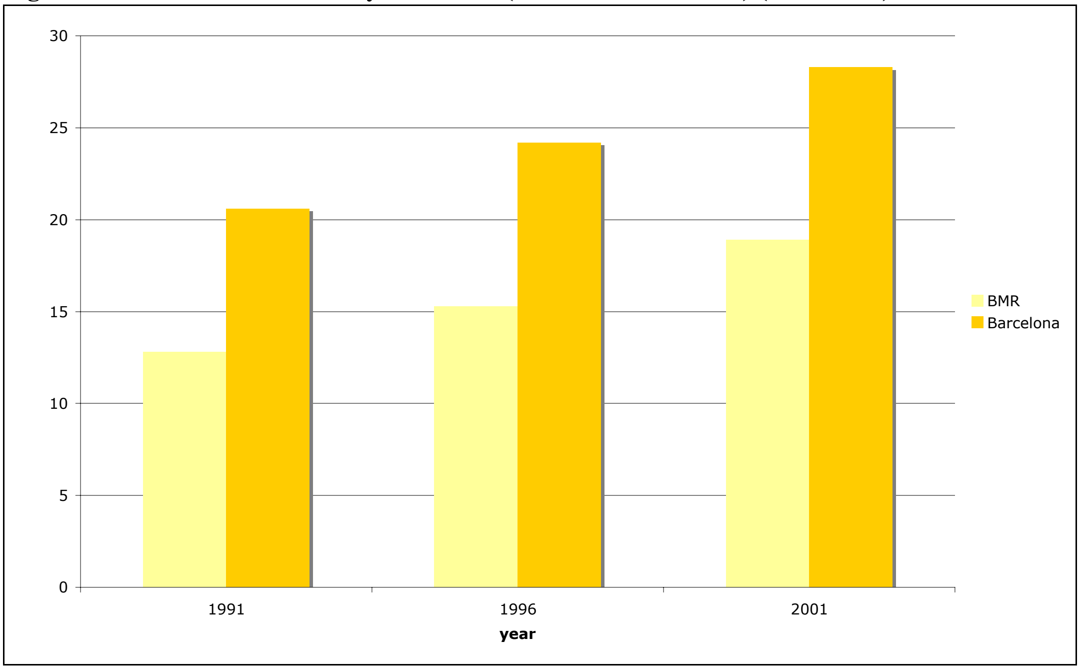
1.3 The state of creative and knowledge sectors

In this section we will analyse the current situation of graduates as well as that of the creative and knowledge sectors in the Barcelona Metropolitan Region. Firstly, we will describe the present situation of secondary and tertiary education. Secondly, we will offer a general overview of the relevance of creative and knowledge sectors and assesses the selected sectors for the Barcelona case study and its significance in the general framework of creative and knowledge industries in the BMR.

1.3.1 General overview of tertiary education in the BMR[4]

The education levels in BMR were extremely low until the last two decades. The low rates are explained by the recent history of the country that experienced a civil war and a dictatorship that did not promote education of the population[5]. However, the number of population with tertiary education started to increase from the early 1990s onwards. In 1991, the population with tertiary education in the BMR was roughly 12 per cent of the total population, but in 2001 this percentage increased until 18 per cent. This increase was similar in the city of Barcelona although it concentrates a major proportion of population with tertiary education. Figure 1.1 shows the evolution of education in Barcelona and in the Barcelona Metropolitan Region. In Barcelona the population between 25 and 64 with tertiary education represents 28.3 per cent of the total population. In the metropolitan region this percentage falls under 19 per cent.

Figure 1.1 – Evolution of tertiary education (5 and 6 ISCED code) (1991-2001)



Source: Barcelona Ciutat del Coneixement

Most public and private universities of Catalonia are in the BMR. The private university system plays a secondary role with only 17.2 per cent of total students. The Universitat de Barcelona, with nearly 205,000 students, is the biggest university in Catalonia. There, social science studies are the most demanded and, in this field, law and economy are the degrees chosen by the highest number of students. As far as the artistic, design and media students is concerned, part of them attend specific academies and institutions with their own degrees.

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[4] The Spanish statistical system does not provide disaggregated data on graduates. Therefore it is not possible to analyse in depth the situation of creative and knowledge graduates. Thus, we will offer a general overview of graduates in the BMR and a description of the current situation of the university system.

[5] Under Franco's regime the Catholic Church controlled the education system. In fact, one of the main objectives of the new regime in the victory of 1939 was to eliminate the Republican education system for it was considered antipatriotic.

Although the number of institutions has grown in Barcelona during the last decade, the number of graduates in these branches remains low.

1.3.2 General overview on creative and knowledge sectors

In this section we will describe briefly the significance of creative and knowledge sectors in the overall economic system and their internal structure attending to the relevance of the different activities that are part of these sectors. We can describe the general situation of these sectors thanks to different data on enterprises and workers at the provincial level and data at autonomic level – data regarding the whole Catalonia[6]. These data reveal a slight increase of the creative and knowledge sectors as defined in the ACRE project.

Whereas the number of companies that work in the creative and intensive knowledge sectors are growing in the whole Autonomous Community, in terms of job creation the increase is less evident as Figure 1.2 reveals. What explains this situation is the fact that not all the creative and knowledge sectors are growing at the same pace. As we shall see presently, the sectors leading creative and knowledge activities have changed.

Figure 1.2 - Evolution of creative and knowledge employment in the Barcelona province (1995-2006)

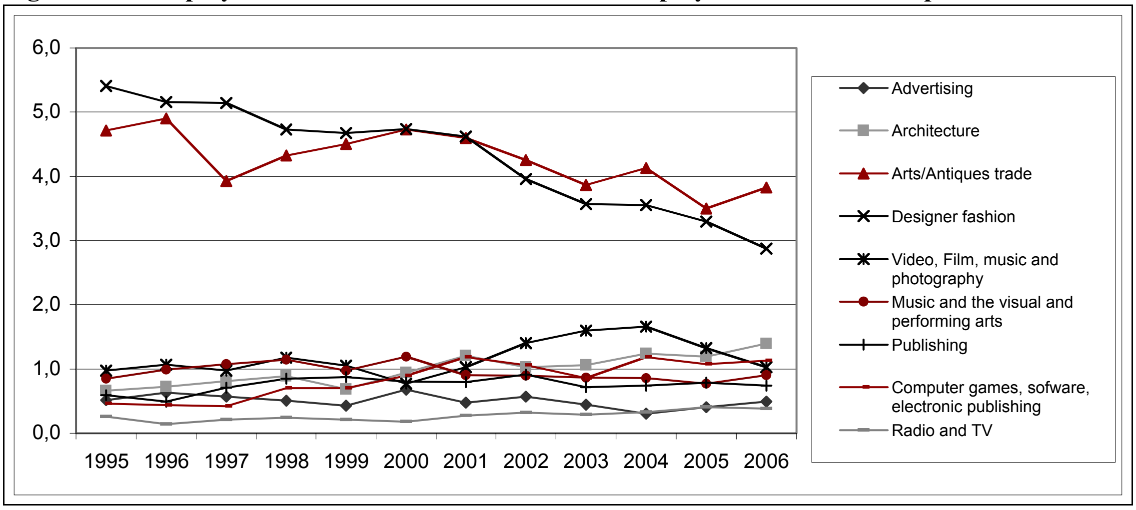
Source: EPA

During the last decades of the twentieth century, creative and knowledge activities that employed a higher proportion of people were, on the one hand, “designer fashion” an activity that includes the textile industry. This sector, that has been historically one of the most significant industrial sectors of the Barcelona Metropolitan Region, is decreasing both in jobs

[6] Although there is no compiled data on creative and knowledge sectors in the Spanish statistical system we can ellaborate it through the NACE codes.

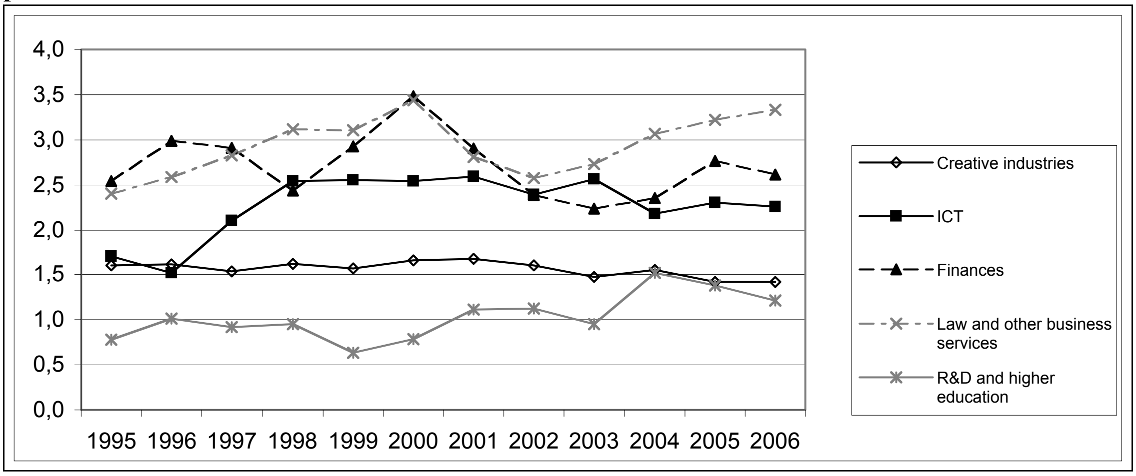
and in economic relevance. That explains the decrease in employment of this kind of industries. As shown in Figure 1.3, between 1995 and 2006 this sector lost 16,000 jobs. On the other hand, Arts and antiques related activities are also decreasing both in terms of jobs and economic contribution. Instead, a new trend emerges with computer, architecture and R&D and higher education as increasing creative and knowledge activities. Law and other business services are also experiencing a significant rise.

Figure 1.3 – Employment in creative sectors over total employment in Barcelona province



Source: Encuesta de Población Activa, INE

Figure 1.4 – Employment in knowledge-intensive sectors over total employment in Barcelona province



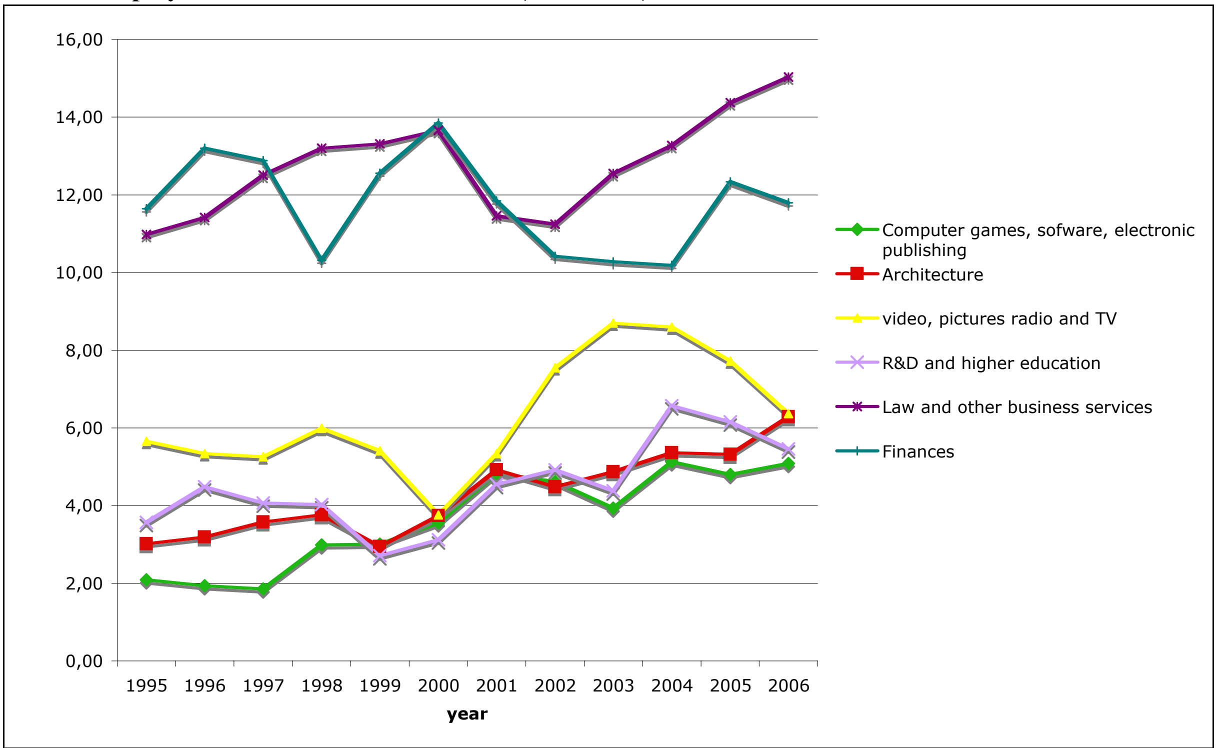
Source: Encuesta de Población Activa, INE

Summarising, the relevance of the creative and knowledge sectors in the economic activity and employment increased and there are new emerging sectors and sectors under deep transformation[7]. Figure 1.3 shows this general trend. Whereas arts and designer fashion are

[7] Decrease in some sectors defined as "creative" in the Barcelona metropolitan region can be explained by the fact that in BMR these sectors are based on the previous industrial, low productive model and are under huge

the biggest creative subsectors in relation to employment, they have had a low increase in the last ten years in comparison to the other subsectors. The subsectors that increased the most are architecture and computer games, software and electronic publishing. As has been pointed out in the previous section, the building sector plays a key role in the economic development of the region. The growth of architecture is due, as has been seen, to the growth of this sector. Hence, that can help to understand the relevant increase of architecture between 1995 and 2006 (roughly 3.3 per cent). Computer and software development grew substantially and steadily from 1995 to 2006 for the .com crisis in 2000 affected the subsector only temporally.

Figure 1.5 - Employment in selected branches – percentages over total creative and knowledge employment. Province of Barcelona. (1995-2006)



Source: EPA (INE)

We would like to emphasise, at this stage of our outline, that the growth of the creative and knowledge sectors is taking place in a framework of general economic and employment growth. Between 1995 and 2000, 900,000 new jobs were created in Barcelona. In spite of that, as we can see in Table 1.1, the contribution to the economy of the defined creative and knowledge sectors in total employment is increasing slightly.

transformation.This is the case of the textile industries that are becoming more creative through innovation (Pareja et. Al. 2007).

Table 1.1 - Employees in the creative industries

Subsector	**Percentage over the total (2006)**	**Increase 1995/2006**
Creative industries		
Arts/antiques trade	3.8	1.25
Designer fashion	2.9	0.82
Architecture	1.4	3.27
Computer games, software, electronic publishing	1.1	3.81
Video, Film, + Radio and TV	1.0	1.75
Music and Visual and performing arts	0.9	1.64
Publishing	0.7	1.92
Advertising	0.5	1.48
Knowledge industries		
Law and other business services	3.3	2.14
Finances	2.6	1.59
ICT	2.3	2.05
R+D and higher education	1.2	1.54
Rest of activities	77.8	1.54
TOTAL	100.0	1.54

Source: EPA, INE

1.3.3 Selected creative and knowledge subsectors for the survey

As we explained above, recent transformation of employment features of the creative and intensive knowledge industries in the region must be considered in order to select pertinent branches that could represent the whole sector. Following the ACRE guidelines six strategic branches in the creative and knowledge industries were selected. For the Barcelona case study, Architecture, R&D and higher education were selected as relevant specific branches. The complete list of branches is listed below and shadowed in grey in Table 1.1.

- Computer games, software, electronic publishing, software consultancy and supply
- Motion pictures and video activities, and radio and TV activities
- Architecture
- Law and other business services
- Finances
- R&D and higher education

As Table 1.1 evidences, these sectors are not the most relevant in terms of jobs over total employment, but they are among those creative subsectors which are experiencing the most significant growth.

2 METHODOLOGY

In this chapter we will explain three aspects related to the methodological proceedings of the data collection. Firstly, we will analyse the adaptation of the questionnaire to the Barcelona case study. One of the main elements that must be taken into account before the elaboration of a questionnaire and a sample is the size of the population to be surveyed and its territorial distribution. As has been pointed out in chapter one, BMR has more than four million inhabitants and more than four thousand square kilometres. These features impelled us to be precise in the application of the common questionnaire, and to clarify some aspects that could create confusion. Secondly, we describe briefly the process of selection of the sample, taking into account territorial distribution of the sample. Finally, the process of data collection is described.

2.1 Questionnaire

Although the questionnaire is common for the 13 ACRE case studies, some adaptations have been made in order to make it coherent to the interviewees. The objective of the questionnaire is to detect the elements that creative and knowledge workers, as well as graduates, consider relevant to work and live in the BMR. The questionnaire is structured in four parts that include questions regarding the satisfaction of the interviewed in several aspects. Beside the factual questions, there are, in each section, questions that refer to aspects of satisfaction. The answers will allow us to assess the relevance of the so-called soft and hard conditions that reinforce the economic development in the BMR (Musterd et al., 2007). The sections are as follows:

- **Section A** Satisfaction with the city (opinion on city of residence)
- **Section B** Satisfaction with job and work environment (workplace and working conditions)
- **Section C** Satisfaction with the neighbourhood and dwelling (particular elements of place of residence)
- **Section D** Background data (social and demographic information)

The questionnaire in its original version, presents some problems to reflect the reality of the BMR. In the first place, the polycentric nature of the BMR generates a need of definition of the place of residence. For that reason, we cannot assume that the category ‘city’ is referred to Barcelona. As it was explained in chapter one, BMR is a network of cities with Barcelona in the core but with other important urban centres such as Sabadell, Terrassa, Mataró or the cities surrounding Barcelona (L’Hospitalet del Llobregat, Badalona, El Prat del Llobregat, Sant Adrià del Besòs, etc.). Taking that fact into consideration, we had to, firstly, ask the interviewees about their city of residence. Moreover, the territorial distribution of the sample was based on the workplace not on the city of residence. This made the question more relevant. The former neighbourhood or city of residence has been included as a part of the question A2 "where did you live prior to moving to your current address?".

In the same direction, questions referred to geographical residence have been adapted to reflect the reality of the BMR. The questions that needed a revision in that direction were A23 (about place where the interviewed spends the weekends) and C1 (about the situation of the place of residence in the region). Tables 2.1 and 2.2 show the adapted category answers for these questions.

Table 2.1 - Adaptation of question A23: Typically, where do you spend your weekends?

Original	Adaptation
At home	In my city
In Dublin (but not at home)	In the Metropolitan region but not in my city
Out of Dublin but in Ireland	Out of my city but in Spain
Out of Dublin and in Europe	Out of my city and in Europe
Don't Know	Don't Know

Source: ACRE survey

Table 2.2 - Adaptation of question C1: Would you consider the area in which you live to be...

Original	Adaptation
City Centre	Barcelona city centre
Rest of the core city (just beyond city centre)	Rest of the neighbourhoods of Barcelona
Rest of the city, including the outskirts	City adjacent to Barcelona
Village or small town in the metropolitan area	Village or small town in the metropolitan area
Medium or large town in the metropolitan area	Medium or large town in metropolitan region

Source: ACRE survey

As can be seen, this adaptation is directed at a major understanding of the questionnaire but the categories remain compatible with the general questions formulated in the ACRE project.

The questions referred to present and past living places also needed an adaptation. We must take into consideration that the levels of mobility in the BMR are low. It is usual that the population remain in the same municipality or even in the same neighbourhood or address all their lives or a very long period of time. For that the following questions were modified:

- A4) which of the following most applies to you and your household? In that case some answers were considered invalid
- A22) If you have lived elsewhere for 1 year or more, how would you rate Dublin as a place to live, compared to other places you have already lived in? In that question, a new answer was added to the question: "I have never lived in another place".

Another problem is related to the subjectivity of some concepts "foreign people" and "minority groups" in questions A16 and A17. The lack of definition allows the interviewed to understand foreign people as immigrants as well as students or even visitors. In the same line, "minority groups" can refer to immigrant communities but also to disabled people or other disadvantaged groups. These terms appear in the questions related to tolerance in section A. This problem, found by the interviewers, was solved defining foreign people as qualified as well as unqualified migrants, whereas minority groups were understood as groups that can potentially suffer social exclusion.

2.2 Sampling

The ACRE project establishes the following groups of professionals and graduates to be surveyed:

- 75 creative workers from selected creative sectors
- 75 intensive knowledge workers from knowledge selected sectors
- 25 university /polytechnic graduates
- 25 arts and media school graduates

The strategy for selecting creative and knowledge workers was based on their workplaces. Thus, the territorial distribution of the sample did not have to be based on territorial distribution of workers but on territorial distribution of creative and knowledge companies. For territorial representation purposes, we differentiated between the city of Barcelona, the first ring of the metropolitan region and the second ring[1]. Since there is no available data on spatial distribution of industries in BMR, we were forced to distribute our sampling according to data on population distribution. That generates possible bias in the distribution of creative employees. Fortunately, there is available data on creative and knowledge industries at municipal level. We corrected the population distribution taking into account the fact that some cities concentrate knowledge and creative industries. For that reason, the distribution of the sample between sectors and territorial distribution was as Table 2.3 shows.

Table 2.3 - Distribution of the sample per branches and territory (Creative and Knowledge sectors)

	Total	BCN	1st ring	2nd ring
Software	21	7	7	7
TV, radio, video and motion pictures	27	10	9	8
Architecture	27	10	9	8
TOTAL	75	27	25	23
Law	35	12	12	11
Finances	27	10	9	8
R+D	13	5	4	4
TOTAL	75	27	25	23

Source: Own calculations on EPA data

Elsewhere in our research we suggest that the tradition of polycentrism of BMR shown in chapter 1 is being followed at lesser or greater extent by the creative industries. In that sense,

[1] BMR has 162 municipalities that are divided in three main areas: Barcelona as the central city, the first and the second ring. The first ring extends in an area of twenty kilometres from the centre of Barcelona and has 35 municipalities. The second ring is a 45 kilometres wide area and has 126 municipalities. Barcelona and the First ring have high population density 2,918 hab/km^2 whereas the second ring has only 1,056 hab/km2. This is relevant to understand patterns of residence and mobility.

we can assume that creative and knowledge companies are in the main cities of the region. The city of Barcelona seems to attract creativity whereas knowledge tends to be established in the region. Following these assessments, we corrected the population data of the first and second ring of the Metropolitan region giving more importance to the city of Barcelona. In the same way the selection of companies of the first and the second ring was based in specific cities: for the second ring, the cities of Sabadell, Sant Cugat and Terrassa in the county of Vallès Occidental and Mataró in el Maresme were selected as preferred spaces because of the concentration of companies in those cities. To select the companies we used the database España 30,000 (2006 edition) edited by the economic magazine *Fomento de la producción*[2]. This database allowed us to obtain addresses and telephones of companies of the BMR. With this information we could construct the sample following the territorial distribution shown in Table 2.3. This database is based on the NACE codes, which were useful for our purposes. Both databases not only provided us with names of enterprises and contact persons.

The selection of the thirteen R&D and higher education workers was based on a different criterion. Higher education workers had to be related to the other creative and knowledge-based branches (architecture, software, TV and radio and motion pictures, finances, and law). For that, thirteen professionals of private and public institutions were selected taking into account the territorial distribution of universities and research centres. For the second ring, members of the Autnomous University of Barcelona (UAB) were selected. For the Barcelona and first ring territories researchers of University of Barcelona and Univeristy Pompeu Fabra were selected as well as researchers in the private sector from the fields of architecture and finances.

Finally, the selection of 50 graduates was based on their specialisation. Firstly, the sample was distributed in two groups, one of polytechnic and university graduates, whatever their specialisation, and the other one of graduates in media and arts from different institutions. Secondly, the polytechnic and university graduates were selected following their academic specialisation, whereas graduates in media and arts were selected taking into account their artistic profile. In that case the territorial distribution was not relevant for the purposes of the sample. Table 2.4 shows the distribution of the polytechnic and university graduates.

Table 2.4 - Sample of graduates according to branches

Social sciences	12
Technical degrees	7
Humanities	4
Health sciences	2
TOTAL	25

Source: own calculations

To contact different groups of graduates, the collaboration of professional associations, as well as the universities of the BMR, was necessary. These institutions provided data on old

[2] The database was provided by CIDEM, the autonomic institution for promoting innovation and competitiveness in Catalonia.

students. The territorial distribution of the different universities and colleges was also taken into account for the construction of this sample. From the overall data on students we selected, when possible, graduates currently working on the creative and knowledge industries.

Media and arts graduates have been selected using data from the design and media schools of the Metropolitan region. University Graduates in the degrees of Audiovisual communication (in the UAB and UPF) and Art (UB, UAB) were also selected for this sample, using the same system as for the 25 university and polytechnic graduates. To complete the sample with 25 media and arts graduates we have surveyed old students of the design school Elisava and the cinema school ESCAC (Escola Superior de Cinema i Audiovisuals de Catalunya) amongst others.

2.3 Administration of questionnaire

The process of data collecting was carried out between June 1st and July 13th 2007 and took place in the whole Metropolitan Region. The fieldwork was conducted by a team of five interviewers with experience as social researchers. The team collected the data performing a total of 204 interviews.

The main technique they used was face-to-face interviews in the workplace of the surveyed. Nevertheless, that generated some difficulties in obtaining answers of people in their working hours. For that some information was collected following other techniques. When the direct interview was not possible the interviewers proposed alternative options such as the filling of the questionnaire by the interviewees themselves, a telephonic interview or even through internet. The most reliable method proved to be the delivering of the questionnaire to the interviewee and fixing a short meeting to collect it filled, solve questions and collect extra comments. However, occasionally the interviewer resorted to the telephone, or the internet. Table 2.5 shows the different methods of surveying used and their relevance.

Table 2.5 - Methods of surveying

Method	Number of surveys
Face to face	106
Delivered	68
Internet	10
Telephone	18

Source: Own calculations

The ACRE Team established permanent collaboration with the interviewers to solve questions and problems during the fieldwork. The main questions and requirements of the interviewers are presented in section 2.1. Apart from daily contact, four formal meetings were arranged to follow the evolution of the surveying process. Each interviewer was assigned a particular creative and knowledge subsector. Graduates were also distributed among the interviewers according their specialisation. Hence, each interviewer did 40 interviews.

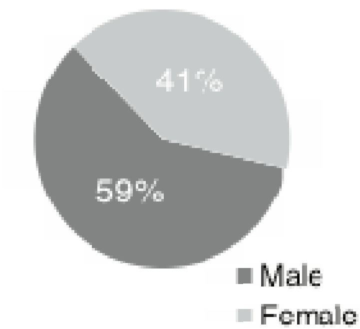
3 CREATIVE AND KNOWLEDGE WORKERS AND GRADUATES IN BMR: AN OVERVIEW

3.1 Demographic structure

In the following section we present the main features of the sample in terms of social and demographic composition. We attend to basic demographic features as well as to elements regarding living conditions and salaries. In the first place, we offer an outline of basic demographic features, that is, age and gender composition of the sample.

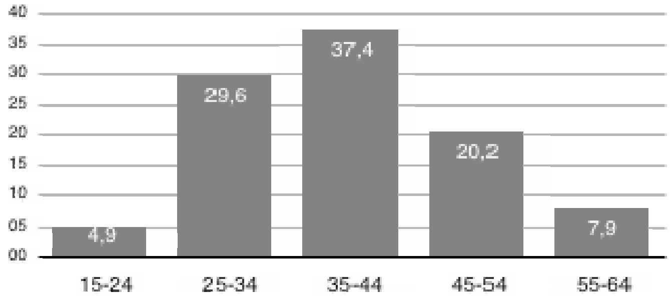
The sample contains more answers from men than from women (59.3 per cent of men compared to 40.7 per cent from women). These percentages are coherent with the structure of the Spanish labour market, where female occupation is roughly 50 per cent. In this sense it is important to point out the late and still incomplete incorporation of women to the labour market in Spain. Women have higher unemployment rates and worse jobs than men, both in terms of wages and of responsibilities. That is true also for the creative and knowledge sectors where there are activities traditionally dominated by men. As we shall see, the interviewed have high quality employments, a fact that can influence the distribution between men and women.

Figure 3.1 - Gender of the sample



Regarding the age distribution, we can see that there are creative and knowledge workers and graduates of all ages, although the very young and the very old are a minority, with only 4.9 per cent of total population under 25 and 7.9 over 55 years old. Thus, the majority of creative and knowledge workers and graduates are between 35 and 44 years old. This distribution is coherent with the general population structure of the region. In the same way, the age of workers of the region is similar to the age distribution detected through our survey.

Figure 3.2 - Age range of the sample



Source: ACRE survey

As shown in Table 3.1, there is a relation between the age and the subsector. 50.9 of workers under 34 years old work in the video, film, radio and TV (28.3 per cent) or architecture (22.6 per cent) sectors. On the contrary, 61.9 per cent of the older group of workers develop their activity in the finances or law sectors. In more general terms, the workers of the creative sectors are younger than workers of knowledge sectors. 64.1 of creative workers are under 34 years old, whereas 66.7 of knowledge workers are 45 years old or more.

Table 3.1- Age distribution per activity branches

Branches of activity	**Age**			
	15-34	35-44	45 or more	Total
Finances	15.1	12.1	28.6	17.6
Law and other services	17.0	20.7	33.3	15.7
R+D and higher education	3.8	12.1	4.8	22.9
TOTAL knowledge sectors	35.9	44.9	66.7	56.2
Architecture	22.6	25.9	4.8	18.9
Software	13.2	17.2	16.7	7.2
Video, film, radio and TV	28.3	12.1	11.9	17.6
TOTAL creative sectors	64.1	55.2	33.4	43.7
TOTAL	100.0	100.0	100.0	100.0

Source: ACRE survey

Three different indicators – education level, occupation and incomes – show the main socioeconomic features of the interviewed. The three indicators show that the interviewed have a favourable position in terms of education and jobs, and relatively high salaries compared to the national average.

The education level distribution shows that the major part of the sample has completed tertiary education (83.3 per cent). Nevertheless we must stress, as has been described in the previous chapter, that graduates are a part of the sample. If we exclude the 50 graduates of the sample, and consider only creative and knowledge workers, we see that 78 per cent of the workers have completed tertiary education, whereas 21.4 per cent have completed secondary education. This is far from the 16.2 per cent of graduates in the total population of the BMR[1]. The figures reveal a close relationship between creative and knowledge sectors and tertiary education.

As regards the education level, the employment features of the interviewed show that medium and high qualification jobs are dominant. Only 10.3 per cent of the interviewed have low qualification occupations in the selected creative and knowledge industries. Amongst medium and high qualification employment the most relevant group is formed by the creative and intellectual jobs (47.8 per cent) followed by the knowledge and scientific jobs (37 per cent).

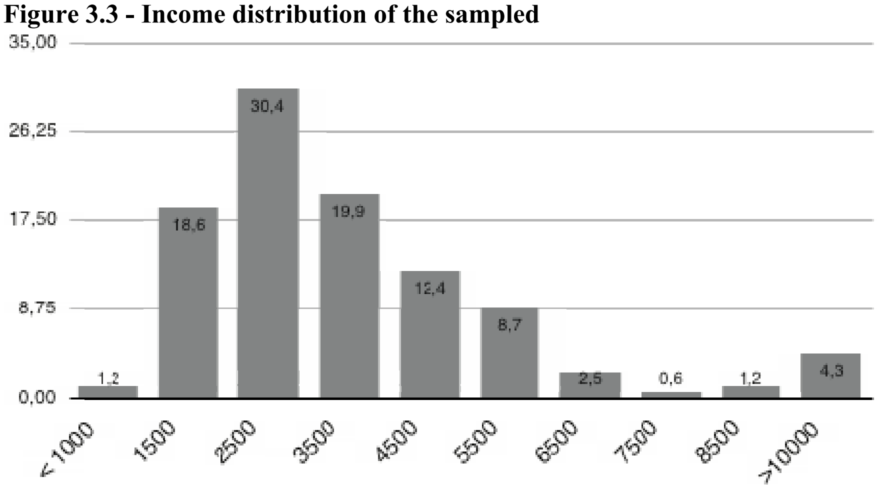
Table 3.2 - Qualification levels of the sample

Medium and high qualification	89.7
Low qualification	10.3
TOTAL	100.0

Source: ACRE survey

Finally, in terms of monthly income, we have taken the net average salary in Spain as a reference to analyse the monthly income after taxes of our sample. The net average salary in Spain was €1161.38 per month in 2005 (INE, 2005). Usually, in Spain employees perceive a total of 14 payments annually distributed in 12 monthly payments with two extra salaries in December and in June. As can be observed in the graph, most salaries are between €1,500 and €3,500 per month after taxes. Roughly a third of the sample (30.4 per cent) receives an average of €2,500 per month, that is, more than two times the net average salary.

Figure 3.3 - Income distribution of the sampled



Source: ACRE survey

Gender differences can be clearly seen in the income distribution. Women tend to have lower incomes than men: 37.1 per cent of women have an average income of €2,500 whereas men's

[1] The Metropolitan Region active population has low education levels (16.2 per cent) in comparison to the EU-average (21.6 per cent).

salaries range predominantly between €2,500 and €4,500. Table 3.3 shows these differences. In fact, the gender variable is of key relevance to understand labour market structure in Spain.

Table 3.3 - Income distribution per gender

Average income	Men	Women	Total
Less than 1,000	2.0	0.0	1.2
1,500	16.2	22.6	18.6
2,500	26.3	37.1	30.4
3,500	20.2	19.4	19.9
4,500	17.2	4.8	12.4
5,500	7.1	11.3	8.7
6,500	3.0	1.6	2.5
7,500	1.0	0.0	0.6
8,500	2.0	0.0	0.0
More than 10,000	5.1	3.2	4.3
TOTAL	100.0	100.0	100.0

Source: ACRE survey

Analysis of monthly income per activity branches shows clear differences amongst creative and knowledge workers (see Table 3.4). A third part of the people employed in law and other related services subsector have high income levels, with an income of €7,000 or above. On the contrary, 72.7 per cent of researchers and workers in higher education receive an income between €1,000 and €2,999.

Table 3.4 - Income distribution per activity branch

	Finances	Law and other business services	R&D and higher education	**Total knowledge sectors**	Architecture	Software	Video, film, radio & TV	**Total creative sectors**	Graduates	Total
Less than €1,000	0.0	0.0	0.0	**0.0**	0.0	0.0	4.2	**1.5**	4.2	1.2
From 1,000 to 2,999	52.0	28.0	72.7	**45.9**	55.6	46.7	50.0	**51.5**	50.0	49.1
From 3,000 to 4,999	36.0	28.0	9.1	**27.9**	29.6	26.7	41.7	**33.3**	41.7	32.3
From 5,000 to 6,999	12.0	8.0	18.2	**11.5**	11.1	8.0	4.2	**12.1**	4.2	11.2
7,000 and above	0.0	36.0	0.0	**14.8**	3.7	0.0	0.0	**1.5**	0.0	6.2
TOTAL	100.0	100.0	100.0	**100.0**	100.0	100.0	100.0	**100.0**	100.0	100.0

Source: ACRE survey

There is a clear relationship between the indicators analysed above. In this sense, high qualification jobs account for relatively high average incomes. Education plays a key role because of it is one of the necessary requirements to obtain a better position in the labour market. This shows that the individuals selected for the sample are part of the most valuable human capital of the city region.

The major part of the sample was born in the BMR. A fact that confirms the low levels of geographical mobility in Spain. 68 per cent of the sample was born in the metropolitan region, with half of the sample born in the city of Barcelona. The rest of people surveyed were born in other parts of Catalonia or Spain. It is important to underline that 13.7 per cent of the sample was born in other regions of Spain. This fact attests to the power attraction that the BMR has for the rest of Spain[2].

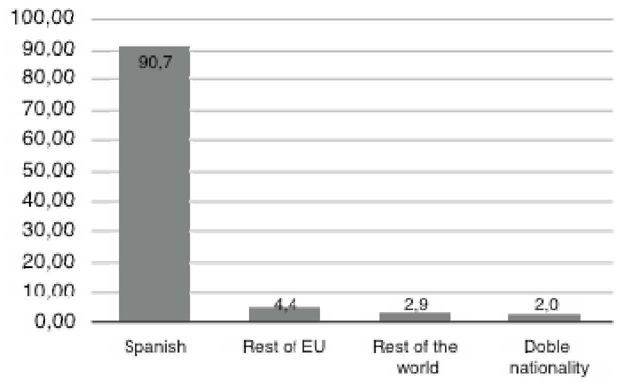
Table 3.5 - Place of birth of the sample

Place of birth	percentage
City of Barcelona	51.0
First Ring	5.9
Second Ring	11.3
Rest of the province	2.0
Rest of Catalonia	6.9
Rest of Spain	13.7
Out of Spain	9.3
TOTAL	100.0

Source: ACRE survey

Another remarkable piece of information is the 9.3 per cent of foreigners of the sample. These foreigners come predominantly from the rest of the EU (51 per cent) and Latin America (30 per cent). This evidences a peculiar trend of Spain regarding the qualified immigration flows, namely the fact that the country is attractive for Latin American qualified workers. This attraction can be explained taking into consideration the common language and similar culture. In the case of qualified migrants, cultural proximity seems to be important. For, the main flow of migrants to Spain comes from Latin America. Hence, the relevance of qualified migrants in the overall creative and knowledge workers must be analysed in depth.

Figure 3.4 - Nationality distribution



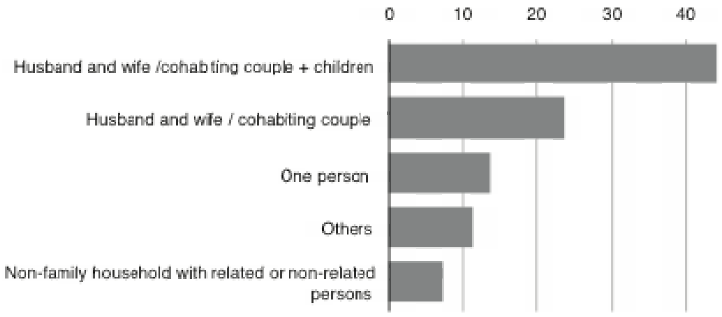
Source: ACRE survey

Finally, we will analyse main features on household structure. That information will be useful to understand some needs and satisfaction patterns. The most common household structure

[2] In fact, Barcelona has attracted migrant population since nineteenth century. Nowadays it is one of the main destination of international migration inflows to Spain, and continues to attract workers.

are families formed by a couple (not necessarily married) and one or more children (44.1 per cent) followed by couples without children (23.5 per cent).

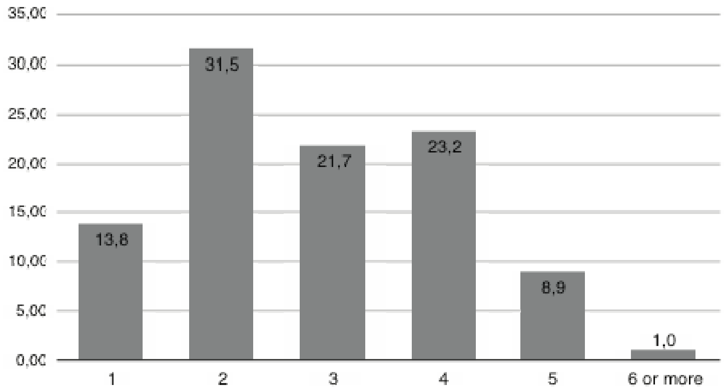
Figure 3.5 - Household distribution



Source: ACRE survey

Another relevant group is the 7.4 per cent of the sample that cohabits with other individuals, but who do not constitute a family unit. This household structure originates due to the particularities of the housing market in the BMR. Housing has suffered huge price increases in the recent years. As an answer, new strategies to obtain a residence have emerged. One of these strategies is renting a flat with other people. This alternative is becoming popular among young professionals. In accordance with these data, the households of the surveyed are mainly formed by two, three or four people, as we can see in the graph below. However, the data on household structure show that the interviewees live mainly with their couple and with one or two children. We will analyse these aspects more in depth in the next section.

Figure 3.6 - Number of people cohabiting together



Source: ACRE survey

3.2 Main residential patterns

This section describes the responses of our interviewees to questions on their place of residence. Particular attention is given to their choice of city, the relationship they establish with their city or town, the type of tenure of their housing, and finally to commuting issues. Our description takes into account peculiarities that occur in the Spanish and Catalan contexts.

The BMR has a population of 4,770,180 inhabitants distributed as follows: 1,593,075 live in the city of Barcelona, 1,555,479 live in the first metropolitan ring, and 1,437,738 in the second metropolitan ring. In order to comply with the ACRE project requirements the sample has been selected in terms of their work place. This results in the following residential territorial distribution: 67.3 per cent of our sample live in the city of Barcelona, 17.3 per cent in the second metropolitan ring and 14.9 per cent in the first. (see 6.1 in chapter 6). Given that the selection of interviewed is based on their workplace, the residential distribution of the sample does not follow the territorial distribution. The polycentric nature of the BMR involves several cities that operate as residential and working centres. The polycentrism influences the internal mobility flows between residential and working municipalities. The city of Barcelona plays a determinant role as a centre that attracts workers and residents, but there are other cities that are influential as well.

Table 3.6 - Place of residence

Consider the area in which you live	Percentage
Barcelona City Centre	28.6
Rest of the neighbourhoods of Barcelona	33.0
City adjacent to Barcelona	17.2
Village or small town in metropolitan region	8.9
Medium or large town in metropolitan region	12.3
TOTAL	100.0

Source: ACRE survey

Concerning the place of residence, the major part of the sample (61.1 per cent) lives in the city of Barcelona (in the centre or in the rest of the neighbourhoods of the city). It is remarkable also that only 8.9 per cent live of the interviewed live in a village or a small town in the region. This is an indicator of the relevance of different towns of the region as secondary residential centres. When dealing with basic residential features in the BMR two relevant facts must be taken into account. Firstly, housing prices have experienced a spectacular increase in the last ten years. From 1997 to 2007, housing prices quadrupled in the city of Barcelona[3]. The increase in the first ring was 297.1 per cent and 361.6 per cent[4] in the second ring.

[3] From €1,474 per square metre in 1997 to €5,791 per square metre in 2006

[4] Mancomunitat de Municipis de l'Àrea Metropolitana de Barcelona according to data of Direcció General d'Habitatge de la Generalitat de Catalunya.

Secondly, there was a significant increase in housing construction from the mid 1990s onwards. Thus, 53.8 per cent – 387,207 dwellings – of all the new housing facilities started in Catalonia from 1992 to 2003 were built in the BMR. Of those, 7 per cent were initiated in the city of Barcelona, 16.7 per cent in the first ring, and 29.7 per cent in the second ring. The last figure attests to the expansion of the BMR in recent times[5].

A key aspect that emerges from our survey is the fact that 71 per cent of the interviewees have lived in the same city or town for over ten years and that 28.9 per cent have moved to a different place of residence in the last ten years (see Table 3.7).

Table 3.7 - Time lived in the city

Time lived in the city	Percentage
Less than one year	3.9
Between one and 2 years	3.9
Between 2 and 5 years	7.4
Between 5 and 10 years	13.7
More than 10 years	71.1
TOTAL	100.0

Source: ACRE survey

As the section on mobility will highlight, the fact that the majority of interviewees were born in the BMR results in limited residential mobility patterns. Moreover, 13.2 per cent of the respondents say that they have never moved (see Table 6.3 in annex). The majority of residential movements have taken place within the BMR; 78.1 per cent of those who respond that they have moved within the BMR. The results obtained reveal that among our interviewees the number of those that reside in the city of Barcelona has increased. Whereas 44.5 per cent of the respondents lived in Barcelona in the past, currently the figure has risen to 67.3 per cent. Barcelona is therefore turning into a pole of attraction for the creative sector. However, the BMR also participates in this function for 11.0 per cent of population who formerly lived in the rest of Spain resides now in the BMR. Besides, 5.5 of the sample were born abroad (see Table 3.8). In section 4.1 we will address the motivation of the sample for moving to the BMR.

[5] Mancomunitat de Municipis de l'Àrea Metropolitana de Barcelona, according to data of Direcció General d'Habitatge de la Generalitat de Catalunya

Table 3.8 – Previous place of residence

Where did you live prior to moving to the city?	Percentage
Barcelona City	44.5
First ring	19.9
Second ring	13.7
Rest of Barcelona province	1.4
Rest of Catalonia	4.1
Rest of Spain	11.0
Abroad	5.5
TOTAL of people who moved to BMR	100.0

Source: ACRE survey

According to the Census 2001 the prevalent type of housing tenure in Spain is ownership. The figures are 82.2 per cent for Spain and 79.1 per cent for Catalonia. In recent years this trend has intensified in the whole country. The number of people in our survey who prefer ownership is significantly higher than those who rent: 65.0 per cent belong to the former group and 26.6 per cent to the latter. However in our sample, the percentage of those who live in rented accommodation is higher than the Catalan average – 15.1 per cent – and higher than the Spanish average –10.8 per cent–[6]. In accordance with common national trends in the housing market, it becomes evident that social housing is insignificant for those who participate in our survey: 1 per cent[7] (see Table 3.9). Finally, we would like to point out that the figures in Census 2001 showed that within the group of ownership tenure, there was a 50.7 per cent who declared that their dwelling was completely paid up, while 22.8 per cent had pending mortgage payments. However, the above percentages are completely different for the participants in the ACRE survey. As shown in Table 3.9, almost half of our interviewees (46.3 per cent) reside in a dwelling with pending payments, and only 18.7 do not have a mortgage.

Table 3.9 – Kinds of accommodation

Which best describes your accommodation?	Percentage
Own without mortgage	18.7
Own with mortgage	46.3
Tenant. paying rent to private landlord	26.6
Tenant. paying rent in social/voluntary/municipal housing	1.0
Accommodation is provided rent free	4.4
Other	3.0
TOTAL	100.0

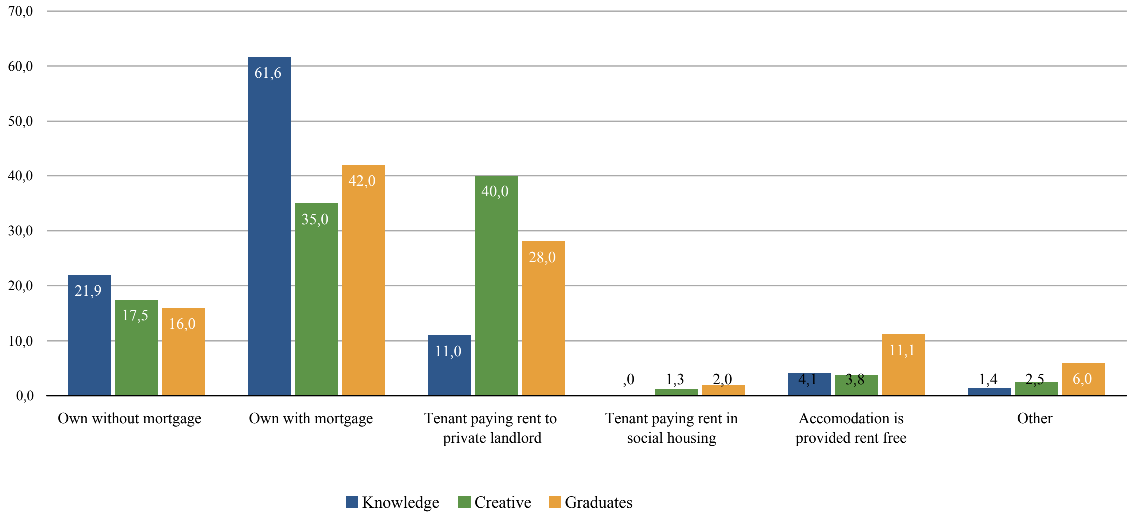
Source: ACRE survey

Clear differences on accommodation can be seen amongst different professionals. The most relevant part of the finances workers has their own accommodation but are paying a mortgage. R&D, software and law workers follow a similar pattern. Nevertheless, other collectives are more inclined to pay a rent for their household. 69 per cent of the architects,

[6] Census 2001
[7] Rented social housing in Spain accounted for un 1 per cent of the total in 2001 (Pareja, 2005).

and a third part of the video and film workers are paying a rent to private landlord (see annex, Table 6.2). In a more general view the creative workers tend to opt for renting in a greater extent than knowledge workers. Figure 3.7 shows the main differences amongst these collectives. As we shall see in section 4.1, these patterns have a relation with the willingness to move from the place of residence in the next three years.

Figure 3.7 - Kinds of accommodation (creative, knowledge and graduates)



Source: ACRE survey

Indebtedness is considerable among Spanish families. The situation is a consequence of the low interest rates that became available in Spain from the moment the country joined the EMU (Pareja, 2005). The bank of Spain has repeatedly stated that the level of indebtedness is growing at a pace that is considerably higher than the increase in the income of households. The high level of indebtedness has fuelled consumption and economic growth in recent years, but currently the increase in interest rates indicates that the period ahead might be one of uncertainty and increased difficulty for a considerable number of families. As data provided by l'Agència Catalana del Consum show, family indebtedness has increased 35 per cent in the last 9 years in Catalonia as a consequence of the rise in the cost of housing.

However, and up to the present moment, those households connected to the creative and knowledge economy are not affected, at least not to the same extent as people from other sectors are, by the difficulties that indebtedness, housing prices and the scarce availability of accommodation for rent entail. As we shall see in the section dedicated to salaries, the salaries perceived by our sample are relatively high when compared to Spanish standards. Nevertheless, 34.1 per cent of the respondents must allocate 30 per cent of household income to pay for their mortgage. This percentage reaches 43.9 per cent for those living in rented accommodation, and 22.8 of those need 40 per cent of their total household income to pay the rent (see Table 3.10). Despite the amounts above, when asked about this issue, almost half of the respondents –48.3 per cent– declares that the costs of rent or mortgages are just about affordable. The percentage of those who admit to have certain degree of difficulty in making their monthly payments is 39.1 per cent (see Table 6.3 in annex).

Table 3.10 – Percentage of monthly income payment

What percentage of your monthly income is your mortgage payment or your rental payment?	Mortgage payment	Rental payment
0-10	4.3	0.0
11-20	27.7	21.1
21-30	34.0	35.1
31-40	21.3	21.1
41-50	9.6	10.5
51-60	3.2	12.3
TOTAL	100.0	100.0

Source: ACRE survey

The percentage of those who spend the weekend in their city of residence is also high, 59.0 per cent (see Table 3.11). The percentage is significant for we have to take into account that second/holiday residences are a very common occurrence, not only among those belonging to the sector under survey but also for a considerable number of families in Spain: the amount of secondary homes in Spain is higher than in the rest of Europe representing around 16 per cent of the total housing stock. *The population most inclined to have a second home is located in the large cities, but the highest percentages of disposal [sic] of this type of home are located in the regions with the highest income levels* (Módenes and López-Collás, 2006).

Table 3.11 – Place where sampled spend the weekend

Where do you spend your weekends?	Percentages
In my city	59.0
In the metropolitan region but not in my municipality	14.0
Outside my city but in Spain	26.0
Outside my city but in Europe	1.0
TOTAL	100.0

Source: ACRE survey

As far as commuting issues are concerned, 41.8 per cent of the surveyed states that the distance they need to cover to go to work is under 4 km, followed by those who commute over 10 km. Within the latter, there are a percentage of commuters, 71.1, who live at a considerable distance from their work place, over 15 km away (see Table 3.12). Only 4.5 per cent of people in our sample work from home. Regarding commuting, it is necessary to mention the fact that mobility is a highly problematic issue for there are serious congestion problems in the BMR. The roads into Barcelona are usually congested at several rush hours, as they are the main streets in the city, there is a lack of fast roads and numerous deficiencies in the public transport between different locations in the BMR. Despite the problems above, the figures confirm that a considerable part of those dedicated to the creative and knowledge economy need to travel to their work place. We will address this fact in more detail in our section on mobility.

Table 3.12 – Distance to work

Generally how far do you travel to get to work (one way)?	Percentages
I work from home	4.5
No fixed place	3.5
under 1km	14.9
1-4 km	26.9
5-9 km	14.9
10-14 km	10.0
15-29 km	16.9
30 or more km	8.5
TOTAL	100.0

Source: ACRE survey

The analysis of the relation between place of residence and place of work shows that the main part of people that live in Barcelona work also in the city (see Table 3.13). On the contrary, people who live in the first ring are mainly attracted by the workplaces of the city (52 per cent of them work in Barcelona). In that sense, it is important to consider that cities of the first ring of the BMR have been traditionally residential cities with high population density. The intraregional migration flows of the 1980s generated this pattern. Nevertheless, the second ring residents are less attracted by jobs in the city of Barcelona. The existence of relevant cities that play the role of centres –where services and industries concentrate– is determinant to understand that 60.5 per cent of population of the second ring work in the same area.

Table 3.13 - Place of residence per place of work

Place of work	Place of residence			
	Barcelona	First ring	Second ring	Rest of Catalonia
Barcelona	85.7	52.8	27.9	0.0
First ring	11.7	35.8	11.6	100.0
Second ring	2.6	9.4	60.5	0.0

Source: ACRE survey

The most used means of transport by our interviewees is the private vehicle. 27.0 of the surveyed go to work by car and 1 out of 7 travels by motorbike. The percentage of people who use a motorbike in Barcelona is one of the highest in Europe (see Table 6.9 and 6.10 in annex). As data supplied by the Barcelona city council confirm, motorbikes account for 27.2 per cent of the total private vehicles in the city. In just three years the number of plates granted to motorbikes has trebled. In 2006 there were 16,992 motorbikes and scooters. Private vehicles are quite relevant for our respondents since 83.7 per cent own a car[8], although only 27 per cent use it to travel to work. In following sections we will have to analyse in more detail mobility issues and cross-reference them to labour variables in order to discuss some of the patterns that are beginning to arise in the present section. Our survey reveals that the number of households with two cars 25.4 per cent- is significantly higher than that of

[8] This question does not include motorbikes. Considering that the number of motorbikes in BMR is very high, number of private vehicles would be obviously higher if this mean of transport had been considered in the questionnaire.

households that do not own a car: 16.2 per cent (see Table 3.14). It is possible to observe that the territorial model in the BMR tends to favour the use of private transport over the use of public transport. The role of the regional government is of key relevance to understand this pattern. During the 1980s, investment in infrastructures was based mainly on the creation of roads and highways, with a marginalisation of public means of transport within the metropolitan region (Pareja et al., 2007).

Table 3.14 - Number of cars in household

How many cars does your household own?	Percentage
None	16.2
1 car	58.3
2 cars	22.5
3 cars or more	2.9
TOTAL	100.0

Source: ACRE survey

To sum up, the answers to the questions concerning residential features provide several insights in this area. The highest number of residential changes occurs within the BMR and almost three quarters of the respondents have taken over 10 years to move. The most usual type of housing tenure is ownership with pending mortgage payments. However, the percentage of people who live in rented accommodation is higher than the Spanish average. Besides, employees in the creative and knowledge sector are not as negatively affected by the high cost of housing in Spain as those in other sectors.

The patterns of mobility at the weekends reveal the weight of the secondary residence in Spain and in particular in its urban agglomerations such as BMR. 40 per cent of the sampled spend the weekend in the BMR but not in their city. Regarding commuting, the journey to work is under 4 km for the majority of respondents. However, the number of people who travel over 10 km to work is significant, 35 per cent. The private car is the most popular means of transport to go to work and therefore the majority of households, over 80 per cent, own one or two cars.

3.3 Main employment features

The economic transformation experienced in the BMR in the last decades has resulted in the loss of significance of manufacturing activity and in an increased relevance of service activities for the regional economy. The transformation has caused the comparative advantages of the region to re-orientate in accordance to the requirements of technical changes and those created by the new global economy. Moreover, it has entailed the emergence of new economic activity and created new demands in terms of factors of production: diversification of capabilities, increased knowledge and the ability to adapt. As far as the labour market is concerned, the transformation has reduced the relevance of mass production and has favoured the emergence of new employment and different professional relationships.

The Spanish labour market owns its current shape to two main factors. Firstly to the successive labour reforms (1984, 1994, 1997 and 2002) whose main objectives were the creation a more flexible labour market through the reduction of dismissal costs and the introduction of more flexible contractual arrangements. Secondly to the new forms of labour relationships that arose within the reformed legal framework. Indeed, the new legal and conditions have resulted in an increased diversity of contractual arrangements and in a higher number of temporary contracts. Besides, job rotation has been adopted by certain companies.

It is important to highlight that one of the consequences of the current structure of the Spanish labour market has undoubtedly been the increase in the number of people who find themselves in a precarious situation, either in terms of salary or in the conditions at the workplace.

The availability of human capital resources is key in attracting productive activity to the BMR. The existence of a highly qualified diversified and flexible labour market is an essential premise for the development of clusters or agglomeration economies, and it is instrumental in improving competitiveness and enhancing the attractiveness of an area. In the BMR, this has become evident in the last ten years, a period when over 900,000 were created (Pareja et al., 2007), the majority of those in the bigger towns (Viladecans and Cofre, 2006).

One of the outstanding aspects derived from the analysis of the BMR employee sample is that the individuals are highly qualified for their occupations. This is partly due to the economic activities to which the survey has been targeted. Indeed, 73.9 per cent of the interviewees have a medium or high professional level (see Table 3.15). However, barely 2 per cent of these work in activities that involve management tasks and only 5.4 per cent hold highly qualified positions related to knowledge: physical, mathematical and engineering science professionals and Teaching professionals.

As far as the rest is concerned, it has proved difficult to pinpoint their positions for almost 43 per cent of the interviewees responded that their professional activities belonged to the category ‘Other professionals’ (Table 3.15), and 31.1 per cent declared that they held positions that required a medium level of technical qualification. This remarkable percentage of professionals involved in “other” activities suggests that there is not much specialisation and consequently a considerable capacity to adapt to new activities and job flexibility. The extremely diversified nature of the sampled available employees is in line with the characteristics of modern labour markets where professional offer is diverse and ability to adapt is required. Moreover, the parameters of the sampled professionals are also in tune with the economic diversification of the BMR. Both aspects, the labour market and the economic development of the BMR have evolved hand in hand in the last decade. The number of jobs created in the BMR proves this fact.

Table 3.15 - Type of occupation

What is your current occupation?	Percentage
Legislators, senior officials and corporate managers and managers of small enterprises	2.0
Physical mathematical and engineering science professionals	3.0
Life science and health professionals	2.5
Teaching professionals	8.4
Other professionals	42.9
Physical, life science and health, teaching and engineering science associate professionals	15.3
Other associate professionals	15.8
Office clerks	7.9
Customer services clerks	2.5

Source: ACRE survey

The cross-examination of data on type of employment and on the type of contract, that is, whether the employees have either a stable contract or a stable relationship with their company allows us to extract several conclusions on employment typology. Thus, the results in Table 3.16 evidence that only 56 per cent of employees have a permanent contract. Therefore, the first conclusion is that there is a marked degree of instability. Furthermore there is a significant 28.5 per cent of the sample that are either self-employed or free-lance. In order to contextualise the above data, a comparison with figures in the rest of Spain is mandatory. There, according to EPA 2005 information, 58 per cent of individuals are employed on a permanent contract. The percentage is, clearly, not substantially higher than that in the BMR. However, a look at the other types of contractual arrangements reveals significant differences for, in the rest of Spain, the percentage of temporary contracts is 24 per cent, and the number of those who are self-employed does not reach 18 per cent of the total. The BMR has, therefore a higher percentage of self-employed and free-lance employees. This can be read as an indication of the existence of more professional initiative and higher flexibility in the BMR.

Table 3.16 - Contract status in job

What is your contract status in your current job?	Percentage
Permanent contract	56.0
Contract for specific project	7.0
On a fixed term contract for less than 12 months	2.5
On a fixed term contract for 12 months or more	2.0
Without written contract	4.0
Self employment/free lance/entrepreneur	28.5

Source: ACRE survey

A further aspect that deserves consideration refers to the disparity between the type of contract, a feature that would suggest uncertainty for the employees, and the stability that derives from the length of time that employees remain in their companies. As shown in Table 3.17, whereas only 12.5 per cent of interviewees remain in their company for a year or less, 74 per cent stay on for over two years, and, more significantly, 54.5 per cent continues to work for the same company for over five years. The above contrast allows us to relate the characteristics of employment on offer and the existing relationships between employers and employees or professionals. The high number of employees catalogued under "other professionals" together with the low stability in types of contract, and the relative stability of the relationship between employees and companies indicate that we are dealing with a highly flexible market, that is, this is a labour market where there are a relatively high number of professionals who work for short contractual periods, though who manage to establish rather long professional arrangements with the companies they work for.

Table 3.17 - Time remaining in your company

How long have you been in your company or organisation altogether?	Percentage
A year or less	12.5
Two years or less	26.0
Five years or less	45.5
Ten years or less	63.5
Twenty years or less	83.5

Source: ACRE survey

Thus, the labour market in the BMR has at hand, among other things, an ample offer of individuals who are highly qualified, flexible and diverse professionals. Moreover, this labour force is extremely apt for the generation of clusters, be it in industrial sectors, or in service activities which require knowledge and specific qualification. The quality of the available human capital in the BMR contributes greatly to the competitiveness of the region from a qualitative point of view.

The workplace of the sample offers some insight into the working conditions in the BMR. As detailed in Table 3.18, large working sites are not predominant. The norm is the existence of sites with few employees. Thus, 47.7 of the respondents work in places that have fewer than 10 employees, and almost 75 per cent work at sites where the number of employees is under 50.

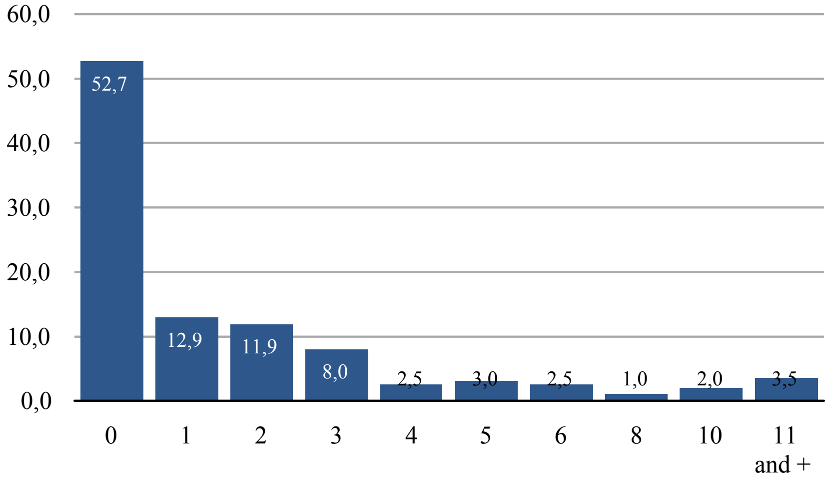
Table 3.18 – People employed in the workplace

How many people are employed at the place where you usually work / worked?	Percentage
Under 10	47.7
10-49	26.9
50-99	4.1
100-249	5.2
250-499	2.1
500-999	3.1
1000-1999	5.2
2000 or more	5.7

Source: ACRE survey

The survey reveals a weak hierarchical structure at work. Over half of the employees surveyed do not have subordinates, and only 9 per cent have more than 5 people working under their supervision (see Figure 3.8). These data indicate the existence of a work environment where horizontal relationships and the ability to co-ordinate prevail over more traditional hierarchical relationships. As we see it, the situation derives from the demands of technical change and attests to the creation of a work environment in which flexibility and the capacity to adapt to new circumstances are of paramount importance.

Figure 3.8 - How many people, if any, work under your supervision?



Source: ACRE survey

Finally, the interviewees were asked for their perception concerning the requirements and exigency of their job. The answers reveal, not surprisingly, that given the highly diversified labour environment, the requirements for the different positions are by necessity extremely diverse. As a consequence, it has proved difficult to specify which requirements are given priority. Table 3.19 details the aspects with a higher degree of exigency. Personal/individual aptitudes emerge as clear requirements. In this group, dedication, commitment, and perseverance are accorded a 16.1 per cent of relevance. These are followed by attention and the ability to concentrate (9.1 per cent), and creativity (7 per cent). As far as acquired abilities are concerned, knowledge and continuous education/training are perceived as having a relevance of 10.6 per cent, and 8.2 per cent respectively. Both categories, that is, personal abilities and qualifications belong to the requirements that are deemed necessary in a competitive economic environment such as the European one. As mentioned above, flexibility in employment and the ability to adapt to change constitute two important factors in terms of competitivity.

Table 3.19 - Requirements and exigency of jobs

Please describe in a few sentences what your current job entails	Percentage
Vocation / dedication / perseverance / compromise	16.1
Coordination, order, control, responsibility	12.4
Knowledge	10.6
Patience/ attention, concentration	9.1
Professional training	8.2
Creativity	7.0

Source: ACRE survey

To sum up, the labour market that is revealed by the survey characterises itself by a high level of professional qualification – at least as far as the tasks conducted in the workplace are concerned – the existence of stable professional relationships for these go beyond the length of particular contracts. Consequently, professional-company relationships tend to become stable. Finally, professional activity is conducted at work sites that are medium and small seized and where there is not a marked hierarchical structure. All of the above shapes a considerably flexible labour market and a human capital which is extremely capable of adapting to change.

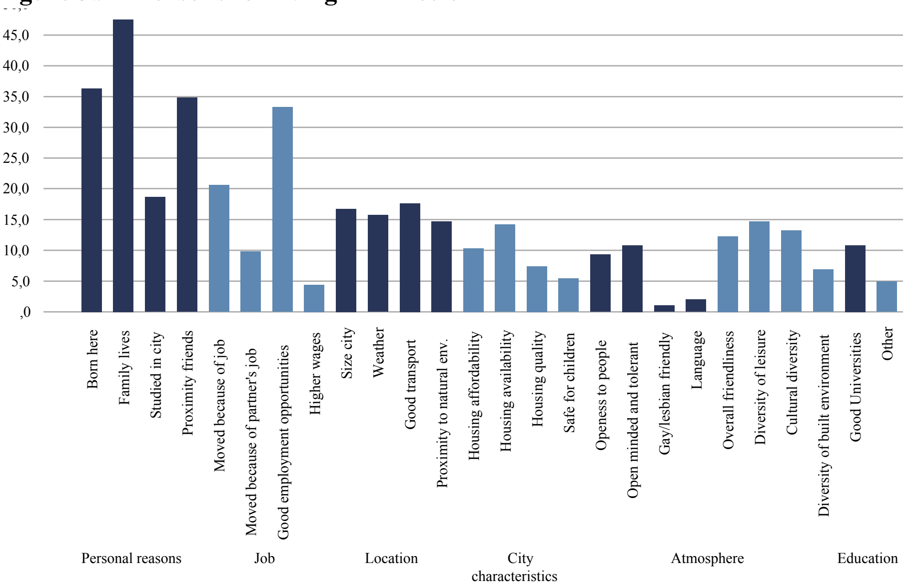
3.4 Satisfaction with the city in the Barcelona Metropolitan Region

The BMR is well-known in Europe as a “place to live in”. Its mild climate, the significant cultural supply, and its closeness to nature spots and the seaside make Barcelona and the surrounding areas extremely attractive. Indeed, the BMR has become a popular destiny not only for tourists but also for entrepreneurial foreigners who look for an enthralling place to settle and develop their activities.

The ACRE survey aimed at identifying the degree of satisfaction of the interviewees with the place they live in. Two issues are key to understand the results of this section; on the one hand, the fact that many respondents have lived almost all their lives in the BMR (71.1 per cent) and, on the other, that the number of residential moves in Spain, and in particular in the BMR, is relatively low compared to the average in many other European cities.

When people were asked to rank the four most important reasons that explain why they lived in the BMR, personal connections was the main reason that accounted for their current place of residence. Reasons related to people, social environment or “atmosphere” ranked lower than expected. 23.5 per cent of the surveyed gave, as the first reason for living in the BMR, the fact that their family lived close by. In fact, as shown in Figure 3.9, 47.5 per cent of the sample selected this reason out of the four possibilities. This means that this is by large, one of the most important determinants for residential location in the BMR.

Figure 3.9 - Reasons for living in Barcelona



Source: ACRE survey

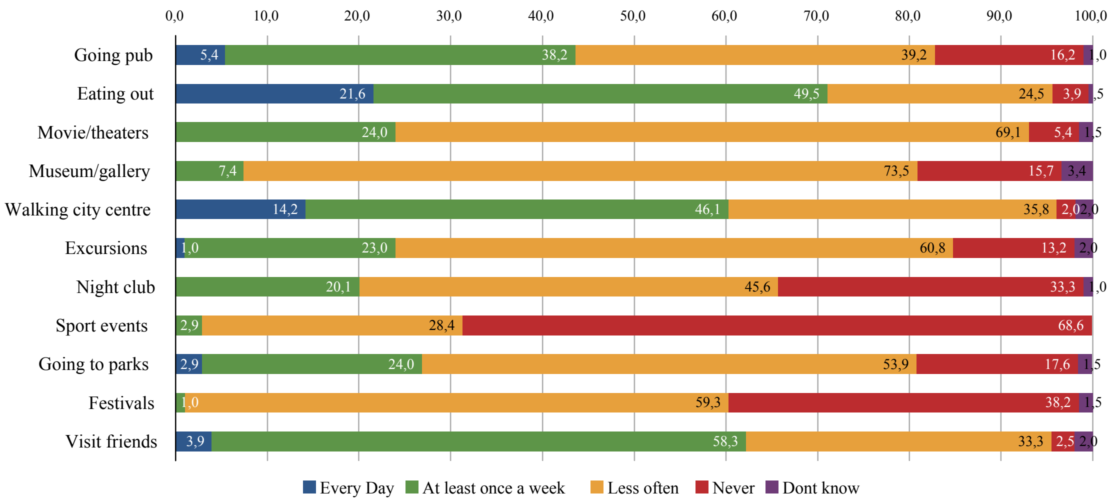
Within the reasons related to the labour market, the option 'good employment opportunities' was selected in 33.3 per cent of the cases. This is the only answer that compares in significance to the whole set of personal reasons. However, the possibility of obtaining higher wages in the area does not influence the decision of living in the BMR. By good employment opportunities our respondents might be referring rather to types of jobs for the area is characterised by a flexible job market with many opportunities.

The characteristics of the location (size of the city, weather, transport and proximity to natural environments) together with characteristics of the city (affordable and available housing, housing quality and safety for the children) were given as reasons to live in the BMR by less than 20 per cent of the interviewees. In general terms, the location characteristics were most valued than housing facilities and safety. This coincides with the results obtained on basic residential features since our interviewees do not consider housing a problem.

Only about 1 per cent in average of interviewed creative and knowledge workers and graduates ranked as first reason for living there reasons linked to the social environment or general atmosphere of their place of residence. However, there were three options that were considered relevant in 10 per cent of the cases, that is, they were accorded positions from 1 to 4. This was so for overall friendliness of the city (12.3 per cent), diversity of leisure & entertainment (14.7 per cent) and cultural diversity (13.2 per cent).

In order to precisely understand the satisfaction and dissatisfaction of those interviewed with the characteristics of the city, they were first asked about the frequency they were involved in certain leisure activities (see Figure 3.10). More than 50 per cent of the respondents ate out and visited friends at least once a week. Walking around the city centre was a considerably frequent activity as well: 14.2 per cent did it every day and 46.1 per cent at least once a week. Two surprising results should be mentioned as regards this particular question: firstly, around 70 per cent eats out at least once a week, and within this group, over 21.6 per cent does it every day. Secondly, 68.6 per cent are never involved in sport events.

Figure 3.10 - Frequency of leisure activities



Source: ACRE survey

Interviewees were also asked about their participation in religious, political and community work activities. In general terms, they do not show a high involvement in these activities for the percentages of those who never participate in any of the activities above are as follows: religious activities (84.3 per cent), political activities (81.9 per cent), community work (71.6 per cent) and residents' association (61.8 per cent). Only activities related to residents' associations (28.9 per cent) and community work (22.5 per cent) were more frequently undertaken than never but the answers show that participation was less than once a week.

In terms of satisfaction, people working in the BMR are in general satisfied with the leisure facilities and activities offered by the area: on average, almost 2 out of 3 of respondents were "very satisfied" or "satisfied" (see Table 3.20).

Table 3.20 -Level of satisfaction concerning leisure activities offered by BMR

How satisfied you are with the following leisure activities offered in Barcelona?	Very satisfied	Satisfied	Neither	Dissatisfied	Very dissatisfied	Don't know
Quality of public spaces (squares, parks, etc)	9,8	58,8	13,2	10,2	1,5	0.5
Quality of sport facilities	4.9	47.5	21.6	14.2	1.0	10.8
The quality and range of festival events and cultural activities	12.3	52.9	18.1	11.8	1.5	3.4
The quality and range of art galleries / museums	9.8	56.4	15.2	13.2	1.0	4.4
Quality and range of restaurants	18.1	58.3	12.7	7.8	1.5	1.5
Quality of pubs	3.9	34.8	37.3	10.3	1.0	12.7
Quality of cinemas	9.8	55.9	15.7	10.8	4.4	3.4
Quality of shopping areas	12.3	65.7	13.7	5.9	1.5	1.0
Architecture of city/relevant monuments	31.4	48.5	9.8	8.8	1.0	0.5
Number of associations/ organisations for social activities	6.4	42.6	28.9	5.9	0	16.2
Average	11.87	52.14	18.62	10.49	1.44	5.39

Source: ACRE survey

Concerning leisure activities, the survey indicates two facts: on the one hand, many interviewees were "very satisfied" with the architecture of the city and its monuments (31.4 per cent). This is a considerably high percentage when compared it to their satisfaction with other items. On the other hand, a very low percentage of people were "very dissatisfied" with leisure opportunities. As evidenced in the table above, the percentages of very dissatisfied people are around 1.5 per cent for the majority of leisure activities on offer in BMR. The percentage only goes up in the case of the quality of cinema since 4.4 per cent of the respondents were very dissatisfied with it. The second high percentage that reveals very satisfied interviewees was related to the quality and range of restaurants (18.1 per cent) followed by the quality and range of festival events and cultural activities (12.3 per cent). However, the quality of public spaces was accorded the highest percentage of dissatisfaction (16.2 per cent) while the quality of pubs, although there are many, is not considered exceptionally good.

In terms of public services, respondents were, in general, less satisfied than with leisure activities (see Table 3.21). Less people were "very satisfied" with public services in the BMR; on average, they accounted for less than 4.6 per cent. 58 per cent of population was "satisfied" or "neither satisfied nor dissatisfied". However, 26 per cent responded that they were dissatisfied with the available supply of public services. About 40 per cent of respondents were dissatisfied or very dissatisfied with the connectivity between the city and the periphery. This fact is certainly related to one of the challenges for the city (see Pareja et al, 2007), that is, to improve transport infrastructures in general and, especially, connectivity between centre and periphery. Besides, the quality of bicycle lanes was responsible for a high degree of dissatisfaction. Finally, special mention should be made, within the range of public services under evaluation, to the quality of health services for the highest percentage of satisfied people (52 per cent) is obtained in this particular question.

Table 3.21 - Level of satisfaction concerning public services offered by the BMR

How satisfied you are with the following public services offered in Barcelona	Very satisfied	Satisfied	Neither	Dissatisfied	Very dissatisfied	Don't know
Quality of BMR's public transportation system	7.8	42.6	13.7	28.4	6.4	1.0
Transport within the city	6.9	43.6	13.7	27.5	5.9	2.5
Connectivity between city & periphery	3.4	31.4	11.3	36.8	13.2	3.9
Safety on the streets	3.4	49.0	19.1	24.0	2.9	1.5
Police services	1.5	37.7	25.5	24.0	5.4	5.9
Number of bicycle lanes	1.0	14.7	27.5	35.3	14.7	6.9
Quality of tourist attractions	6.4	38.7	29.4	12.3	3.4	9.8
Social security	4.9	47.5	13.2	25.0	5.4	3.9
Quality of health services	5.9	52.0	15.7	21.6	3.9	1.0
Average	4.58	39.7	18.79	26.10	6.80	4.04

Source: ACRE survey

The survey also dealt with environmental aspects in the BMR. The possible answers for this section ranged from "Very good" to "Very poor" (see Table 6.11 of Annex). Five items were considered in more than 33 per cent of the cases of "very poor" quality: the quality of drinking water (33.3 per cent), traffic congestion (34.8 per cent), availability of parking spaces (52.9 per cent), noise pollution (39.7 per cent) and air pollution (33.8 per cent). The issues which were given higher valuation ("Very Good" or "Good") were the pavement condition of the city and side walks (46 per cent), the condition/cleanliness of city streets and sidewalks (43.7 per cent), recycling collection services (44.1 per cent), garbage/waste collection (46 per cent) and the cleanliness of facilities in city parks (46.1 per cent).

To identify which issues worried the respondents was among the objectives of the survey. They were asked to rank from "very worried" to "not worried at all" certain aspects related to their quality of life in the BMR (see Table 3.22).

Table 3.22 - Degree of concern about certain issues

How worried are you about the following aspects in Barcelona?	Very worried	Somewhat worried	Not particularly worried	Not worried	Not worried at all	Don't know
Amount of crime in the city	12.7	23.0	40.7	13.7	5.4	4.4
Safety	16.2	35.3	32.4	11.3	3.9	1.0
Availability of recreation for teenagers	21.1	35.8	25.0	7.8	2.5	7.8
Availability of affordable housing	79.9	13.2	3.9	1.0	.5	1.5
Availability of recreation for seniors	40.2	32.4	14.7	3.9	1.5	7.4
Availability of jobs	20.1	37.7	25.5	8.8	2.9	4.9
Availability of public transportation	14.2	38.2	26.0	14.2	5.9	1.5
Availability of recreation for children	20.1	27.9	24.5	13.7	2.9	10.8
Amount of graffiti	16.2	16.2	31.9	21.6	12.3	2.0
Drug problems	23.5	34.8	26.0	5.4	4.4	5.9
Homelessness	25.5	32.8	24.0	10.3	3.4	3.9
Aggressive/ anti-social behaviour	28.9	34.8	20.1	11.3	2.5	2.5
Prostitution on streets	11.8	19.1	31.9	21.1	10.8	5.4
Traffic	32.8	42.6	18.1	4.9	0.5	1.0
Air pollution	39.7	38.7	15.2	2.9	2.5	1.0
Demonstrations on public spaces	4.4	13.2	41.2	18.1	20.6	2.5

Source: ACRE survey

Availability of affordable housing is a major concern for those interviewed. This is, by large, the most relevant issue which worries the ACRE respondents. It is followed by the availability of recreation for seniors (40.2 per cent) and air pollution (39.7 per cent). In addition to these items and in general terms, more than 50 per cent of respondents were "very worried" or "somewhat worried" about the following issues: safety (51.5 per cent), availability of recreation for teenagers (56.9 per cent), availability of jobs (57.8 per cent), availability of public transportation (52.4 per cent), drug problems and homelessness (58.3 per cent both), aggressive/anti-social behaviour (63.7 per cent) and traffic (75.4 per cent). Finally, the fact that there was a relatively low level of preoccupation in categories such as demonstrations on public spaces, with 20.6 per cent of respondents who are not worried at all, prostitution on the streets (10.8 per cent) and the amount of graffiti (12.3 per cent) is significant. These figures might be read as indicators of openness and tolerance.

In order to analyse aspects related to tolerance and unproblematic co-existence between people from different cultures, backgrounds, religions, income levels and nationalities, respondents were asked to agree or disagree with the following sentences shown in Table 3.23:

Table 3.23 – Tolerance and openness of the BMR

To what extent do you agree with the following statements?	1	2	3	4	5	6
This city is welcoming to people from other countries	16.7	51.0	22.5	8.8	1.0	
This city is welcoming to visible minorities	7.4	40.7	26.0	20.6	1.0	4.4
This city is a lesbian friendly place	8.8	58.8	22.1	2.5	0.5	7.4
This city is a gay friendly place	11.3	58.8	22.1	1.5	0.5	5.9
This city is a place with tensions between different income groups	5.9	17.2	37.3	29.9	4.4	5.4

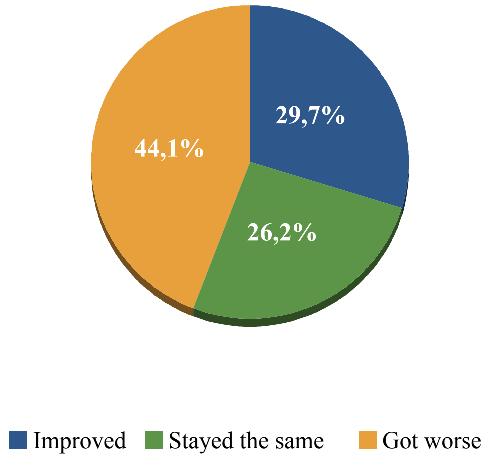
Legend: 1. Strongly agree, 2. Agree, 3. Neither agrees nor disagree, 4. Disagree, 5. Strongly disagree, 6. Don't know

Source: ACRE survey

Within a broad agreement with the sentences that reflect a tolerant and open society, two remarkable facts should be stressed; Firstly, the percentage of respondents, 20.6 per cent, who strongly disagree on "This city is welcoming to visible minorities". This, somehow, undermines the conception of the BMR as a welcoming city to visible minorities. Lately, visibility of minorities has become an issue in Spanish society and, in particular, among residents in the BMR. Peaceful co-existence between different cultures or religious traditions is at the very beginning of the process given the fact that immigration is a relatively new development. Therefore, although efforts are made by the public authorities to welcome incomers, certain sectors of the population find it difficult to accept new lifestyles and cultural traditions (Pérez-Díaz et al., 2001) and this might worsen in the future. Secondly, and according to the results of the ACRE survey, more than 65 per cent of interviewed people disagree or neither agrees nor disagrees as far as the existence of tensions between income groups is concerned. This fact is certainly relevant and might be used as an example of unproblematic co-existence between income groups but hides the main dimension of conflict between different segments of population in some of the Autonomous Communities of Spain and, certainly, in Catalonia. Here the division might be detected along national/ territorial/ identity lines rather than in income class terms for the BMR and Catalonia, are home to two different cultures, the Spanish and the Catalan (Keating, 1998). These traditions, have encountered, on occasion, difficulties to expand without treading on each other. That is, they have not always flourished together and supported each other. Nowadays, this might be the main clash between population sectors in the BMR.

As shown in Figure 3.11, 44.1 per cent of respondents considered that the quality of life had worsened in relation to the past. Only 29.7 per cent acknowledge that the situation is nowadays better.

Figure 3.11 - Quality of life in the BMR and its relation with the past situation

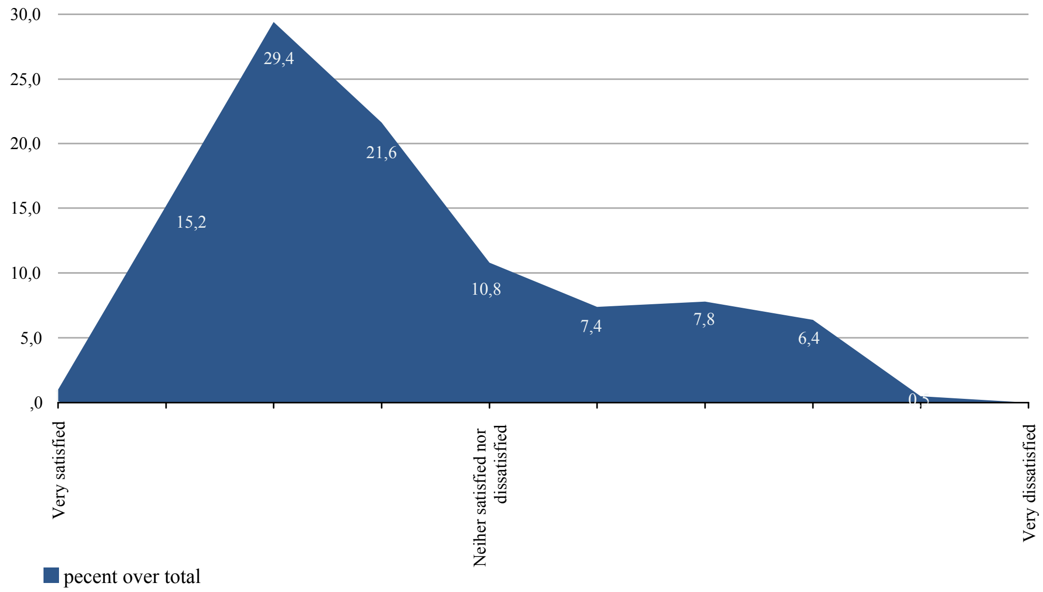


Source: ACRE survey

For those who considered that the quality of life at the BMR has improved, the main reason for this was the improvement of services and facilities (53.4 per cent) followed by the existence of a higher cultural level than in the past (10.3 per cent). The reasons mentioned by those who considered that quality of life in the BMR had worsened were the higher cost of living (40.7 per cent), the dirtiness of the city and the bad quality of some of the services offered (26.7 per cent), and problems related to housing affordability and accessibility (15.4 per cent).

If respondents had lived somewhere else for one year or longer, they were asked to rate the BMR as a place to live, compared to other places they had previously lived in. This applied to half of the sample (see Figure 3.12). Three out of four considered the place they currently live in better (much better or slightly better).

Figure 3.12 - Level of satisfaction with the BMR



Source: ACRE survey

More than 70 per cent of the respondents were not likely to move away from the BMR in the next 3 years. For those with a high or medium likelihood to move, the reasons behind the decision were basically related to work and, broadly speaking, they might be leaving for areas outside the BMR and also outside Spain.

3.5 Satisfaction with job and working environment

The sense of satisfaction with the job and working environment is strongly influenced by a wide range of factors referred to working conditions. We have considered the following division of the elements related to the satisfaction with job:

- Soft factors intrinsically linked to the performance of the job
  - Sense of achievement
  - Scope for using own initiative
  - Amount of influence over the job
  - Intellectually stimulating aspect of the job
- Soft factors related to the environment and the work place
  - Friendliness in the working environment
  - Prospects for career advancement
  - Ability to balance professional and personal life
  - Ability to meet & network with professionals of the same field
- Hard factors related to company costs
  - Facilities in the workplace
  - Training you receive
  - Amount of pay you receive
  - Amount of holiday time/paid leave

In almost all the aspects, respondents declared to be satisfied or very satisfied, only in the aspect “amount of pay you receive”, the percentage of very satisfied and satisfied people was under 50 per cent. Thus, there is a high level of satisfaction amongst the interviewed. If we analyse the overall satisfaction with job, we observe that 14.4 per cent of the sampled declared to be very satisfied with their job. According to Table 3.24, 83.1 per cent of the sample selected the categories “satisfied” and “very satisfied”.

Table 3.24 – Overall satisfaction with job

How satisfied are you with the following aspect of your job? (Overall satisfaction)	Percentage	Cumulative percentage
Very satisfied	14.4	14.4
Satisfied	68.7	83.1
Neither	10.0	93.0
Dissatisfied	6.5	99.5
Very dissatisfied	0.5	100.0

Source: ACRE survey

Satisfaction with the job is higher for females rather than for males, (see Table 3.25). About 88.7 per cent of females are “satisfied” or “very satisfied” with the job whereas the percentage for males is 79.4 per cent. Besides, 9.3 per cent of males are “dissatisfied” or “very dissatisfied” while females show a lower percentage (4.8 per cent).

Table 3.25 -Satisfaction with the job per gender (percentages)

Gender	**Satisfaction with job**		
	Very satisfied or satisfied	Neither	Dissatisfied or very dissatisfied
Male	79.4	11.3	9.3
Female	88.7	6.5	4.8
TOTAL	83.1	10.0	7.0

Source: ACRE survey

Taking into consideration income level, women perceiving lower salaries show a highest percentage of satisfaction than males belonging to the same income range (see Table 3.26).

Table 3.26 - Satisfaction with the job per gender and income level (percentages)

		Income			**Total**
		Less than two times the average salary	**Between two and four times the average**	**More than four times the average salary**	
Male	Very satisfied or satisfied	69.0	86.5	88.9	79.4
	Neither	16.7	10.8	0.0	11.3
	Dissatisfied or very dissatisfied	14.3	2.7	11.1	9.3
	TOTAL	100.0	100.0	100.0	100.0
Female	Very satisfied or satisfied	89.2	86.7	90.0	88.7
	Neither	5.4	13.3	0.0	6.5
	Dissatisfied or very dissatisfied	5.4	0.0	10.0	4.8
	TOTAL	100.0	100.0	100.0	100.0

Source: ACRE survey

Tables 3.27 to 3.29 reflect the results of other aspects regarding work. Table 3.27 shows how soft factors inherent to the working activity, that is, sense of achievement, influence, initiative and intellectual stimulation affect overall satisfaction. We observe how the elements connected to the success in the job are not amongst the key factors to explain the satisfaction of the respondents. In that sense, the second column of Table 3.27 shows the satisfaction with the sense of achievement with the job. If we compare there results to the overall satisfaction with the job, we can see that whereas more than 83 per cent are satisfied or very satisfied with the job, only 71.3 per cent declare satisfaction or high satisfaction with their sense of satisfaction with job. As depicted in Table 3.27, satisfaction with the rest of soft factors inherent to work is higher than the sense of achievement. In the three factors (scope for using the own initiative, amount of influence over the job and intellectually stimulating aspect of the job) the level of satisfaction is high, with more than three quarters of the sample considering to be satisfied or very satisfied with them.

Table 3.27 - Soft factors inherent to work

	Sense of achievement with the job	Scope of using the own initiative	Amount of influence over the job	Intellectually stimulating aspect of the job
Very satisfied	8.9	25.7	18.3	26.1
Satisfied	62.4	54.5	59.4	55.7
Neither	19.8	11.9	13.9	11,1
Dissatisfied	7.9	6.4	7.9	10.8
Very dissatisfied	1.0	1.5	0.5	1.0

Source: ACRE survey

The satisfaction with the scope for using own initiative is noticeable, with more than 80 per cent of the sampled satisfied or very satisfied with this aspect. In a similar vein, the satisfaction with the intellectual stimulation of the job is very high (81.1 per cent is satisfied or very satisfied with this aspect). These facts, alongside with the results concerning satisfaction produced by the influence over the job, reflect two clear facts: on the one hand, a positive attitude and feeling towards their working activity and, on the other, the preferences of the respondents over the characteristics of their job.

Concerning the working environment, respondents showed high levels of satisfaction, visible in the 85.1 per cent that declared to be very satisfied or satisfied with the friendliness of their working environment (Table 3.28). However, results are not that clear with respect to the rest of the aspects of the table. In fact, the possibility of making compatible working life and personal life, as well as the prospects for advancement in the professional career, generate less satisfaction amongst the sampled. 61.5 per cent of them consider themselves satisfied or very satisfied with the prospects of advancement in their career, whereas 17.5 per cent consider themselves dissatisfied or very dissatisfied. Satisfaction with the compatibility of work and personal life is very low. Respondents showed a serious concern on this issue: only 53.7 per cent are satisfied or very satisfied, whereas 35.5 per cent are dissatisfied or very dissatisfied. This reflects a general concern in Spanish society about the compatibility of personal and working life[9].

Satisfaction of the working environment contributes to explain why the interviewees were more satisfied with their job in general terms than with respect to specific aspects such as the sense of achievement.

Table 3.28 - Satisfaction with working environment

	Friendliness in the working environment	Prospects for career advancement	Ability to balance professional and personal life	Ability to meet and network with professional from your same field
Very satisfied	25.9	9.0	15.3	16.9
Satisfied	59.2	52.5	38.4	53.2
Neither	11.9	21.0	10.8	19.4
Dissatisfied	2.5	15.0	29.1	9.0
Very dissatisfied	0.5	2.5	6.4	1.5

Source: ACRE survey

[9] The Spanish government, as well as other regional and local administrations, are introducing this issue on the political agenda with policies oriented at encouraging companies to modify their working hours.

The material dimension of the job shows the lowest level of satisfaction. Given that the material aspects account for the major part of labour costs of companies, they constitute the hard factors of employment. Table 3.29 shows the satisfaction with these aspects. 68.8 per cent of the respondents showed high levels of satisfaction with the facilities in the workplace, but 20.1 per cent declared to be dissatisfied or very dissatisfied with the services and facilities of their company. Assessments on satisfaction with the training received are also very negative, with 59.9 per cent of people who declare being satisfied or very satisfied, but 19.8 per cent dissatisfied or very dissatisfied. We infer that workers are more concerned about their training than their companies are. This is coherent with their concern above the prospects of advancement in the professional career.

Salaries receive the worst satisfaction levels of respondents. Less than a half of the interviewed expressed satisfaction or a lot of satisfaction with their salaries (47 per cent) whereas 37 per cent were dissatisfied or very dissatisfied. The interviewees were relatively unsatisfied with their amount of holiday time

Table 3.29 - Material aspects of the workplace

	Facilities in the workplace	Training you receive	Amount of pay you receive	Amount of holiday time/ paid leave
Very satisfied	16.6	15.2	3.0	4.8
Satisfied	52.3	44.7	44.0	51.6
Neither	11.1	20.3	16.0	17.7
Dissatisfied	18.6	17.8	32.0	18.8
Very dissatisfied	1.5	2.0	5.0	7.0

Source: ACRE survey

In comparison with the soft factors analysed, the relatively major dissatisfaction in the material aspects, particularly for salaries received it is outstanding. In fact, as we have seen in section 3.1, 80 per cent of the sampled receive twice the average wage for Spain, and 50 per cent receive three times that salary. Nevertheless, they show dissatisfaction in this aspect. To conclude, respondents tended to be dissatisfied with the material aspects (hard factors), but that was balanced with a high level of satisfaction with respect to the different soft factors based on a more subjective and ethereal assessment. Overall satisfaction with job is high, as has been explained in the first part of this section. A high concern for training and improvement in the workplace is found amongst the positive aspects. Overall, these aspects evidence the existence of a qualified labour market.

Table 3.30 confirms that respondents preferred job stability with longer careers in their company. In fact, 77.3 per cent of them expected to remain more than three years in the same company, and 68.1 per cent expect to remain on it more than five years. Thus, that willingness to remain in the company corroborates the concern of the respondents in their working activity.

Table 3.30 – Expected remaining time in the company

How long do you expect to remain in this company/ organisation?	Percentage
Less than 6 months	5.0
Less than 1 year	6.4
Between 1 and 3 years	11.3
More than 3, less than 5 years	9.2
Between 5 and 10 years	13.5
More than 10 years	54.6

Source: ACRE survey

Although they only express the willingness of the surveyed, these data are coherent with the fact that those who have more stability in employment have more contract stability as well (see section 3.3 for further information). The sampled that have expressed an expectation of leaving their company in a short period of time have also explained the reasons for doing so.

Table 3.31 – Reasons for leaving the company in a near future

If you expect to leave the company / organisation in the next year, what are the main two reasons in order of priority?	Percentage
To seek a more interesting job	14.2
To seek better pay	9.3
To seek a less stressful job	4.4
To seek better conditions	4.4

Source: ACRE survey

As can be seen in the Table 3.31, the first reason, given by respondents, was to seek a more interesting job, which is coherent with the other results of the survey. The second most quoted option was the economic motivation, possibly because of the low satisfaction that their current incomes produced.

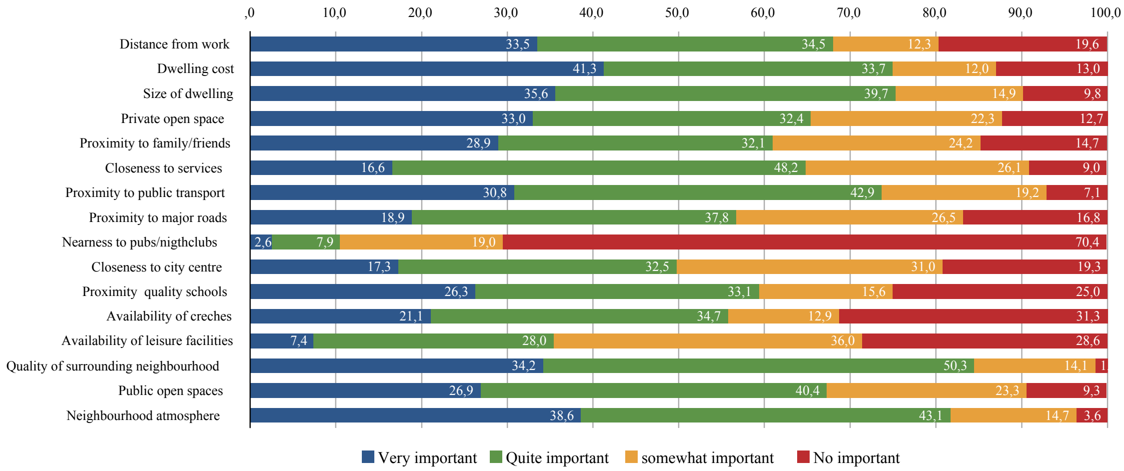
3.6 Satisfaction with neighbourhood and living environment

The present section outlines the level of satisfaction of the surveyed with their living environment by considering the responses to questions that refer to various aspects of life in their neighbourhoods. The results obtained on the levels of satisfaction are essential in order to study the motivation that prompts interviewees to choose a particular place of residence. The levels of satisfaction indicate the role played by soft and/or hard factors in the choice of place of residence. The aim is to determine to what extent aspects such as the existence of certain services or infrastructures in the neighbourhood, the distance from work, quality of life, and social relationships are taken into consideration when deciding where to live.

We will begin by briefly giving the percentages of the places of residence of the creative and knowledge employees surveyed. Then we will proceed by summarising the main reasons why the respondents have chosen a particular area and whether their current residence fulfils the expectations that they initially paced on it. Finally, we will analyse the degree of satisfaction of the respondents with various aspects regarding their neighbourhoods and their dwellings.

67.3 per cent of the interviewees live in the city of Barcelona, 14.9 per cent in the first ring and 17.3 percent, in the second ring. Of those who live in the city of Barcelona, 28.6 per cent live in the city centre and 33 per cent in other neighbourhoods in Barcelona. The percentage of interviewees who live in a city neighbouring Barcelona is 17.2. As far as the rest is concerned, 12.3 per cent declare that they live in a medium or big city in the rest of the BMR, and only 8.9 per cent consider that they live in a small town in the BMR[10].

Figure 3.13 - Relevant factors in the decision of moving to current residence



Source: ACRE survey

As shown in Figure 3.13**,** the quality of the surrounding neighbourhood and the cost of housing are key influential factors when choosing a place to live. 84.4 per cent of the surveyed respond that the quality of the surrounding neighbourhood is either very or quite important. This reason is intrinsically connected to the one concerning the neighbourhood atmosphere – an aspect that is considered either very or quite important by 81.7 per cent of the people surveyed. The cost of housing is given as very or quite important by 75.0 per cent of the respondents. However, this motivation, that is, the cost of housing is the one that was accorded the answer very important by the highest proportion, 41.3 per cent. In the same line, 75.3 percent consider that the size of dwelling is a very or quite important reason for living in their current place of residence, and finally there are a 73.7 per cent of people who consider the proximity to public transport as very or quite important. We can conclude, then, that the most influential aspects that have led interviewees to choose their current place of residence are soft factors which are intrinsically related to general soft conditions such as quality of life and housing conditions. We have to go down in the list of motivations to the fifth reason-transport facilities- in order to find an aspect which is considered a hard factor.

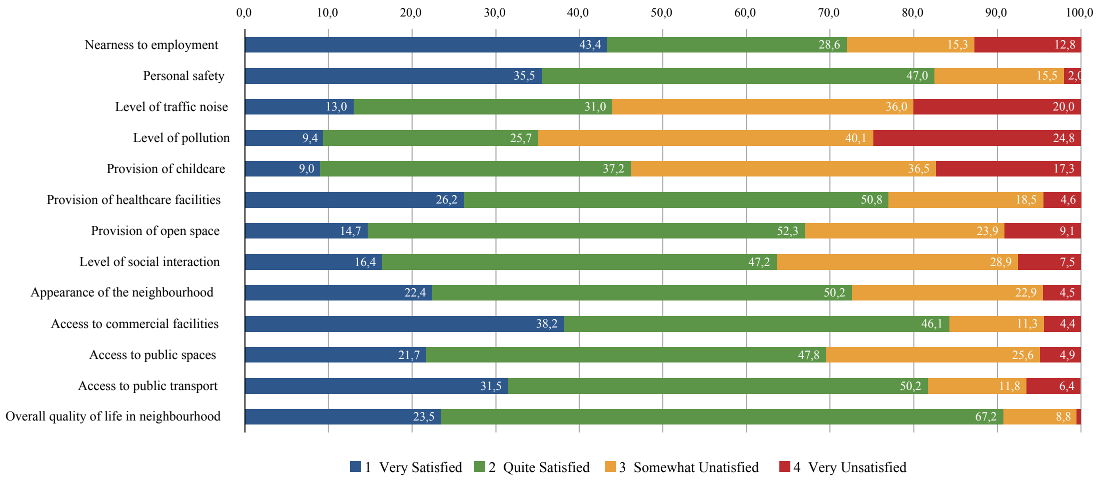
As far as the aspects which are deemed as less influential in the choice of residence, they read as follows: 70.4 per cent does not regard nearness to pubs/nightclubs as important, availability of crèches is not influential for 31.3 per cent, availability of leisure facilities is not an issue for 28.6 per cent, and 25.0 per cent do not consider relevant the proximity to good quality schools. The above aspects are soft factors related to leisure activities, but some of them are

[10] See section 3.2 *Basic residencial features.*

hard factors classified as public social infrastructure. Finally, we would like to point out that the distance from home to work and the proximity to the city centre are not considered essential. Namely, distance to work is not important for 19.6 per cent and proximity to the city centre is irrelevant for 19.3 per cent. Therefore, respondents accord a higher degree of relevance to the access to public transport than to living in areas that are close to the places where they have to travel to regularly.

The majority of the surveyed, 85.3 per cent declares that life in their neighbourhoods has fulfilled their expectations. This result is corroborated by the fact that 90.7 per cent of the respondents manifest that they are quite or very satisfied with the overall quality of life in the neighbourhood: 67.2 per cent are quite satisfied, and 23.5 per cent are very satisfied (see Figure 3.14).

Figure 3.14 - Satisfaction with aspects of life in neighbourhood / area



Source: ACRE survey

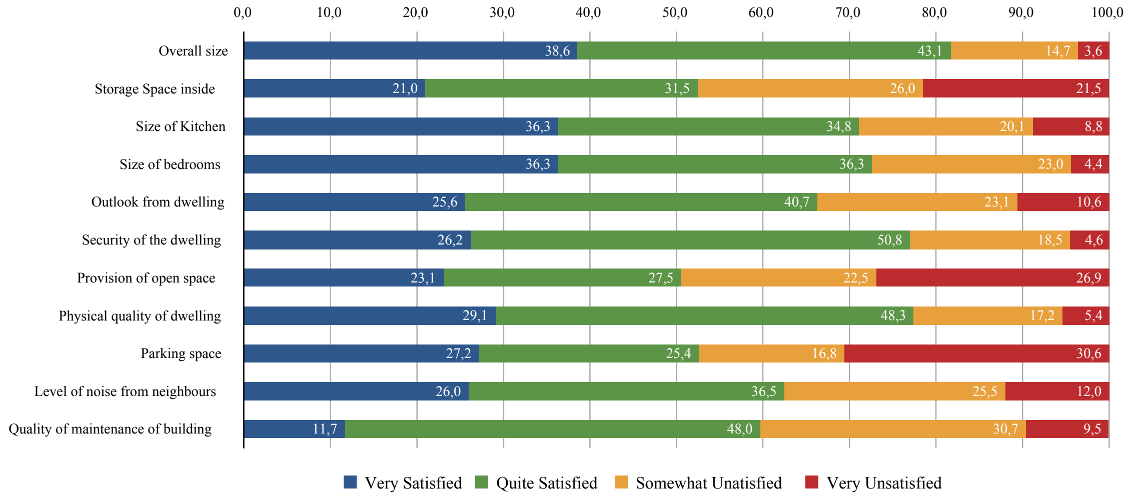
In general, our interviewees are considerably satisfied with their neighbourhoods/areas of residence. The aspects that most account for the satisfaction are access to commercial facilities (84.3 per cent quite or very satisfied), personal safety (82.0 per cent), and access to public transport (81.7 per cent). We observe that the expectative related to public transport has been fulfilled for proximity to public transport arises as a relevant reason when deciding on the place of residence, and at the same time, it is accorded one of the highest grades as far as satisfaction is concerned.

The fourth factor that is accorded a high level of satisfaction, 72.0 per cent, is proximity to employment. Although proximity to work did not feature among the essential motivations to choose the place of residence, 43.4 per cent – the highest percentage of very satisfied of all the variables considered – affirms to be very satisfied with proximity to work.

Moving onto less satisfactory aspects, we observe that the dissatisfaction of our respondents is mainly directed to issues related to the environment. Thus, 64.9 per cent declare to be somehow dissatisfied with pollution levels, and 56.0 per cent with traffic noise. Besides, the results for the level of social interaction between neighbours are poor for 36.4 per cent are somehow dissatisfied and a significant 22.1 per cent do not answer the question. The results obtained for the above aspects are puzzling for we need to remember that the neighbourhood atmosphere emerged as one of the key motivations when deciding on the area of residence.

The highest levels of satisfaction with the neighbourhood are accorded to both soft and hard factors (quality of live, transport infrastructure, public transport facilities), whereas dissatisfaction is directed towards the soft factor known as residential environment.

Figure 3.15 - Satisfaction with aspects of dwelling



Source: ACRE survey

As regards satisfaction with different aspects of the dwelling (see Figure 3.15), we would like to remark that the size of the dwelling is the most valued. 47. 5 per cent of the respondents are very satisfied with it, and 78.4 per cent are quite o very satisfied. The size of the kitchen and the size of the bedrooms are accorded positive assessment, but the results are slightly lower than for the whole dwelling (71.1 per cent and 72.5 per cent respectively are quite or very satisfied). We conclude that the expectations of the interviewees have been fulfilled in this area for the size of the dwelling was one of the main reasons behind the current choice of residence.

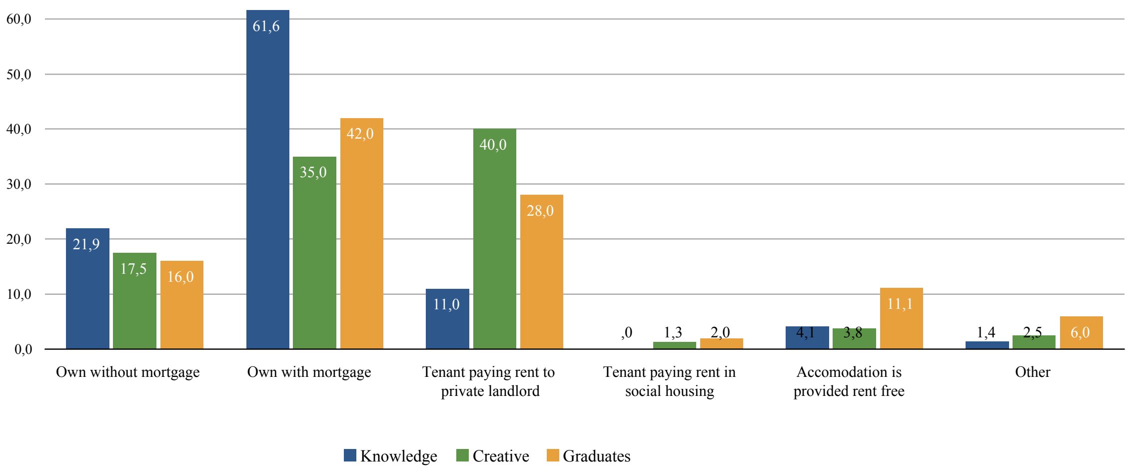
The physical quality of dwelling is the second most valued variable with 77.3 per cent who respond that they are quite or very satisfied, followed closely by security of the dwelling with 76.9 per cent of answers in the same line. Security, both in the neighbourhood and in the dwelling features as one of the most valued aspects. However, the provision of open space, parking space and quality of management of building are the aspects of the dwelling that are considered less satisfactory. The percentages of those who are somehow dissatisfied with the above aspects read as follows: 49.4 per cent for the provision of open space, 47.4 per cent for parking space and, finally, 40.2 per are dissatisfied with quality of management of building.

Although we do not have, in this section, information on the degree of satisfaction with the cost of housing, and the relationship quality-cost of housing, we can conclude that the level of satisfaction with the dwelling is considerably high. We observe a positive connection between the relevance of the soft factor housing condition as one of the main motivations when choosing residence and the considerable degree of satisfaction with the current dwelling.

3.7 Figures in colour

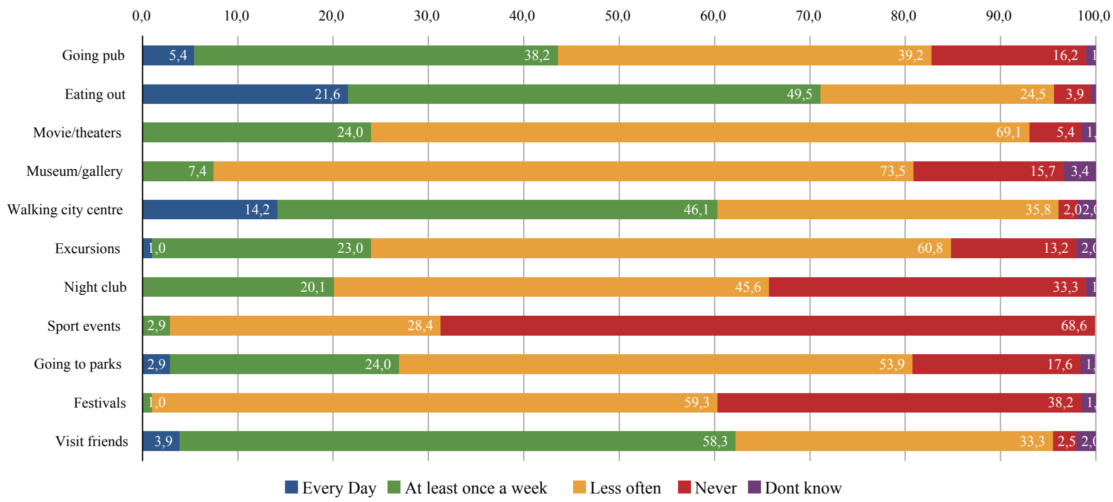
This section includes the most relevant figures of the chapter in colour

Figure 3.7 - Kinds of accommodation (creative, knowledge and graduates)



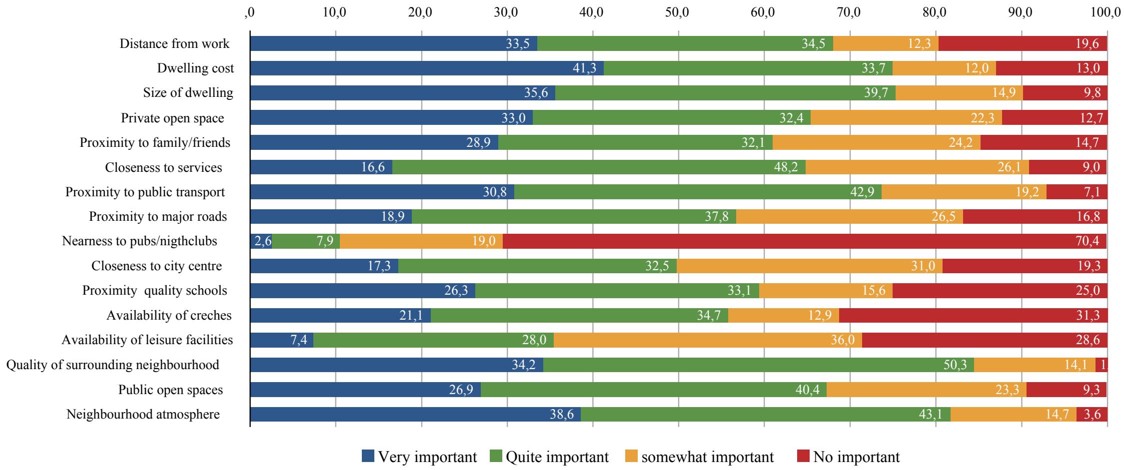
Source: ACRE survey

Figure 3.10 -Frequency of leisure activities



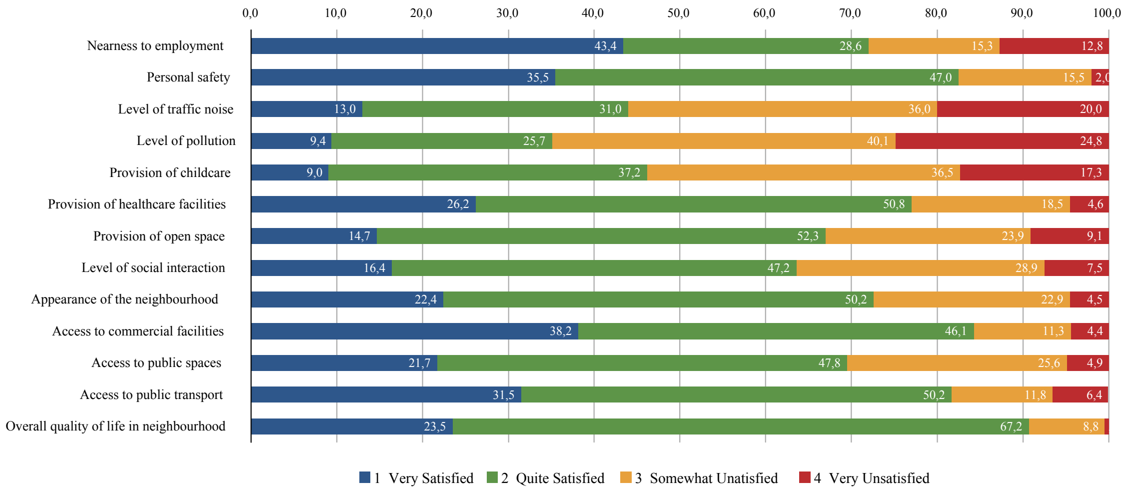
Source: ACRE survey

Figure 3.13 -Relevant factors in the decision of moving to current residence



Source: ACRE survey

Figure 3.14 -Satisfaction with aspects of life in neighbourhood / area



Source: ACRE survey

Figure 3.15 -Satisfaction with aspects of dwelling

Source: ACRE survey

4 CREATIVE AND KNOWLEDGE WORKERS AND GRADUATES IN BMR: RELEVANT DIMENSIONS

This section looks at some of the results obtained from the perspective of bivariate analyses in order to determine how soft factors influence the sample's decision of living and working in the BMR. The first part of the section analyses current mobility patterns and the reasons that determine them. Moreover, we offer some insights into mobility patterns that are likely to occur, as far as our sample is concerned, in the near future. The second part of the section approaches satisfaction with the city and with job paying particular attention to the relevance of social differences and soft factors of the BMR.

4.1 Are the creative and knowledge workers mobile?

As we established in section 3.2, the residential mobility of our sample is low. The respondents conform to traditional patterns that are usually encountered in the Spanish context, where family and friends are given considerable relevance and are thought to hinder residential mobility. Furthermore, the results prove that the number of newcomers to the different areas where the sample reside is low. Nevertheless, it is necessary to state, at the beginning of the present analysis, that although only 13.2 per cent of the sample has lived always in the same place, 71.1 per cent of the respondents have been living in their current municipality for more than ten years, and only 7.8 of the surveyed individuals have moved to a city of the BMR in the last two years. These figures are a consequence of the high level of internal mobility registered in the BMR in the 1980s (see Chapter 1). Therefore the new inhabitants of the different municipalities come mainly from other municipalities of the region but not from outside the region. Considering all these facts, the analysis of residential mobility has, perforce, been done over a small proportion of the sample. However, we have chosen to take into consideration the reasons that our interviewees give for remaining in their city of residence. Our interest focuses on the influence of the so-called soft factors.

Reasons for taking residence in the cities and towns of BMR vary depending on the origin of the sampled. Table 4.1 shows the relation between the previous places of residence and the main reason for living in the current city of the BMR[1]. People who have never moved or have moved to another neighbourhood of the same city give personal connections as the reason for their current place of residence, while respondents who have moved from another city in the country or from outside the country cited their job as the main reason for the residential move. It is somehow remarkable that only those who have moved referred to the social atmosphere of their city as the main reason for living there.

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[1] For the purpose of our analysis, we have just considered the first reason given for living in a city of the BMR.

Table 4.1 – Relation between previous place of residence and reasons for living in BMR

	Never moved	**In city but other neighbourhood**	**Another city in region**	**Another city in country**	**Outside country**	**Outside Europe**
Personal connection	96.3	74.7	40.3	33.3	25.0	28.6
Job	0.0	17.2	26.3	50.0	50.0	57.1
Location	0.0	2.3	12.3	5.5	12.5	0.0
City characteristics	3.7	3.5	10.5	0.0	12.5	0.0
People/ social atmosphere	0.0	1.1	5.3	5.5	0.0	14.3
Education	0.0	0.0	1.7	0.0	0.0	0.0
Other	0.0	1.1	3.5	5.5	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

Thus, the categories personal connections and job emerge as the main reasons for living in the BMR. The former is relevant for the people who have never moved from their neighbourhood or their city, whereas the latter explains the residential moves of people from outside the BMR. As far as soft factors are concerned and taking a closer look at the results, we observe that aspects such as natural environment or openness play a secondary role in the election of the BMR. That is, they do not constitute the most relevant reasons for living in the city in general terms, but they are most cited as pertinent by those who have moved from another city. For example, in the group of people who cited weather / climate as a relevant factor, 84.7 per cent cited it as a third or fourth most determinant factor.

As regards residential mobility in the near future, the responses of the sample suggest that this will be quite low. Only 10.8 per cent of the interviewees answered, when asked about their willingness to leave the city, that they were almost definitely or very likely to move away from their city in the next three years. The social and economic features of that 10.8 per cent provide some insight into the suggested future trends on mobility for most of them are young people. A fact that confirms the belief that young adults are more inclined to move than other groups of population. In fact, as shown in Table 4.2, those who express a higher likelihood to leave their city are people under 34.

Professional careers, which are intrinsically related to income and the level of education, seem to have an influence on the willingness to move. Table 4.3 shows how willingness to leave the city and income level are related. The inclination to leave the current city of residence is higher among those who receive low incomes. The proportion is four times higher than for those who receive high/very high incomes.

Table 4.2 - Relationship between willingness to leave the city and age structure

	Age range				
	15-24	25-34	35-44	45-54	55-64
Almost definitely	10.0	8.3	1.3	2.4	3.9
Very likely	0.0	11.7	5.3	4.9	6.4
Somewhat likely	30.0	30.0	10.5	12.2	17.2
Not too likely	50.0	30.0	40.8	29.3	34.5
Not likely at all	10.0	20.0	42.1	51.2	37.9
TOTAL	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

Table 4.3 - Relation between income and willingness to leave the city.

Willingness to leave the city	Income Less than two times the average salary	 Between two and four times the average	 More than four times the average salary
Almost definitely	13.6	7.7	3.6
Somewhat likely	16.0	25.0	14.3
Not too likely or not likely at all	70.4	67.3	82.1
TOTAL	100.0	100.0	100.0

Source: ACRE survey

In the same line, the education level also explains the willingness of future mobility for while 12 per cent of the graduates want to leave the city in a near future, only six per cent of the sampled with secondary studies have the same desire. That is, people who declare themselves inclined to change their place of residence in the near future are young people with tertiary studies and low incomes. This group of people would seem to regard mobility as relevant to their professional careers. As far as the reasons for leaving the city in the near future are concerned, the percentages are quite evident. That is, 32 per cent of the respondents see themselves moving out of their current place of residence in order to look for improved job opportunities. The cost of housing and quality of life were among further reasons to account for potential residential moves.

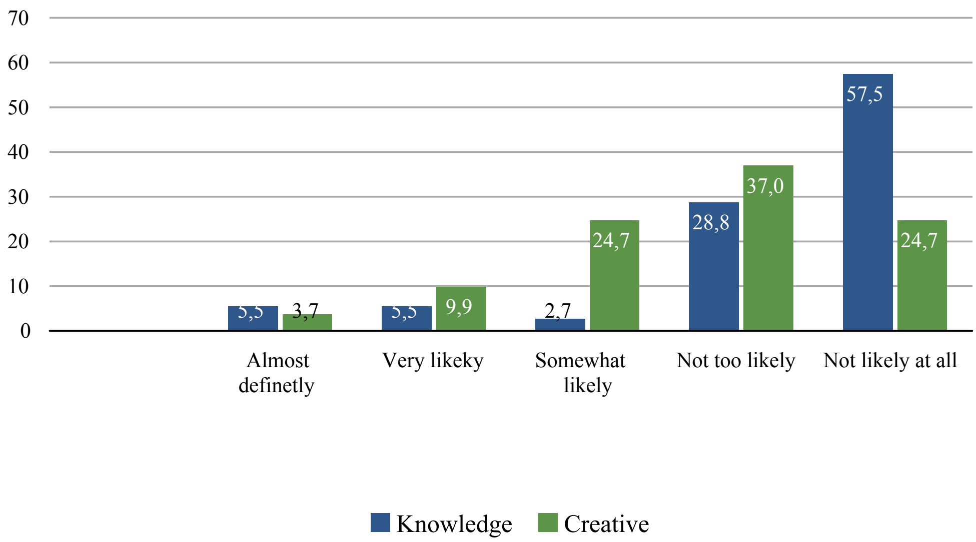
Table 4.4 - Reasons for leaving the city in the next three years

Reason for leaving the city	Percentage
Family or partner	15.1
Personal reasons	11.3
Job	32.1
Housing prices	17.0
Better quality of life	17.0
Other reasons	7.6
TOTAL	100.0

Source: ACRE survey

Finally, we can find differences amongst professional branches in the willingness to leave the city. Architects are the professionals that declare in a major proportion a willingness to move. 13.3 per cent declares that they will move in a near future and a remarkable 40 per cent declares that is possible that they leave their residence in that period of time. Only 16.7 of architects declare that they are sure that they will not move from their residence.

Figure 4.1 - Willingness to leave the city per sectors



Source: ACRE survey

4.2 What elements generate satisfaction with the city?

The aim of this section is to provide detailed information about the degree of satisfaction with the city of residence of our interviewees. In fact, as the first analysis of satisfaction already mentioned, most people working at the BMR (around 60 per cent) feel quite satisfied with their place of residence. There is an important issue to take into account when analysing the sample. The fact that we are considering many neighbourhoods, municipalities and cities, not just Barcelona; therefore, the evaluation of results gives a quite varied picture of satisfaction according to the territory. This is the reason why we have decided to start interpreting the satisfaction according to the area of the BMR they live. As Table 4.5 shows, respondents were in general very satisfied or quite satisfied. Those living in the first or second rings were slightly less satisfied than those living in the city of Barcelona were.

Table 4.5 - Satisfaction with the city at BMR

How satisfied are with your life in BMR?	Living in the city of Barcelona	Living in the first ring	Living in the second ring
Very satisfied	23.1	22.9	22.9
Quite satisfied	68.5	62.9	65.7
Somewhat satisfied	8.3	11.4	11.4
Very unsatisfied	0.0	2.9	0.0

Source: ACRE survey

Respondents punctuated, in a range going from one (very satisfied) to 10 (very dissatisfied), their level of satisfaction with the city. According to this, and given the average of 4.1, those living in Barcelona and in the first ring were more satisfied than the average (4.1 and 4.0 respectively) while those living in the second ring were less satisfied than the average (4.3).

The location of their house, that is, at the inner city, at the periphery etc. becomes an important issue to consider. Those living in a village or a small town show a higher percentage of people “very satisfied” than the rest (see Table 4.6). However, the higher amount of people “somewhat dissatisfied” corresponds to those living in a medium or large town in the metropolitan area. Many reasons might explain these percentages; since the nineties, many households have moved from the city of Barcelona to the first or second ring. Two main reasons explain this shift; on the one hand, some of them were looking for a better place to live, next to the mountains or to the coast. On the other, housing became more affordable than in the centre of the city. Those who moved looking for a better quality of live, usually reside in single-family houses in small towns. They are probably “very satisfied” with their surroundings. However, less attractive dwellings and neighbourhoods accommodate those who moved out of the city looking for affordable housing. They would probably be “somehow dissatisfied or very unsatisfied”.

Table 4.6 -Satisfaction with the city according to location

	City centre	Rest of the core city	Rest of city, including the outskirts	Village or small town in metro region	Medium or large town in BMR
Very satisfied	22.4	20.9	28.6	33.3	16.0
Quite satisfied	70.7	71.6	62.9	61.1	60.0
Somewhat satisfied	6.9	7.5	5.7	5.6	24.0
Very unsatisfied	0.0	2.9	0.0	0.0	0.5

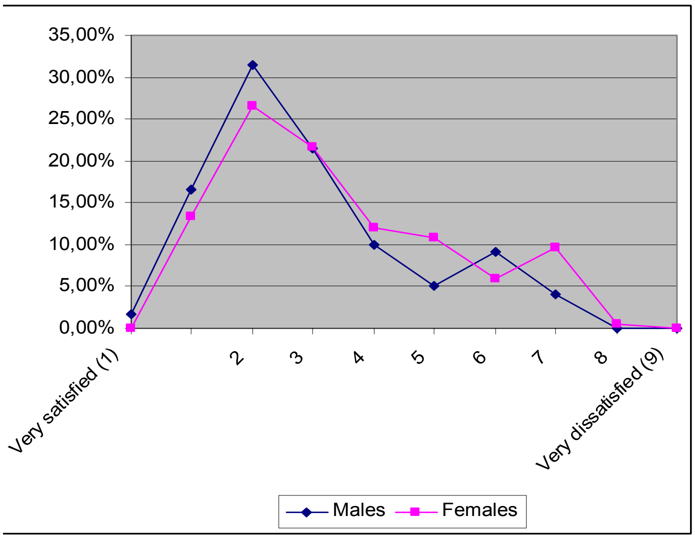
Source: ACRE survey

In terms of spatial location, results were as follows: more satisfied than the average were those living in the city centre (3.8) and in the rest of the city, including outskirts (4.0). However, those living in the rest of the core city, in a village or a small town and in a medium or large town were less satisfied than the average (4.2, 4.5 and 4.4 respectively).

Time since they arrived to the city might also be significant in order to explain satisfaction. According to the number of years since they arrived to the neighbourhood they currently live, those who arrived more than 10 years ago are more satisfied (3.9) than those who arrived less than one year ago (4.3), between one and 5 years (4.3) and between 5 and 10 years (4.5).

According to gender, there are no huge differences between them; they follow the average pattern already explained in the previous section. As it can be seen in Figure 4.2, females are slightly less satisfied than men are about their cities.

Figure 4.2 - Satisfaction according to gender



Source: ACRE survey

We have defined an index to give a general overview of the satisfaction with leisure activities and public services for males and females[2]. There is no significant gender difference in terms of satisfaction with public services. However, females are more satisfied than males about leisure activities (see Tables 4.7 and 4.8).

Table 4.7 - Index of satisfaction with leisure activities, per gender and percentages

	Male	Female	Total
Very dissatisfied or dissatisfied	2.5	1.6	2.1
Neither	58.8	44.4	52.4
Very satisfied or satisfied	38.8	54.0	45.5
TOTAL	100.0	100.0	100.0

Source: ACRE survey

Table 4.8 - Index of satisfaction with public services, per gender and percentages

	Male	Female	Total
Very dissatisfied or dissatisfied	20.4	20.9	20.6
Neither	68.8	68.7	68.8
Very satisfied or satisfied	10.8	10.4	10.6
TOTAL	100.0	100.0	100.0

One of the important questions related to Florida's theories, is the attractiveness of the city based on the open character of people and tolerant environment. In order to identify how welcome to foreigners the BMR is, interviewees agreed or disagreed with the following sentence: "Is the BMR a welcoming place to people from other countries?". The expected tolerant and open nature of the BMR (see Pareja et al, 2007) as a welcoming place to live was

[2] This index summarises specific variables related to quality of leisure activities (quality of public spaces, quality of sport equipement...) We add all the answers of each respondent (one very dissatisfied, 5 very satisfied) and we transform this into a scale from zero to ten.

proved. However, the percentage of disagreement with the sentence is higher for those who belong to other nationalities rather than the Spanish[3] (see Table 4.9).

Table 4.9 -Agreement with the sentence "The BMR is a welcoming place" per nationality, in percentages

Nationality	Spanish	Rest of EU	Latin America	Double nationality	Total
1. Strongly agree	16,2	11.1	33.3	25.	16.7
2. Agree	52.4	44.4	50	0	51
3. Neither	22.7	33.3	0	25	22.5
4. Disagree	7.6	11.1	16.7	20	8.8
5. Strongly disagree	1.1	0	0	0	0
TOTAL	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

In terms of nationality and overall satisfaction with the city, people coming from Latin America, who share one of the official languages in the BMR, the degree of satisfaction is considerably higher (3.0) than the average (4.1)

According to income, no great differences are evident in terms of overall satisfaction with the city (Table 4.10). However, both located at the extremes of the income range (Very low and very high) are those more satisfied (3.0 and 3.2, respectively). Intervals of income in between evidence lower levels of satisfaction.

Table 4.10 - Income and satisfaction

Income	Average
Very low	3.0
Low	4.3
Medium	4.2
High	4.2
Very high	3.2
TOTAL	4.2

Source: ACRE survey

There is no direct relation between overall satisfaction with the job and overall satisfaction with the city (Table 4.11). In other words, independently of the degree of satisfaction with the job, satisfaction with the city stands at around three. A detailed analysis, which takes into account all aspects participating in the overall satisfaction with the job, shows that satisfaction with the city is around four in all items considered (see annex).

[3] It must be taken into account the reduced number of foreign population that was interviewed (see demographic section)

Table 4.11 - Satisfaction with the city and satisfaction with the job

	Satisfaction with the job		
Satisfaction with the city	**Very satisfied or satisfied**	**Neither**	**Dissatisfied or very dissatisfied**
Very satisfied (1)	1.2	0.0	0.0
2	16.8	5.0	7.1
3	26.9	50.0	28.6
4	23.4	5.0	21.4
5	10.8	10.0	14.3
6	7.2	10.0	7.1
7	6.6	15.0	14.3
8	6.6	5.0	7.1
Very dissatisfied (9)	0.0	0.0	0.5

Source: ACRE survey

As Table 4.12 shows, income level does not have a bearing on satisfaction with leisure and public services. Therefore, Florida's theories, which state that high-income earners are more demanding in these areas, could not be proved for all the leisure activities sampled. For instance, eating out is a favourite activity for 32.1 per cent of those belonging to the higher income group, whereas a relevant 6.2 per cent of those belonging to lower income groups never go out. However, in the case of "going to the pub", 41.3 of low-income interviewees go at least once a week and 25 per cent of those with higher incomes never go to the pub.

Table 4.12 - Activities and satisfaction

		Less than two times the average salary	**Between two and four times the average**	**More than four times the average salary**	**Total**
Going to the pub	Every day	6.3	3.8	3.6	5.0
	At least once a week	41.3	44.2	32.1	40.6
	Less often	37.5	40.4	39.3	38.8
	Never	15.0	11.5	25.0	15.6
	TOTAL	100	100	100	100
Eating out	Every day	17.3	15.7	32.1	19.4
	At least once a week	53.1	51.0	50.0	51.9
	Less often	23.5	33.3	14.3	25.0
	Never	6.2	0	3.6	3.8
	TOTAL	100	100	100	100
Movies/theatre	At least once a week	21.0	28.8	33.3	25.6
	Less often	72.8	63.5	63.0	68.1
	Never	6.2	7.2	3.7	6.3
	TOTAL	100	100	100	100
Museums/Galleries	At least once a week	11.4	2.1	7.1	7.7
	Less often	68.4	85.4	71.4	74.2
	Never	20.3	12.5	21.4	18.1
	TOTAL	100	100	100	100
Walking in the city centre	Every day	13.6	19.2	19.2	16.4
	At least once a week	49.4	48.1	30.8	45.9
	Less often	35.8	30.8	50.0	36.5
	Never	1.2	1.9	0	1.3
	TOTAL	100	100	100	100
Excursions in parks/green areas	Every day	1.3	00	0	0.6
	At least once a week	20.0	26.0	21.4	22.2
	Less often	61.3	62.0	64.3	62.0
	Never	17.5	12.0	14.3	15.2
	TOTAL	100	100	100	100

Going to night club	At least once a week	23.8	19.6	17.9	21.4
	Less often	43.8	43.1	53.6	45.3
	Never	32.5	37.3	28.6	33.3
	TOTAL	100	100	100	100
Going to sport events	At least once a week	2.5	5.8	3.6	3.7
	Less often	29.6	26.9	28.6	28.6
	Never	67.9	67.3	67.9	67.7
	TOTAL	100	100	100	100
Going to parks	Every day	3.8	3.9	0	3.2
	At least once a week	20.3	23.5	25.0	22.2
	Less often	58.2	49.0	53.6	54.4
	Never	17.7	23.5	21.4	20.3
	TOTAL	100	100	100	100
Going to festivals	At least once a week	2.5	0	0	1.3
	Less often	58.8	56.9	67.9	59.7
	Never	38.8	43.1	32.1	39.0
	TOTAL	100	100	100	100
Visiting friends	Every day	3.8	6.0	0	3.8
	At least once a week	60.0	60.0	57.1	59.5
	Less often	32.5	32.0	39.3	33.5
	Never	3.8	2.0	3.6	3.2
	TOTAL	100	100	100	100

Source: ACRE survey

In terms of participation, (see Table 4.13) all income groups have a low degree of participation. However, those belonging to a higher income range show a slightly higher percentage under the item of political life involvement.

Table 4.13 - Participation and income level

		Less than two times the average salary	**Between two and four times the average**	**More than four times the average salary**	**Total**
Participation in resident's associations	Every day	1.2	2.0	0	1.3
	At least once a week	8.6	3.9	7.4	6.9
	Less often	21.0	35.3	40.7	28.9
	Never	69.1	58.8	51.9	62.9
	TOTAL	100	100	100	100
Participation in religious activities	Every day	1.3	0	0	0.6
	At least once a week	1.3	9.8	0	3.8
	Less often	10.0	5.9	11.1	8.9
	Never	87.5	84.3	88.9	86.7
	TOTAL	100	100	100	100
Participation in community work	At least once a week	1.2	2.0	4.3	1.9
	Less often	25.9	26.0	26.1	26.0
	Never	72.8	72.0	69.6	72.1
	TOTAL	100	100	100	100
Participation in political activities	Every day	2.5	2.0	7.7	3.2
	At least once a week	1.2	2.0	7.7	2.5
	Less often	14.8	6.0	15.4	12.1
	Never	8.5	90.0	69.2	82.2
	TOTAL	100	100	100	100

Source: ACRE survey

One of the most interesting conclusions is related to the fact that many people are forced to commute and, certainly, this directly affects their level of satisfaction. As shown in Table

4.14, there is a negative relationship between satisfaction with the city and time travelled. As expected, if we consider distance rather than time, the correlation is non-existent. However, those living less than one kilometre away from their place of work are more satisfied with the city than the rest. The BMR is nowadays experiencing a huge problem of evident lack of maintenance of infrastructures for years. The "time of commuting" variable is highly explanatory of the degree of satisfaction of those living in the BMR, given that the sample is homogeneously distributed over the whole territory.

Table 4.14 - Time and distance from home to work and overall satisfaction with the city

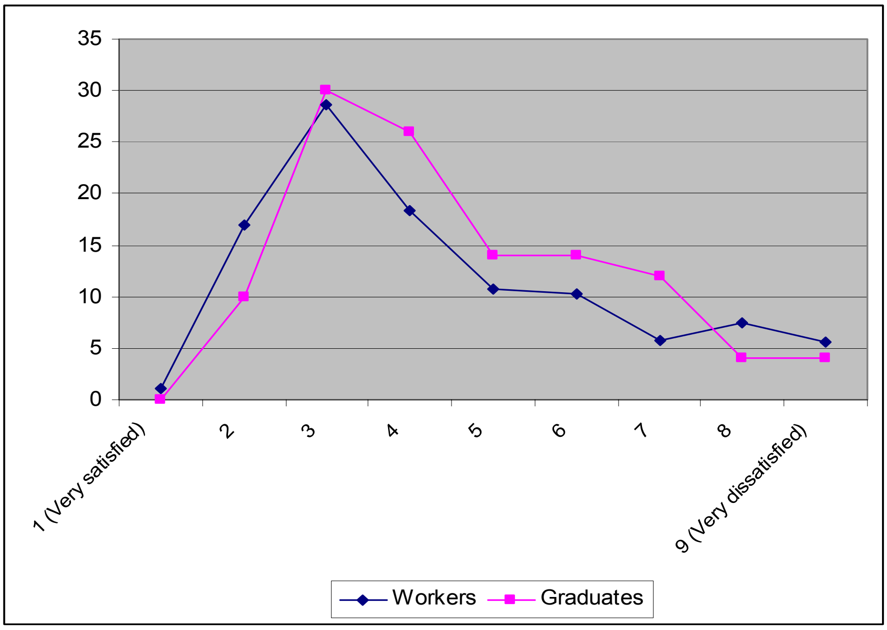
Travel time	Percentage
I work from home	4.3
Less than 15 minutes	3.9
15-29 mins	4.1
30-44 mins	4.1
45-59 mins	4.3
60-90 mins	5.5
Depends on works	5.0
TOTAL	4.1

Distance	Percentage
I work from home	4.4
No fixed place	4.7
Under 1km	3.7
1-4 km	4.0
5-9 km	4.0
10-14 km	4.6
15-29 km	4.3
30 or more km	4.1
TOTAL	4.1

Source: ACRE survey

According to the sub-sector where interviewees worked, different levels of overall satisfaction with the city are perceived. In general terms, both workers and graduates follow the same pattern of satisfaction, being most of them quite satisfied with the city they live in (see Figure 4.3).

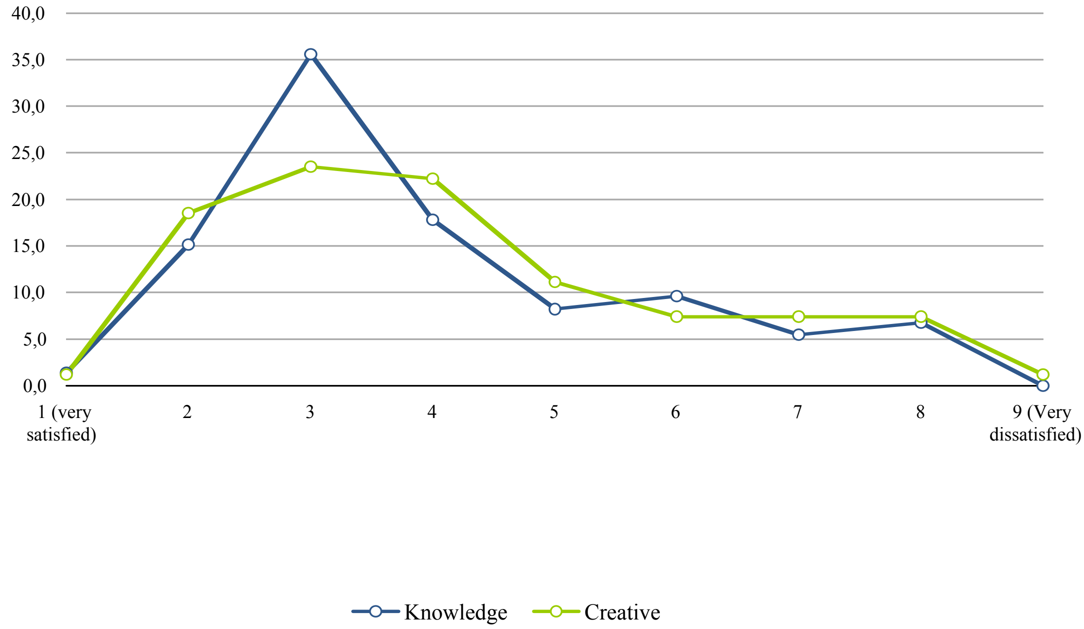
Figure 4.3 - Overall satisfaction with the city, workers and graduates



Source: ACRE survey

However, larger differences exist depending on the sub-sector they work. Knowledge workers are more satisfied with the city than creative workers. Roughly 35 per cent of knowledge workers assessed their satisfaction as '3' in a scale from 1 to 9 (see Figure 4.4), whereas creative workers assessment is more distributed. As shown in Table 6.13 in annex, those working in the finance sector show the highest percentage of people very satisfied or quite satisfied. Surprisingly enough, those working in the "Video, film and radio and TV" sector, show the highest percentage of dissatisfied or quite dissatisfied people. Certainly, the youngest of the sample work in this sector.

Figure 4.4 - Overall satisfaction with the city according to sectors



Source: ACRE survey

4.2.1 Multivariate analysis on satisfaction with the city

In order to understand in a more comprehensive way the satisfaction with the city, we developed a multivariate analysis. This analysis tries to explain what factors from the sample affect the variable on overall satisfaction with the city. The analysis has been done in two parts. Firstly, we analyse the influence of variables A6 to A10 in the questionnaire as a set of explanatory variables of the behaviour of the overall satisfaction with the city. Secondly, we elaborated a more transversal analysis using a set of variables from different questions in the questionnaire (see the annex for the results).

Firstly, it is relevant to point out that the different factors analysed have low explanatory power of the overall satisfaction with the city (The indicator, R2, shows low levels of significance). The high number of variables that are relevant to explain the overall satisfaction can have an influence on that.

Nevertheless, the multivariate analysis shows that soft factors can have a relevant role in the satisfaction with the city. These factors have higher levels of significance than hard factors. Three variables explain the overall satisfaction in a greater extent than the other analysed variables: the cost of living, the tolerance of the city to gays and the quality of life in the neighbourhood. As a conclusion, we can assume that interviewees are more influenced by the closer environment than by other distant factors.

4.3 Why are the creative and knowledge workers satisfied with their jobs?

In chapter three we analysed the variable "overall satisfaction with the job" looking at the 13 aspects or items in the questionnaire that explored this aspect. In this section we undertake an in depth analysis of the job satisfaction of our surveyed by relating various items addressed in the previous section with the variables that follow:

- Income
- Occupation
- Contract status/employment status
- Hours worked
- Size of company/organisation
- Commuting

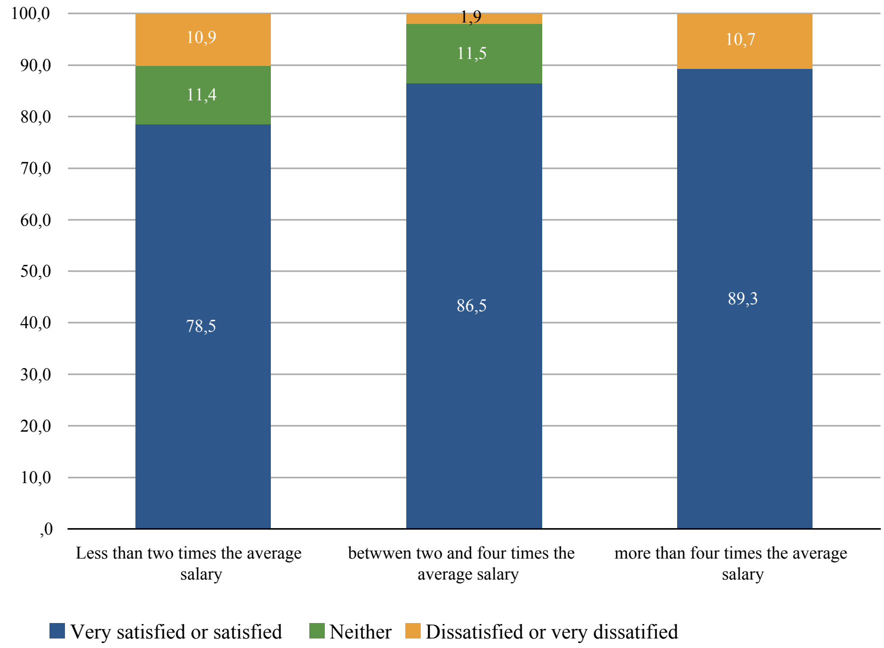
In doing so we have elaborated cross tables (see annex) that allow us to analyse each aspect in job satisfaction in terms of the variables listed above. We will compare each of the percentages obtained for the different cross tables with the percentage given for each concept. Thus, Table 6.12 in annex details the influence of income level on satisfaction with the job. The data on the table columns specify the three different income levels and the data in the rows of the table specify the overall satisfaction of the surveyed with their job. The data on the final column detail the average level of satisfaction. As an example, 83 per cent of all the interviewees declare that they are either satisfied or very satisfied, and 7.5 per cent say that they are dissatisfied or very dissatisfied. However, each income level cohort expresses the level of satisfaction and as a result, among the interviewees with a very low or low income we find that 78.5 per cent are satisfied or very satisfied. A percentage than is lower than the average, which stands at 83 per cent. In a similar way, it is possible to compare the degree of satisfaction in each income group with the average level of satisfaction and to draw some conclusions.

As we established elsewhere in this report (see section 3.5) the level of satisfaction with the job among our interviewees is remarkably high for 83 per cent declare that they are satisfied or very satisfied. We will now move on to analyse this variable by comparing it with the ones mentioned at the beginning of this section. Data analysed proves that around 83 per cent of the respondents are satisfied or very satisfied with their job in the entire cross-examinations undertaken.

4.3.1 Income, occupation and activity as a factors of satisfaction

Obviously, income and job satisfaction are intrinsically related. Figure 4.5 shows the different degrees of satisfaction in detail. Within the group of employees with high income level the percentage of those who are satisfied or very satisfied is above average. However, the percentages of those who are dissatisfied or very dissatisfied with their job are above average among the interviewees with lower incomes and, in a remarkable way, among those who perceive more than four times the average salaries.

Figure 4.5 - Satisfaction with job according to income



Source: ACRE survey

To proceed with a more comprehensive analysis of the relationship between the variables income and satisfaction with the job we will connect income with the items that define job satisfaction through cross tables (see annex).

The responses shown in Figure 4.5, which indicate a positive connection between the income level and job satisfaction, derive as well from a positive perception of the majority of items or aspects of the questionnaire. Thus, there is a marked positive connection between income and the aspects that follow:

- “Sense of achievement got from the job” (see annex). Although sense of achievement is high among the interviewees, those who consider themselves as being more successful in their jobs are those in the high-income range. Conversely, the ones that receive lower incomes have a lower sense of achievement.
- Amount of influence over the job. Obviously, the interviewees are more satisfied with their influence over the job when they perceive higher incomes for there is a relationship between income and job responsibility.
- The scope for using your own initiative.
- Facilities in the workplace are intrinsically related to more responsibility and higher income.
- The intellectually stimulating aspect of the job. In this particular case, we would like to emphasise that there is a degree of satisfaction with the job that is above average

among respondents with low income. This percentage might be accounted for by the entrepreneurial or pioneering attitude of the interviewees in this group.

- Friendliness of the working environment. As established in the previous section the level of satisfaction with this aspect is considerable. In particular, among those respondents with medium incomes, who declare levels of satisfaction that are above the average.
- Training you receive. Employees in the medium income range evidence a degree of satisfaction, as regards this aspect, that is above average. This fact suggests that motivation and the will to achieve promotion prevails in this cohort and that training is perceived as influential on being promoted.
- Amount of pay you receive.
- Ability to meet & network with professionals from your same field. Higher degrees of responsibility both demand and allow for a wider range of professional relationships.

The answers that do not allow for the establishing of a direct relationship between income and levels of satisfaction with the job are the following:

- Prospects for career advancement. Although medium income earners are eager to succeed, they are, at the same time, less satisfied with their potential in this sense. There is a considerable percentage, 23.5 per cent, who are dissatisfied or very dissatisfied. However, the satisfaction among low-income earners is slightly above average.

Finally, there are three aspects in which the relationship between job satisfaction and income is reversed:

- Amount of holiday time/paid leave
- Ability to balance your professional & personal life. As happens with the previous aspect, the degree of satisfaction is higher among the low-income group, and lower among the high-income group who are dissatisfied because they cannot find enough time to spend with their families.
- Job security. Low-income earners regard their employment as more secure than those who perceive higher incomes.

Thus, interviewees who perceive high or very high incomes are satisfied with all the aspects in the questionnaire but not with the ones that refer to the available free time ("amount of holiday time/paid leave" and "ability to balance your professional & personal life"), and as far as "job security" is concerned where their dissatisfaction is above average.

As regards low or very low income earners, their responses evidence a degree of satisfaction that is above average as regards the following aspects: "amount of holiday time/paid leave", "ability to balance your professional & personal life", "job security", the fact that their job is intellectually stimulating, and the "prospects for career advancement". Therefore, the aspects that lead to job satisfaction among the respondents in this group differ considerable from those that are considered influential in deriving job satisfaction by high or very high-income earners.

The interviewees in the medium income group deem as positive such aspects as “scope for using your own initiative”, “amount of influence over the job”, “training received”, “friendliness of the working environment” together with the aspects that relate to the availability of leisure time.

To analyse the satisfaction in the job amongst different occupations and professions we have taken into account the branches of activity as well as the professional category. As a first step we must distinguish between graduates and workers. As shown in Table 4.15, overall satisfaction with the job is high for both collectives. However, graduates exhibit a slightly higher percentage of “satisfied” or “very satisfied”.

Table 4.15 - Overall satisfaction with the job. Workers and graduates (percentages)

	Graduates	Workers	Total
Very satisfied or satisfied	87.8	81.6	83.1
Neither	8.2	10.5	10.0
Dissatisfied or very dissatisfied	4.1	7.9	7.0
TOTAL	100.0	100.0	100.0

Source: ACRE survey

With respect to sub-sectors, the highest percentage of “very satisfied” or “satisfied” respondents is to be found among those working in the law and other business sector, followed by architects and those working in the “Software” sector. Respondents working in the “Finances” sector account for the highest percentage of “dissatisfied” or “very dissatisfied” (see Table 4.16).

Table 4.16 - Overall satisfaction with the job per branches of activity (percentages)

	Finances	R+D and higher education	Software	Total Knowledge sectors	Law and other services	Architecture	Video. Film. Radio-TV	Total Creative sectors	Graduates	Total
Very satisfied or satisfied	70.4	80.0	82.6	80.6	88.6	83.3	81.5	82.5	87.8	83.1
Neither	11.1	20.0	4.3	11.1	8.6	6.7	18.5	10.0	8.2	10.0
Dissatisfied or very dissatisfied	18.5	0.0	13.0	8.3	2.9	10.0	0.0	7.5	4.1	7.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

The results obtained on the relationship between job satisfaction and type of occupation are, broadly speaking, much more diverse that those obtained in the rest of cross- examinations. The reasons for this diversity are twofold. On the one hand, the great variety of professional categories and the differing situations, even within the same category, of the respondents. On the other, the sparse number of respondents in some of the categories produces polarised results. For some of the cases, the responses obtained are under ten. Table 4.17 evidences the situation which might result in biased conclusions.

Clearly, there is a level of satisfaction with the job that is above average among directors, company managers, biology professionals, teaching professionals, and other science and intellectual professionals. However, there are also percentages of dissatisfied or very dissatisfied people that are above average among the rest of interviewees.

Table 4.17 Overall satisfaction with the job per occupation

Satisfaction	Occupation									
	Legislators, senior officials and managers	Physical, mathematical and engineering science professionals	Life science and health professionals	Teaching professionals	Other professionals	Physical, life science and health, teaching and	Other associate professionals	Office clerks	Customer services clerks	Total
Very satisfied or satisfied	100.0	66.7	100.0	93.3	88.5	80.0	78.1	62.5	80.0	83.5
Neither	0.0	16.7	0.0	6.7	8.0	13.3	9.4	25.0	0.0	10.0
Dissatisfied or very dissatisfied	0.0	16.7	0.0	0.0	3.4	6.7	12.5	12.5	20.0	6.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

These results derive from the responses given to the different questions that address job satisfaction in terms of the particular occupation of the different groups of professionals.

The interviewees are satisfied mainly with the following aspects:

- Amount of holiday time/paid leave, which receives a positive assessment by all the groups, except by other science and intellectual professionals.

- Friendliness of the working environment. Six of the professional categories surveyed gave positive grades to this aspect. However, teaching professionals were dissatisfied or very dissatisfied with it.

- Amount of pay received. This was satisfactory for six of the groups and considered unsatisfactory by “other associate professionals” and office clerks.

- Training received. The responses regarding this aspect were satisfied or very satisfied in a total of six groups, but “Physical, mathematical and engineering science professionals”, physical, life science and health, teaching and engineering science associate professionals” and other associate professionals were dissatisfied or very dissatisfied about the training they received.

The highest levels of dissatisfaction were found in the following aspects:

- Scope for using own initiative. Here, only two groups of professionals- teaching professionals and “physical, life science and health, teaching and engineering science associate professionals proved to be satisfied or very satisfied while five of all the professional categories manifested that they were dissatisfied or very dissatisfied.

These were physical, mathematical and engineering science professionals, Life science and health professionals, physical, life science and health, teaching and engineering science associate professionals, office clerks and customer office clerks.

- Amount of influence over the job. This was regarded as satisfactory by three professional categories. Namely Life science and health professionals, other associate professionals and customer office clerks, while directors and manager of companies and Physical, mathematical, engineering science professionals and office clerks are either dissatisfied or very dissatisfied.
- Prospects for career advancement. This was deemed as satisfactory by a total of four professional categories, and among those categories who said that they were dissatisfied or very dissatisfied were the following: Physical, mathematical, engineering science professionals", "Life science and health professionals", "other associate professionals" and "office clerks".

When we approach the responses obtained taking as reference the different categories or occupations, it is possible to identify which categories express a level of satisfaction that is above average and which say to be below average. Thus, the highest levels of satisfaction are found among directors and managers, professionals of life and health sciences, and teaching professionals. Answers of directors and managers of companies indicate that their levels of satisfaction are above average as far as 10 out of the 13 aspects under survey. However, they are critical about such aspects as "amount of influence over the job" and "prospects for career advancement". In the case of health and life sciences professionals, the dissatisfaction is directed towards such aspects as "scope for using own initiative", "prospects for career advancement" and "ability to balance professional and personal life". Finally, teaching professionals and customer office clerks are also among those professionals who are either satisfied or very satisfied with their employment.

Physical, mathematical, engineering science professionals and other associate professionals and "office clerks" are the professionals who admit to highest levels of dissatisfaction. Their dissatisfaction is mainly directed to aspects of the job such as "sense of achievement from the work", "scope of using own initiative", "amount of influence over the job", "intellectually stimulating aspect of the job", "training received" or "prospects for career advancement".

4.3.2 The relevance of working conditions

After analysing differences between occupations and branches of activity, it is pertinent to take into consideration the working conditions of the creative and knowledge workers and their influence in their general satisfaction with job. Two variables are considered: the contract status and the number of hours worked.

The results obtained on the relationship between 'contract status in current job' and 'satisfaction with the job' are, as were those in the previous section, very diverse. Likewise, we are faced with a low number of responses for some particular aspects and therefore the conclusions might be biased. Table 4.18 shows the level of satisfaction with the job in terms of the contract status. We observe a higher degree of satisfaction in those employees who work under a “fixed term contract for less than 12 months”, “without written contract” and “other”. These declare a high level of satisfaction with the majority of aspect that concern their employment. They are closely followed by people who work under a “contract for specific project”. The people who are dissatisfied with a higher number of aspects of their job are those who work “On limited permanent contract”, which is the type of contractual arrangement that offers more job security (see Table 4.18).

Table 4.18 - Overall satisfaction per contract status

Overall satisfaction with job	**Contract status**						**Total**
	On limited permanent contract	On a contract for a specific project	On a fixed term contract for less than 12 months	On a fixed term contract of 12 months or more	without written contract	Other	
Very satisfied or satisfied	78.9	71.4	100.0	75.0	87.5	93.0	83.2
Neither	11.0	21.4	0.0	25.0	12.5	3.5	9.6
Dissatisfied and very dissatisfied	10.1	7.1	0.0	0.0	.0	3.5	7.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

A look at the results grouped in terms of current employment status confirms some of the trends that were evident in previous cross tables. Indeed, Table 4.19, which relates current employment status and overall satisfaction with job, shows that those employees who work on more flexible contractual arrangements manifest a higher level of overall satisfaction with the job. These are people who have categorised their employment as “Other” in Table 4.19 and the corresponding tables in annex. The highest percentage of dissatisfied or very dissatisfied employees is to be found among those who work on more stable contractual arrangements.

Table 4.19 - Overall satisfaction with job per current employment status

Overall satisfaction with job	**Job status**		**Total**
	Employed	Self employed or freelance	
Very satisfied and satisfied	79.2	89.5	83.1
Neither	12.0	6.6	10.0
Dissatisfied or very dissatisfied	8.8	3.9	7.0
	100.0	100.0	100.0

Source: ACRE survey

Thus, self-employees and freelance workers declare that their job satisfaction is above average for most of the aspects concerning their job. The only exceptions are the amount of pay received, the amount of holiday time/paid leave, job security and the ability to balance your professional & personal life.

Broadly speaking, the employees who declare a higher level of satisfaction are those who work between 21 and 42 hours per week. However, the responses given to the different aspects that their job involves are quite diverse and again we obtained a low number of answers for certain aspects. The results for this section are shown in 4.20 and annexed tables. The set of data allows us to conclude that:

- The satisfaction with the job is above average for those interviewees who work between 21 and 30. In particular they are satisfied with “sense of achievement from the work”, “scope for using the own initiative”, “prospects for career advancement” and “amount of pay received”, and with the aspects that are related to personal and social aspects such as “friendliness of the working environment”, “ability to balance professional and personal life” and “ability to meet and network with professionals from the same field”.

- Interviewees who work between 30 and 42 hours are also above average as regards the following items: “sense of achievement from the work”, “amount of influence over the job”, “amount of holiday time/pay leave”, and “job security” together with the aspects that affect personal and social relationships.

Table 4.20 - Overall satisfaction per hours worked

Overall satisfaction with job	**How many hours do you work per week in your main job?**						**Total (%)**
	Less than 20	21-30	31-42	43-55	55 and +	Varies per week	
Very satisfied or satisfied	66.7	91.3	86.6	77.6	80.0	77.8	82.9
Neither	33.3	0.0	6.1	15.5	13.3	16.7	10.1
Dissatisfied or very dissatisfied	0.0	8.7	7.3	6.9	6.7	5.6	7.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

- However, “intellectually stimulating aspects of the job”, “training received”, “prospects for career advancement” and “scope for using own initiative” are aspects that lead to a high level of satisfaction in the case of those employees whose working timetable is at both ends of the scale, that is, among those who work under 20 hours per week, or among those who work over 43 or even 55 hours per week.

- Finally, we need to state, though, that there is not enough evidence that points towards a direct relationship between satisfaction/dissatisfaction and number of hours worked.

4.3.3 Influence of the workplace

The possible influence of the workplace in the overall satisfaction has been analysed in two different ways. Firstly the influence of the number of people in the workplace is taken into consideration. Secondly the relevance of commuting in the general satisfaction is considered as a possible explanation.

As evidenced in Table 4.21, the highest levels, above average, of overall satisfaction with the job are found among those respondents who work in work sites that have between 10 and 49 people; while the highest levels of dissatisfaction are found in the two other defined environments. Broadly speaking, and as shown in the annex satisfaction with the job – number of employees cross tables the opinions about this aspect can be summarised by saying that the interviewees whose level of satisfaction is above average are those who work in medium size companies and those whose degree of dissatisfaction stands above average are those employed in companies that have over 50 employees. These declare to be dissatisfied with aspects such as "sense of achievement got from the work", "scope for using own initiative", "amount of influence over the job", "intellectually stimulating aspect of the job", "ability to meet & network with professionals from same field". Further, they are dissatisfied with "facilities in the workplace" and "prospects for career advancement". In this last group of answers they coincide with the respondents who work in places that have fewer than 10 employees.

Small companies produce satisfactory results as regards "friendliness of the working environment" and "training received" whereas these aspects are graded negatively in larger companies.

Finally, "amount of pay received", "amount of holiday time/paid leave", "job security" and "ability to balance professional and personal life", lead to higher job satisfaction in work sites that have over 49 workers.

Table 4.21 - Number of people employed per satisfaction with job

Overall satisfaction with job	**Number of people employed**			**Total**
	Under 10	10-49	50 and above	
Very satisfied or satisfied	80.4	90.2	81.3	83.2
Neither	10.9	7.8	10.4	9.9
Dissatisfied or very dissatisfied	8.7	2.0	8.3	6.8
TOTAL	100.0	100.0	100.0	100.0

Source: ACRE survey

As far as the distinction between soft and hard factors is concerned, we would like to point out that, in general, soft factors are proved influential in small and medium environments, and that hard factors are regarded as influential in work sites that have above 49 employees.

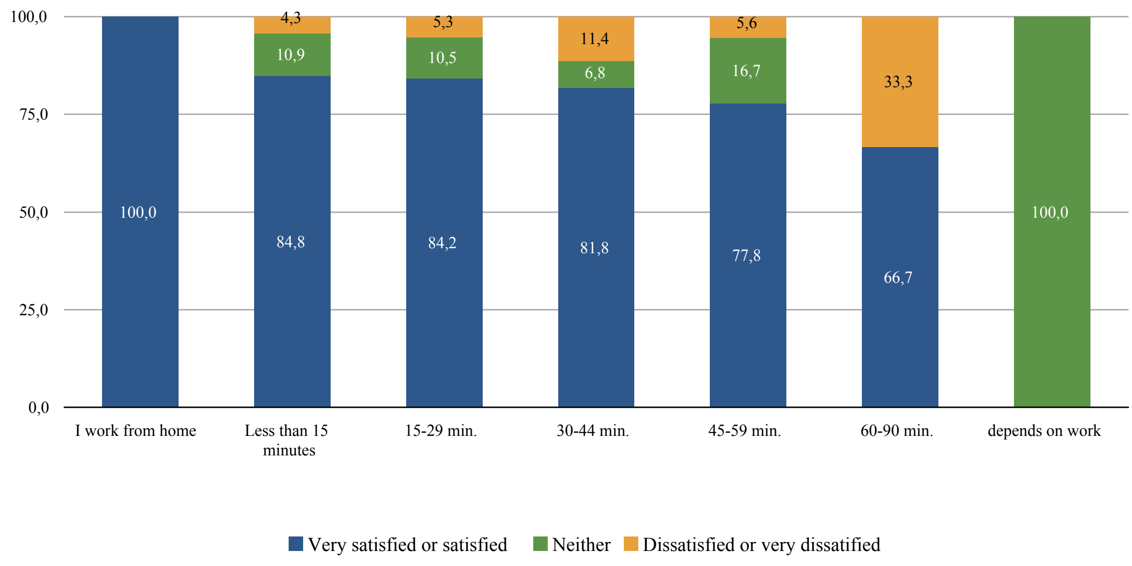
Regarding commuting, we must consider that, in dense populated areas –such as the BMR– where there is a diversity of available means of transport, the distance to work expressed in kilometres is not an adequate indicator. What counts in the above situations is the time it takes a person to go from home to work. The amount of time, very often, depends on the means of transport used. Therefore, we have used time to explore this aspect.

The initial hypothesis was that working not far from home resulted in higher levels of satisfaction. Indeed, this is confirmed by the results shown in Figure 4.6, where we can see that the highest percentage of overall satisfaction with the job is evidenced among those who work at home or who spend under 30 minutes to go to work. On the other hand, those who are more dissatisfied are the ones who have longer journeys to work.

As for the previous section, the analysis of the relationship between travel work time and satisfaction with the job has been undertaken through the use of the tables that feature in the annex, that is, "Satisfaction with the job-cross tables, travel work time". Briefly, we summarise the most remarkable results:

- There is a level of job satisfaction that stands above the average among the interviewees who work from home or among those for whom the commuting time is under 30 minutes. A look at the aspects that lead to these results allows us to identify the soft factors that are influential:
  - Scope for using own initiative
  - Amount of influence over the job
  - Intellectually stimulating aspect of the job
  - Prospects for career advancement
  - Ability to meet & network with professionals from the same field
- Some of the aspects listed above are also regarded as influential by employees whose commuting circumstances are different. Namely, "Scope for using own initiative" and "Intellectually stimulating aspect of the job".
- Finally, it is possible to observe that those employees who live at a distance that is between 15 and 30 minutes from the work place declare to feel satisfied above average with 11 out of 14 items in the interview. Besides, this group is the most numerous of all. A fact that indicates that employees tend to avoid having to travel long distances to work and that coincides with the overall low mobility patterns of the BMR. Figure 4.6 shows that there is a clear relation between the distance and the satisfaction with job.

Figure 4.6 - Overall satisfaction with job according to distance from home to work



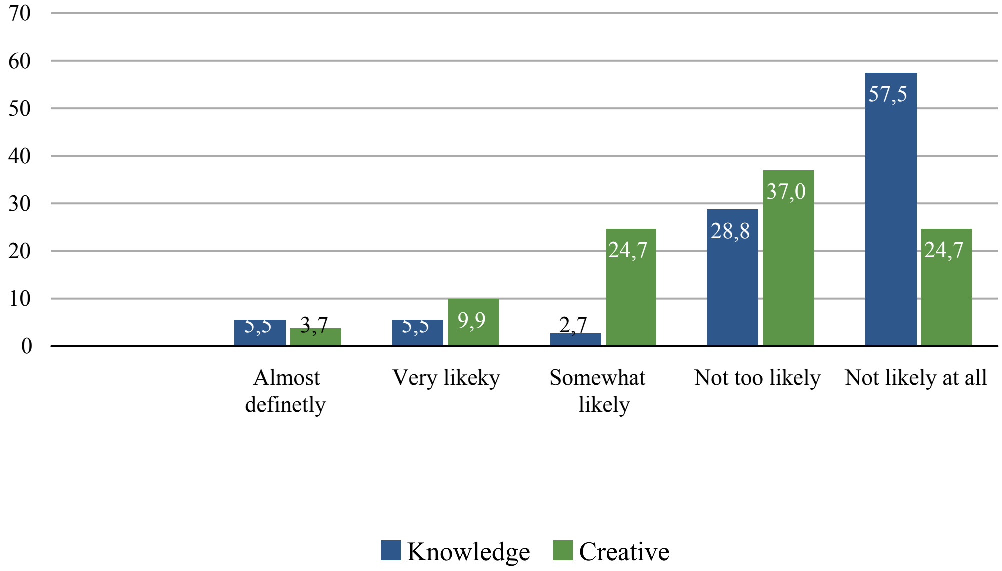
Source: ACRE survey

Summarising, there is a clear correspondence between income and level of satisfaction, especially in aspects that are considered soft factors. There is a positive relation between satisfaction with the job, income and most features, except amount of holiday time/paid leave, ability to balance professional and personal life and job security, where low income interviewers are most satisfied than high income interviewees. There is negative relationship between income level and time for personal life. Concerning occupation, although opinions are very diverse, we were able to identify critical opinions and a certain preoccupation among knowledge and technical professionals with intellectually stimulating aspects of the job, scope for initiative, training and prospects of promotion. Office clerks are very critical with most of their employment features. Whereas, managers, life science and health professionals and teaching professionals have a high degree of satisfaction with most features of their employment features. In a similar vein, there is a clear relation amongst contract and employment status and overall satisfaction with the job. More flexible contractual arrangements, self-employees and freelance jobs lead to higher levels of satisfaction. Whereas, fixed contract status are the interviewees with low level of satisfaction. There is no direct correspondence between hours worked and level of satisfaction of interviewees. Those more satisfied tend to work between 21 and 42 hours. Interviewees who work more than 43 hours and those who work less than 20 hours per week both have higher level of satisfaction in intellectually, knowledge and initiative features. Concerning number of employees at work place, we have found that soft factors are more influential and evidence more potential for development in places with fewer employees (from 0 to 49), whereas paces with more than 50 employees are better for hard factors, such as amount of pay received. Finally, distance to work shows that the shorter the distance, the higher the level of satisfaction, especially as regards soft factors. The same is true for employees in other commuting circumstances.

4.4 Figures in colour

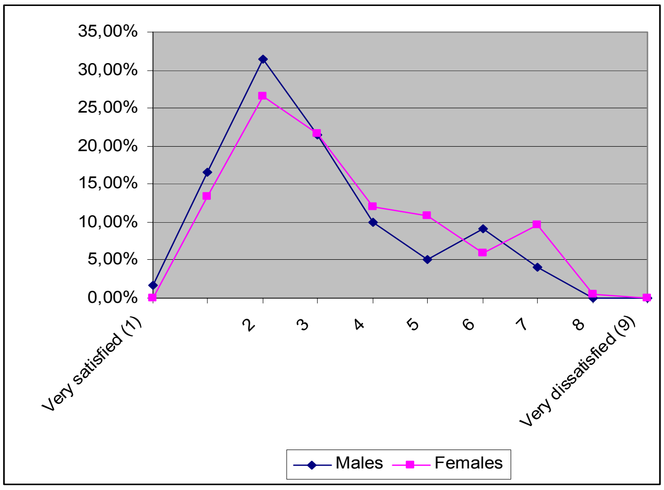
This section includes the most relevant figures of the chapter in colour

Figure 4.1 Willingness to leave the city per sectors



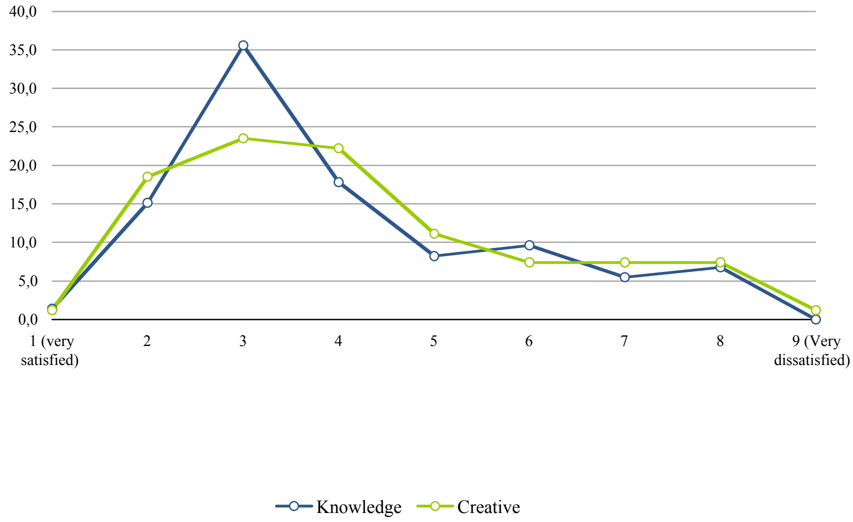
Source: ACRE survey

Figure 4.2 - Satisfaction according to gender



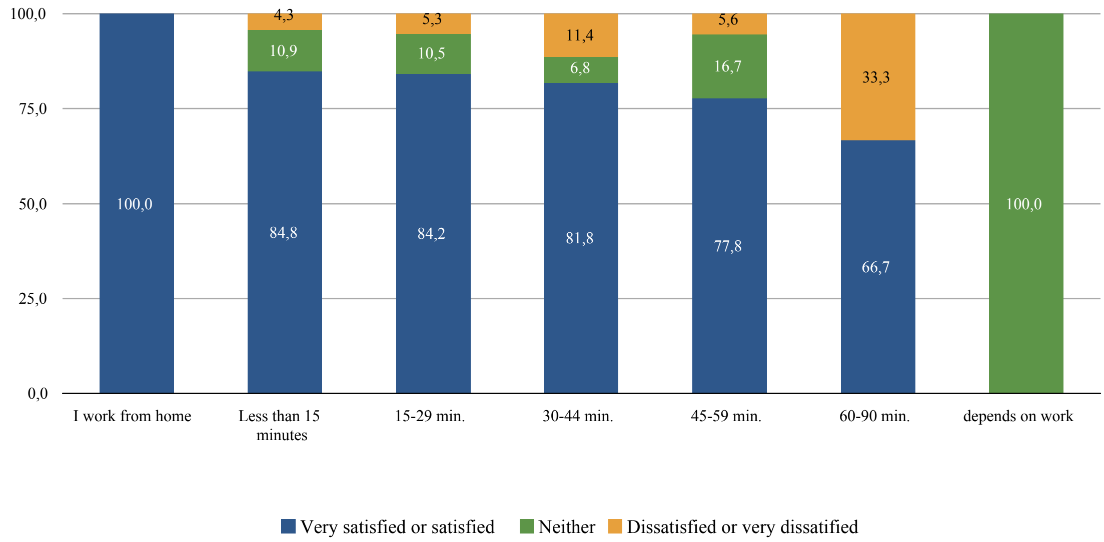
Source: ACRE survey

Figure 4.4 - Overall satisfaction with the city according to sectors



Source: ACRE survey

Figure 4.6 - Overall satisfaction with job according to distance from home to work



Source: ACRE survey

5 CONCLUSIONS

The aim of this chapter is to summarise the main findings of the report on the perceptions and opinions of creative and knowledge workers about the BMR. Furthermore, their reactions are linked to the general situation of the city and its metropolitan region previously described in Pareja et al, 2007. Besides, we present some hypotheses regarding the relevance of soft and hard factors in the context of Barcelona.

A total of 200 interviews were distributed according to the territory and to the sector. The territorial distribution of the sample was based on population criteria. Some corrections were made in order to incorporate population who live in cities of the BMR, where creative industries are located. The creative sectors included were i) computer games, software, and electronic publishing, ii) radio and TV, and iii) architecture. The knowledge intensive sectors were i) R&D and higher education, ii) law and other business services, and iii) finance. 150 questionnaires were distributed in selected creative and knowledge sectors, and 50 questionnaires were given to graduates.

As the selection of the respondents was based on companies, the criterion for choosing individuals was random. Nevertheless, the main social features of the sample are coherent with the characteristics of workers in the BMR. There are more men than women in the sample; the age distribution is wide, although the majority are young people. As expected, given that interviewees belong to creative and knowledge sectors, they are highly educated and skilled, and their income is about two and a half times above the average salary. The majority live in owner-occupied dwellings, which certainly reflects the national pattern. However, the percentage of respondents who live in rented dwellings is higher than the national average. We infer that creative and knowledge intensive workers are able to afford high rents for their dwellings. Besides, more people than the national average have pending mortgage payments. This relates to the fact that many of them are young and, probably, at the beginning of their professional career. Regarding their workplace, the majority of the respondents work in small companies, as this is the most common typology of companies at the BMR. Around 75 per cent work in companies formed with fewer than 50 workers. Amongst them, 47.7 per cent in companies with fewer than 10. In these companies the work relationships tend to be more horizontal than vertical or hierarchical. This perception is substantiated by the fact that 65.7 per cent of workers do not have any person under supervision. In short, the above description matches the general image of creative and knowledge workers as described by Florida.

Thus far we have the features that are shared by the three groups of employees under study. Now we will turn to the differences between them.

Firstly there is a noticeable difference in the age distribution of creative and knowledge workers. Workers of the selected knowledge sectors are older than workers of the creative sectors. This fact, in turn, explains further differences between these two groups, such as income and differences in mobility. Namely, the incomes of knowledge workers are higher than those of creative workers. They also tend to own their dwellings. Knowledge workers have also more stability at work, with higher percentages of stable contracts. Therefore, we can conclude that knowledge workers are in a better position in material and work conditions than creative workers, who are more flexible. However, and according to Florida's arguments on the creative class, flexibility can be considered an advantageous edge. Stability on the one hand and flexibility on the other, influence the responses on satisfaction, as we shall see in the analysis of the different issues of the survey, such as satisfaction with the city, the neighbourhood and the workplace.

According to international rankings, BMR is an attractive place to live in. The survey results evidence that the BMR is a desirable place to be for respondents value the region positively. In a scale from 0 (very satisfied) to 10 (very dissatisfied), the BMR obtains a mark of 4.1. Only a reduced percentage of people are dissatisfied. The issues positively valued in the survey are those related to the supply of leisure activities, public services and environmental aspects. In particular, architecture in the city, shopping areas and the quality of restaurants are assessed positively. Besides, in the area of services, the quality of public transportation in the city, health services and social security are accorded better results.

Barcelona is also known for its qualities as a place to invest, especially for knowledge and creative industries. Therefore sustained growth of creative and knowledge sectors in is expected. Nevertheless, the evolution of these sectors does not evidence a very optimistic landscape in terms of contribution to the regional GDP and employment figures. However, two issues should be taken into account, firstly, that the selection of sectors by the ACRE project might have excluded some significant contributions to the economic production of the creative sector. Secondly, that sometimes the relevance and knowledge of the region at the European level does not depend on economic indicators. Hence, we conclude that the attraction of the BMR is related to the soft factors of the city and that there is no direct translation into economic growth.

The image of Barcelona as a welcoming and tolerant place and the weight of its cultural assets would seem to attract creative and knowledge workers. Besides, the city is attractive not only for residents but also for visitors. In this sense, the supply of amenities and the tolerant atmosphere of the BMR are of foremost importance. In terms of frequency of involvement in leisure activities, eating out and visiting friends were the preferred activities (in more than 50 per cent of the cases).

As far as satisfaction with the different opportunities offered by the city, the majority of respondents are very satisfied or satisfied. A very low percentage of people feel dissatisfied or very dissatisfied. Architecture and relevant monuments are the aspects related to leisure activities which people felt more satisfied with. Nevertheless, the image of the city is less positive in other aspects. Environmental aspects are a major concern for respondents both at the level of their neighbourhood and at the regional level. Thus, air pollution and traffic noise are the main issues that affect satisfaction negatively. Another striking fact is the opinion of respondents about the evolution of the quality of life at the BMR: 43 per cent of respondents consider quality of life at the BMR worse than in the past. Increasing cost of living, dirtiness of the city and bad quality of some of the services offered might account for this perception. The public services that affected satisfaction negatively were connectivity between the inner city and the periphery or the amount of cycling paths. These results reflect the general perception of lack of transport facilities and other infrastructures in BMR.

In short, satisfaction is higher for leisure activities than public services as a whole. The level of satisfaction with the city barely changes according to age or gender, and there is no difference between the creative and knowledge sectors.

Conversely the place of residence results in relevant differences: those living in small cities show a higher degree of satisfaction than those living in large cities, except for those living in Barcelona. The outcome is coherent with the structure of the BMR, where medium cities grew during the sixties and have experienced a historical lack of infrastructures. On the contrary, small towns and villages grew during the nineties under democratic governments, who paid more attention to urban planning and infrastructures. Consequently, we infer that satisfaction with the city is higher for those who live in cities that developed in recent times, when social needs linked to hard factors were taken into account.

The responses on satisfaction with the city and the neighbourhood go along the same lines as the existing literature, which argues that recent economic development has favoured tourism and construction over other economic activities. The promotion of the above activities has somehow prevented the necessary development and maintenance of infrastructures and equipment. These aspects are essential for the development of economic diversification and social cohesion. Therefore, the direction that the BMR has moved in up to the present moment should be corrected in order to incorporate the necessary conditions to attract creativity and knowledge.

Besides, we believe that the lack of infrastructures and equipment is a key factor to understand how the respondents assess the relevance of soft factors. Thus, we argue that when problems linked to ‘hard factors’ are solved, soft factors are seen as having a greater relevance, On the contrary, when there is a perception of general lack of infrastructures and equipment, soft factors play a secondary role. This is the reason why, when the respondents were asked about their neighbourhood –where the influence of big infrastructures is not felt to be of foremost relevance– the satisfaction with the city grew considerably. More than 90 per cent of the respondents declared high degree of satisfaction with their neighbourhood.

Surprisingly, it is not possible to see the relationship between soft and hard factors when the interviewed assess their working conditions and their satisfaction with the job. As previously seen, respondents tend to be dissatisfied with the material aspects, hard factors of their job, whereas they show high level of satisfaction with the different soft factors, which are based on a more subjective and ethereal assessment. If we take into consideration that the overall satisfaction with job is high, we have to infer that soft factors have a relevant weight in that overall satisfaction.

Likewise, the interviewed show a high concern for training and improvement in the workplace. Overall, these aspects reveal that we are dealing with a qualified labour market who is demanding with the capital and the managerial class of the BMR. As has been pointed out, the working conditions for the three groups interviewed are somehow different. For instance knowledge workers have more job stability and better paid jobs. Nevertheless, these differences do not affect the overall satisfaction with the job for the three groups are highly satisfied. That reinforces the idea that working environment, the sense of achievement in the job and the other soft factors inherent to work have an important role in the satisfaction with the job, especially for the creative workers.

The distance between the place of residence and the place of work contributes to explain the overall satisfaction with the job. People that live near their workplace tend to be more satisfied than people that live farther. Consequently, people wish to live close to their place of work or look for a job near their place of residence. The influence of commuting in the satisfaction with the job is better acknowledged taking into account two elements: on the one hand, the satisfaction with public services, especially with transport, which is lower than satisfaction with other aspects of the region. On the other, the fact that only 27 per cent of respondents, uses private transport to go to their workplace. As mentioned above, there is a visible perception of lack of public transport in the BMR. The results of the survey show also this dissatisfaction. Not only citizens but also entrepreneurs demand the modernisation of the railway intraregional system. In fact, the creation of good intraregional public transport system is in the policy agenda.

The low levels of residential mobility in the BMR contribute to explain the demand for more transport infrastructures to connect workplace and residence. In fact, the residential mobility is very low: 71.3 per cent of the interviewed have lived in the same place of the BMR for more than 10 years. If they have moved, they have done so within the BMR. As there is little residential mobility, people use different means of transport to go to their workplace. Regarding external residential mobility, only 15.5 per cent of interviewees are from the rest of Spain or abroad. Let us remember that the number of foreigners in the sample is low in spite of the fact that the BMR is one of the most attractive urban contexts for migrants in Spain. But the Spanish economic model has not allowed a wide participation of migrants in the creative and knowledge industries. Thus, most of the newcomers are working in low-skilled jobs, independently of their qualification.

In conclusion, although the general profile of creative and knowledge workers in the BMR complies with the common patterns of the creative class, there are features determined by the particularities of the area. One of the main features of employees in the creative and knowledge sectors in the BMR is that they are considerably attached to the territory and that they accord a great significance to social relations. These characteristics do not conform to Florida's definition. As an adjacent conclusion, creative workers differ from knowledge workers. The former are more flexible and adaptable to change than the later. Thus, it is possible to affirm that soft factors have a major influence in the decisions about job and residence of creative workers.

The creative and knowledge class in BMR accords transport and public equipment, that is hard factors, a special relevance. When respondents perceive a lack of infrastructures and equipments, soft factors are ignored or play a secondary role in the assessment of the city. On the contrary, at the micro-level, that is, when assessing the neighbourhood instead of the city or the region, soft factors become more significant. In this sense, respondents value positively intangible aspects such as environment or atmosphere of the neighbourhood. They are certainly satisfied with their living environment and their place of residence. 90.7 per cent of respondents are satisfied or very satisfied about their overall quality of life. In more than 85.3 per cent of the cases, their expectations they had about their dwelling have been confirmed. The supply of amenities and the tolerant atmosphere of the BMR contribute to their satisfaction.

Finally, in the area of job and working environment, the perceptions of creative and knowledge workers are influenced by soft factors. The sense of achievement with the job, the scope for using their own initiative, the amount of influence over the job and the intellectually stimulating aspect of the job are aspects with which workers are satisfied.

6 ANNEXES

6.1 Main residential patterns

Table 6.1 - Current city

	%
Barcelona	67.3
First ring (ATM)	14.9
Second ring	17.3
Rest of Catalonia	0.5
TOTAL	100.0

Source: ACRE survey

Table 6.2 - Kinds of accommodation per sectors

	Finances	Law and other services	R+D and higher education	Total knowledge	Architecture	Software	Video, film, radio-TV	Total creative	Graduates	Total
Own without mortgage	14.8	31.4	9.1	21.9	3.4	33.3	18.5	17.5	16.0	18.7
Own with mortgage	77.8	48.6	63.6	61.6	27.6	54.2	25.9	35.0	42.0	46.3
Tenant paying rent to private lord	3.7	14.3	18.2	11.0	69.0	12.5	33.3	40.0	28.0	26.6
Tenant, paying rent in social housing	3.7	0.0	0.0	0.0	0.0	0.0	3.7	1.3	2.0	1.0
Accommodation is provided rent free	0.0	2.9	9.1	4.1	0.0	0.0	0.0	3.8	11.1	4.4
Other	0.0	2.9	0.0	1.4	0.0	0.0	7.4	2.5	6.0	3.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

Table 6.3 - Where lived prior to moving to City (2)

	%
Never moved	13.2
In city but other neighbourhood	42.6
Another City in region/ province/ country	27.9
Another city in country	8.8
Outside country	3.9
Outside Europe	3.4
TOTAL	100.0

Source: ACRE survey

Table 6.4 - How affordable is your current rent/mortgage

	%
Very easy to afford	6.0
Easy to afford	6.6
Just about affordable	48.3
Not easy to afford	32.5
Very difficult to afford	6.6
TOTAL	100.0

Source: ACRE survey

Table 6.5 - Housing Cost

	%
Very expensive	89.7
Expensive	9.3
Average	.5
Cheap	.5
TOTAL	100.0

Source: ACRE survey

Table 6.6 - Cost of basic services related to house

	%
Very expensive	32.8
Expensive	49.5
Average	16.7
Cheap	1.0
TOTAL	100.0

Source: ACRE survey

Table 6.7 - How often are involved in participating in community work

	%
At least once a week	2.0
Less often	23.5
Never	74.5
TOTAL	100.0

Source: ACRE survey

Table 6.8 - How often are involved in participating in resident's assoc

	%
Every day	1.5
At least once a week	6.5
Less often	29.4
Never	62.7
TOTAL	100.0

Source: ACRE survey

Table 6.9 - Your main mode of transport

	%
Walk	20.6
Cycle	2.9
Rail	10.3
Private car	27.0
Tram	.5
Bus	8.3
Metro/subway	14.2
Car passenger	2.0
Other	14.2
TOTAL	100.0

Source: ACRE survey

Table 6.10 - Other mode of transport

	%
Moto	96.4
Taxi	3.6
TOTAL	100.0

Source: ACRE survey

6.2 Mobility

Table 6.11 - Willingness to leave the city per professional branches

	Finances	Law & business services	R&D and higher education	Total Knowledge sectors	Architecture	Software	Film, video, radio and TV	Total Creative sectors	Total
Almost definitely	7.4	2.9	9.1	5.5	3.3	4.2	3.7	3.7	3.9
Very likely	3.7	8.6	0.0	5.5	10.0	8.3	11.1	9.9	6.9
Somewhat likely	3.7	2.9	0.0	2.7	40.0	12.5	18.5	24.7	17.2
Not too likely	22.6	28.6	45.5	28.8	30.0	33.3	48.1	37.0	34.3
Not likely at all	63.0	57.1	45.5	57.5	16.7	41.7	18.5	24.7	37.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

6.3 Satisfaction with the city

Table 6.12 - Quality rate of environmental issues at the BMR

	Very good	Good	Average	Poor	Very poor	Don't know
Pavement condition of city streets and sidewalks	3.4	42.6	36.3	16.2	1.5	0
Condition/cleanliness of city streets and sidewalks	2.5	41.2	28.9	20.1	6.9	0.5
Recycling collection services	4.9	39.2	26.5	19.6	8.8	1.0
Quality of drinking water	2.0	18.6	19.6	25.0	33.3	1.5
Garbage/waste collection	3.4	42.6	31.4	15.2	4.4	2.9
Cleanliness of facilities in city parks	2.5	43.6	32.4	14.7	4.4	2.5
Traffic congestion	1.5	10.3	21.1	30.9	34.8	1.5
Availability of parking space	1.5	4.4	9.3	29.4	52.9	2.5
Availability of bicycle lanes	1.0	11.8	19.1	34.3	20.1	13.7
Noise pollution	1.0	9.3	19.1	29.9	39.7	1.0
Air pollution	2.9	8.3	18.1	34.3	33.8	2.5
Quality of Playgrounds of city	6.9	29.4	28.9	19.6	8.3	6.9

Source: ACRE survey

Table 6.13 - Compared to other places. How do you rate the place you currently live in?

	%
The best place in which to live	10.2
A much better place in which to live	25.9
A slightly better place in which to live	42.6
A slightly worse place in which to live	18.5
A much worse place in which to live	2.8

Source: ACRE survey

Table 6.14 - Overall satisfaction with the city according to sub-sectors

Satisfaction	Finances	R+D and higher education	Law and other services	Total Knowledge workers	Architecture	Software	Video, film radio-TV	Total creative workers	Graduates	Total
1 (+)	0.0	0.0	2.9	1.4	3.3	0.0	0.0	1.2	0.0	1.0
2	3.7	18.2	22.9	15.1	13.3	25.0	18.5	18.5	10.0	15.2
3	**44.4**	27.3	31.4	35.6	23.3	12.5	**33.3**	**23.5**	**30.0**	29.4
4	**22.2**	0.0	20.0	17.8	20.0	29.2	18.5	22.2	26.0	21.6
5	3.7	18.2	8.6	8.2	13.3	20.8	0.0	11.1	14.0	10.8
6	7.4	**27.3**	5.7	9.6	13.3	8.3	0.0	7.4	14.0	7.4
7	7.4	0.0	5.7	5.5	6.7	0.0	**14.8**	7.4	12.0	7.8
8	11.1	9.1	2.9	6.8	6.7	4.2	**11.1**	7.4	4.0	6.5
9 (-)	0.0	0.0	0.0	0.0	0.0	0.0	**3.7**	1.2	0.0	6.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

6.4 Satisfaction with the job

Table 6.15 - Satisfaction with the job & income (in %)

		Income			
	Sense of satisfaction	**Low + very low**	**Medium**	**High + very high**	**Total**
Sense of achievement you get from your work	Very satisfied or satisfied	70.0	70.6	82.1	72.3
	Dissatisfied or very dissatisfied	11.3	7.8	3.6	8.8
The scope for using your own initiative	Very satisfied or satisfied	75.0	80.8	85.2	78.6
	Dissatisfied or very dissatisfied	12.5	5.8	7.4	9.4
Amount of influence you have over your job	Very satisfied or satisfied	69.6	78.8	85.7	75.5
	Dissatisfied or very dissatisfied	12.7	7.7	3.6	9.4
The facilities in the workplace	Very satisfied or satisfied	65.4	66.7	85.7	69.4
	Dissatisfied or very dissatisfied	24.4	21.6	10.7	21.0
The intellectually stimulating aspect of the job	Very satisfied or satisfied	82.5	75.0	89.3	81.3
	Dissatisfied or very dissatisfied	10.0	5.8	0.0	6.9
The friendliness of the working environment	Very satisfied or satisfied	80.0	92.0	85.7	84.8
	Dissatisfied or very dissatisfied	6.3	2.0	0.0	3.8
The training you receive	Very satisfied or satisfied	54.5	70.6	63.0	61.3
	Dissatisfied or very dissatisfied	26.0	17.6	7.4	20.0
The amount of pay you receive	Very satisfied or satisfied	43.8	42.3	74.1	48.4
	Dissatisfied or very dissatisfied	42.5	36.5	22.2	37.1
The amount of holiday time/paid leave	Very satisfied or satisfied	57.5	59.2	48.1	56.4
	Dissatisfied or very dissatisfied	23.3	22.4	44.4	26.8
Your job security	Very satisfied or satisfied	77.5	71.2	73.1	74.7
	Dissatisfied or very dissatisfied	12.5	15.4	15.4	13.9
Prospects for career advancement	Very satisfied or satisfied	59.5	54.9	66.7	59.2
	Dissatisfied or very dissatisfied	17.7	23.5	14.8	19.1
The ability to balance your professional & personal life	Very satisfied or satisfied	60.0	57.7	35.7	55.0
	Dissatisfied or very dissatisfied	27.5	30.8	57.1	33.8
Ability to meet & network with professionals from your same field	Very satisfied or satisfied	64.6	71.2	81.5	69.6
	Dissatisfied or very dissatisfied	12.7	7.7	7.4	10.1

Source: ACRE survey

Table 6.16 - Satisfaction with the job & occupation (in %)

	Sense of satisfaction	Legislators. senior officials and managers	Physical. mathematical and engineering science professionals	Life science and health professionals	Teaching professionals	Other professionals	Physical. life science and health. teaching and engineering science associate professionals	Other associate professionals	Office clerks	Customer services clerks	Total
Sense of achievement you get from your work	Very satisfied or satisfied	100.0	66.7	80.0	76.5	71.3	63.3	77.4	62.5	80.0	71.6
	Dissatisfied or very dissatisfied	0.0	16.7	0.0	11.8	5.7	16.7	6.5	6.3	20.0	8.5
The scope for using your own initiative	Very satisfied or satisfied	75.0	66.7	60.0	94.1	90.7	76.7	75.0	50.0	60.0	80.6
	Dissatisfied or very dissatisfied	0.0	16.7	20.0	5.9	1.2	13.3	6.3	25.0	20.0	7.5
Amount of influence you have over your job	Very satisfied or satisfied	75.0	66.7	80.0	76.5	89.7	72.4	68.8	50.0	80.0	78.1
	Dissatisfied or very dissatisfied	25.0	16.7	0.0	5.9	4.6	10.3	9.4	18.8	0.0	8.0
The facilities in the workplace	Very satisfied or satisfied	100.0	83.3	80.0	58.8	76.2	63.3	54.8	56.3	100.0	69.2
	Dissatisfied or very dissatisfied	0.0	16.7	0.0	23.5	11.9	23.3	35.5	37.5	0.0	19.7
The intellectually stimulating aspect of the job	Very satisfied or satisfied	100.0	83.3	100.0	82.4	89.7	73.3	81.3	43.8	100.0	82.2
	Dissatisfied or very dissatisfied	0.0	16.7	0.0	11.8	2.3	13.3	9.4	12.5	0.0	6.9
The friendliness of the working environment	Very satisfied or satisfied	100.0	33.3	100.0	64.7	88.4	89.7	87.5	81.3	100.0	85.0
	Dissatisfied or very dissatisfied	0.0	16.7	0.0	11.8	1.2	0.0	3.1	6.3	0.0	3.0
The training you receive	Very satisfied or satisfied	100.0	33.3	40.0	82.4	64.7	44.8	46.7	62.5	100.0	60.2
	Dissatisfied or very dissatisfied	0.0	33.3	20.0	11.8	15.3	24.1	36.7	12.5	0.0	19.4
The amount of pay you receive	Very satisfied or satisfied	50.0	50.0	60.0	52.9	46.5	56.7	32.3	43.8	75.0	47.2
	Dissatisfied or very dissatisfied	50.0	0.0	20.0	35.3	37.2	30.0	48.4	50.0	25.0	37.2
The amount of holiday time/paid leave	Very satisfied or satisfied	100.0	66.7	80.0	76.5	42.3	59.3	58.6	73.3	75.0	56.8
	Dissatisfied or very dissatisfied	0.0	16.7	20.0	5.9	39.7	18.5	24.1	6.7	0.0	25.4
Your job security	Very satisfied or satisfied	75.0	83.3	100.0	93.8	72.9	60.0	71.9	81.3	80.0	74.4
	Dissatisfied or very dissatisfied	0.0	0.0	0.0	0.0	14.1	20.0	18.8	12.5	20.0	13.6
Prospects for career advancement	Very satisfied or satisfied	75.0	33.3	60.0	64.7	70.6	56.7	48.4	43.8	100.0	61.8
	Dissatisfied or very dissatisfied	25.0	33.3	40.0	17.6	14.1	10.0	25.8	18.8	0.0	17.1
The ability to balance your professional & personal life	Very satisfied or satisfied	75.0	33.3	20.0	82.4	46.0	66.7	56.3	43.8	80.0	54.0
	Dissatisfied or very dissatisfied	25.0	66.7	40.0	11.8	44.8	20.0	34.4	37.5	0.0	35.1
Ability to meet & network with professionals from your same field	Very satisfied or satisfied	75.0	66.7	80.0	82.4	82.4	66.7	53.1	37.5	60.0	70.5
	Dissatisfied or very dissatisfied	0.0	16.7	20.0	11.8	9.4	3.3	18.8	6.3	20.0	10.5

Source: ACRE survey

Table 6.17 - Satisfaction with the job & current contract status (in %)

		Contract status in current job						
With:	**Sense of satisfaction**	**On limited permanent contract**	**On a contract for a specific project**	**On a fixed term contract for less than 12 months**	**On a fixed term contract of 12 months or more**	**Without written contract**	**Other**	**Total**
Sense of achievement you get from your work	Very satisfied or satisfied	68.5	57.1	80.0	75.0	50.0	82.1	71.2
	Dissatisfied or very dissatisfied	9.9	21.4	0.0	25.0	12.5	3.6	9.1
The scope for using your own initiative	Very satisfied or satisfied	72.1	85.7	60.0	100.0	100.0	91.1	79.8
	Dissatisfied or very dissatisfied	12.6	7.1	20.0	0.0	0.0	0.0	8.1
Amount of influence you have over your job	Very satisfied or satisfied	71.2	84.6	60.0	100.0	87.5	86.0	77.3
	Dissatisfied or very dissatisfied	10.8	7.7	.0	0.0	0.0	7.0	8.6
The facilities in the workplace	Very satisfied or satisfied	65.8	71.4	80.0	50.0	42.9	77.8	68.7
	Dissatisfied or very dissatisfied	24.3	21.4	20.0	50.0	28.6	9.3	20.5
The intellectually stimulating aspect of the job	Very satisfied or satisfied	73.9	85.7	60.0	100.0	100.0	94.7	81.9
	Dissatisfied or very dissatisfied	11.7	7.1	0.0	0.0	0.0	1.8	7.5
The friendliness of the working environment	Very satisfied or satisfied	82.9	85.7	100.0	75.0	100.0	85.7	84.8
	Dissatisfied or very dissatisfied	4.5	0.0	0.0	25.0	0.0	0.0	3.0
The training you receive	Very satisfied or satisfied	53.2	78.6	80.0	50.0	100.0	62.3	60.1
	Dissatisfied or very dissatisfied	26.6	14.3	0.0	25.0	0.0	13.2	20.2
The amount of pay you receive	Very satisfied or satisfied	45.5	42.9	40.0	50.0	25.0	56.4	47.4
	Dissatisfied or very dissatisfied	37.3	57.1	60.0	25.0	62.5	27.3	37.2
The amount of holiday time/paid leave	Very satisfied or satisfied	69.1	38.5	60.0	75.0	0.0	40.9	57.4
	Dissatisfied or very dissatisfied	10.9	46.2	20.0	.0	85.7	47.7	25.1
Your job security	Very satisfied or satisfied	80.0	50.0	80.0	100.0	25.0	76.4	75.0
	Dissatisfied or very dissatisfied	8.2	35.7	20.0	0.0	50.0	12.7	13.3
Prospects for career advancement	Very satisfied or satisfied	52.7	50.0	60.0	75.0	75.0	78.2	61.2
	Dissatisfied or very dissatisfied	22.7	42.9	20.0	25.0	12.5	1.8	17.9
The ability to balance your professional & personal life	Very satisfied or satisfied	56.8	42.9	60.0	75.0	87.5	45.6	54.3
	Dissatisfied or very dissatisfied	30.6	50.0	20.0	25.0	12.5	45.6	35.2
Ability to meet & network with professionals from your same field	Very satisfied or satisfied	62.7	71.4	80.0	100.0	100.0	78.6	70.6
	Dissatisfied or very dissatisfied	12.7	14.3	20.0	0.0	0.0	5.4	10.2

Source: ACRE survey

Table 6.18 - Satisfaction with the job & current employment status (in %)

With:	Sense of satisfaction	Employment status		Total
		Employed	Self employed/ freelance	
Sense of achievement you get from your work	Very satisfied or satisfied	69.3	74.7	71.3
	Dissatisfied or very dissatisfied	9.4	8.0	8.9
The scope for using your own initiative	Very satisfied or satisfied	72.4	93.3	80.2
	Dissatisfied or very dissatisfied	11.8	1.3	7.9
Amount of influence you have over your job	Very satisfied or satisfied	71.7	88.0	77.7
	Dissatisfied or very dissatisfied	11.0	4.0	8.4
The facilities in the workplace	Very satisfied or satisfied	65.9	74.0	68.8
	Dissatisfied or very dissatisfied	25.4	11.0	20.1
The intellectually stimulating aspect of the job	Very satisfied or satisfied	74.8	93.4	81.8
	Dissatisfied or very dissatisfied	11.0	1.3	7.4
The friendliness of the working environment	Very satisfied or satisfied	83.5	87.8	85.1
	Dissatisfied or very dissatisfied	4.7	0.0	3.0
The training you receive	Very satisfied or satisfied	56.0	66.7	59.9
	Dissatisfied or very dissatisfied	25.6	9.7	19.8
The amount of pay you receive	Very satisfied or satisfied	49.2	43.2	47.0
	Dissatisfied or very dissatisfied	35.7	39.2	37.0
The amount of holiday time/paid leave	Very satisfied or satisfied	69.0	30.0	56.5
	Dissatisfied or very dissatisfied	13.5	51.7	25.8
Your job security	Very satisfied or satisfied	81.0	63.5	74.5
	Dissatisfied or very dissatisfied	10.3	18.9	13.5
Prospects for career advancement	Very satisfied or satisfied	52.4	77.0	61.5
	Dissatisfied or very dissatisfied	23.8	6.8	17.5
The ability to balance your professional & personal life	Very satisfied or satisfied	59.1	44.7	53.7
	Dissatisfied or very dissatisfied	29.1	46.1	35.5
Ability to meet & network with professionals from your same field	Very satisfied or satisfied	65.9	77.3	70.1
	Dissatisfied or very dissatisfied	12.7	6.7	10.4

Source: ACRE survey

Table 6.19 - Satisfaction with the job & hours worked per week (in %)

:	Sense of satisfaction	Hours per_week in your main job: Less than 20	Between 21 and 30	Between 31 and 42	Between 43 and 55	More than 55 hours	Varies per week	Total
Sense of achievement you get from your work	Very satisfied or satisfied	66.7	73.9	66.7	77.6	80.0	66.7	71.6
	Dissatisfied or very dissatisfied	0.0	4.3	10.7	6.9	6.7	16.7	9.0
The scope for using your own initiative	Very satisfied or satisfied	100.0	82.6	75.9	82.8	80.0	83.3	80.0
	Dissatisfied or very dissatisfied	0.0	0.0	12.0	8.6	6.7	0.0	8.0
Amount of influence you have over your job	Very satisfied or satisfied	66.7	73.9	81.9	79.3	73.3	66.7	78.0
	Dissatisfied or very dissatisfied	0.0	8.7	6.0	10.3	6.7	16.7	8.5
The facilities in the workplace	Very satisfied or satisfied	66.7	63.6	66.3	74.1	86.7	50.0	68.5
	Dissatisfied or very dissatisfied	33.3	22.7	21.7	19.0	6.7	25.0	20.3
The intellectually stimulating aspect of the job	Very satisfied or satisfied	100.0	78.3	78.6	82.8	93.3	88.9	82.1
	Dissatisfied or very dissatisfied	0.0	13.0	9.5	5.2	0.0	5.6	7.5
The friendliness of the working environment	Very satisfied or satisfied	100.0	87.0	84.5	84.5	85.7	88.9	85.4
	Dissatisfied or very dissatisfied	0.0	4.3	3.6	1.7	7.1	0.0	3.0
The training you receive	Very satisfied or satisfied	100.0	60.9	58.0	58.6	78.6	52.9	60.2
	Dissatisfied or very dissatisfied	0.0	17.4	24.7	15.5	7.1	23.5	19.4
The amount of pay you receive	Very satisfied or satisfied	33.3	60.9	45.8	50.9	42.9	33.3	47.5
	Dissatisfied or very dissatisfied	66.7	30.4	37.3	31.6	42.9	50.0	36.9
The amount of holiday time/paid leave	Very satisfied or satisfied	100.0	54.5	68.4	51.9	30.8	33.3	56.8
	Dissatisfied or very dissatisfied	0.0	31.8	17.7	24.1	30.8	66.7	25.9
Your job security	Very satisfied or satisfied	66.7	73.9	79.5	77.2	71.4	44.4	74.2
	Dissatisfied or very dissatisfied	33.3	26.1	8.4	7.0	7.1	44.4	13.6
Prospects for career advancement	Very satisfied or satisfied	66.7	69.6	57.8	65.5	71.4	44.4	61.3
	Dissatisfied or very dissatisfied	0.0	13.0	20.5	10.3	14.3	38.9	17.6
The ability to balance your professional & personal life	Very satisfied or satisfied	33.3	73.9	72.6	29.3	20.0	50.0	53.7
	Dissatisfied or very dissatisfied	33.3	13.0	20.2	53.4	80.0	38.9	35.3
Ability to meet & network with professionals from your same field	Very satisfied or satisfied	100.0	78.3	71.1	69.0	57.1	66.7	70.4
	Dissatisfied or very dissatisfied	0.0	8.7	12.0	10.3	7.1	5.6	10.1

Source: ACRE survey

Table 6.20 - Satisfaction with the job & number of employees in the workplace (in %)

:	Sense of satisfaction	Number of employees in the workplace			
		Sense of satisfaction	10-49	more than 50	Total
Sense of achievement you get from your work	Very satisfied or satisfied	71.4	73.1	69.4	71.4
	Dissatisfied or very dissatisfied	8.8	3.8	12.2	8.3
The scope for using your own initiative	Very satisfied or satisfied	79.1	84.6	73.5	79.2
	Dissatisfied or very dissatisfied	8.8	7.7	8.2	8.3
Amount of influence you have over your job	Very satisfied or satisfied	75.0	82.7	77.1	77.6
	Dissatisfied or very dissatisfied	7.6	9.6	6.3	7.8
The facilities in the workplace	Very satisfied or satisfied	74.4	73.1	56.3	69.5
	Dissatisfied or very dissatisfied	15.6	21.2	29.2	20.5
The intellectually stimulating aspect of the job	Very satisfied or satisfied	80.4	90.4	73.5	81.3
	Dissatisfied or very dissatisfied	6.5	3.8	14.3	7.8
The friendliness of the working environment	Very satisfied or satisfied	87.8	86.5	81.6	85.9
	Dissatisfied or very dissatisfied	2.2	1.9	4.1	2.6
The training you receive	Very satisfied or satisfied	66.7	58.8	55.1	61.5
	Dissatisfied or very dissatisfied	12.6	19.6	28.6	18.7
The amount of pay you receive	Very satisfied or satisfied	37.8	63.5	50.0	47.9
	Dissatisfied or very dissatisfied	43.3	26.9	33.3	36.3
The amount of holiday time/paid leave	Very satisfied or satisfied	46.3	60.8	75.0	58.1
	Dissatisfied or very dissatisfied	38.8	15.7	12.5	25.1
Your job security	Very satisfied or satisfied	72.2	78.4	83.7	76.8
	Dissatisfied or very dissatisfied	15.6	7.8	10.2	12.1
Prospects for career advancement	Very satisfied or satisfied	66.3	63.5	51.0	61.6
	Dissatisfied or very dissatisfied	14.6	17.3	26.5	18.4
The ability to balance your professional & personal life	Very satisfied or satisfied	50.0	51.9	59.2	52.8
	Dissatisfied or very dissatisfied	39.1	36.5	28.6	35.8
Ability to meet & network with professionals from your same field	Very satisfied or satisfied	68.9	82.7	57.1	69.6
	Dissatisfied or very dissatisfied	8.9	11.5	12.2	10.5

Source: ACRE survey

Table 6.21 - Satisfaction with the job & commuting (in %)

	Sense of satisfaction	Travel_work_time I work from home	Less than 15 minutes	15-29 mins	30-44 mins	45-59 mins	60-90 mins	Depends on works	Total
Sense of achievement you get from your work	Very satisfied or satisfied	66.7	71.7	72.7	73.3	77.8	33.3	0.0	71.3
	Dissatisfied or very dissatisfied	0.0	6.5	6.5	17.8	0.0	33.3	0.0	8.9
The scope for using your own initiative	Very satisfied or satisfied	90.0	88.9	79.2	77.8	66.7	66.7	100.0	80.2
	Dissatisfied or very dissatisfied	0.0	2.2	9.1	8.9	11.1	33.3	0.0	7.9
Amount of influence you have over your job	Very satisfied or satisfied	90.0	82.6	81.6	71.1	66.7	0.0	0.0	77.7
	Dissatisfied or very dissatisfied	0.0	4.3	5.3	15.6	5.6	33.3	100.0	8.4
The facilities in the workplace	Very satisfied or satisfied	50.0	80.0	68.4	63.6	70.6	50.0	100.0	68.8
	Dissatisfied or very dissatisfied	20.0	11.1	21.1	27.3	17.6	33.3	0.0	20.1
The intellectually stimulating aspect of the job	Very satisfied or satisfied	100.0	84.8	83.1	80.0	72.2	66.7	0.0	81.8
	Dissatisfied or very dissatisfied	0.0	6.5	6.5	6.7	5.6	33.3	100.0	7.4
The friendliness of the working environment	Very satisfied or satisfied	80.0	82.2	84.2	93.3	77.8	83.3	100.0	85.1
	Dissatisfied or very dissatisfied	0.0	2.2	2.6	2.2	5.6	16.7	0.0	3.0
The training you receive	Very satisfied or satisfied	71.4	59.1	57.1	64.4	76.5	16.7	0.0	59.9
	Dissatisfied or very dissatisfied	0.0	22.7	19.5	17.8	17.6	33.3	100.0	19.8
The amount of pay you receive	Very satisfied or satisfied	22.2	46.7	52.6	46.7	50.0	16.7	0.0	47.0
	Dissatisfied or very dissatisfied	55.6	31.1	34.2	42.2	38.9	33.3	100.0	37.0
The amount of holiday time/paid leave	Very satisfied or satisfied	0.0	47.6	63.9	52.4	66.7	83.3	0.0	56.5
	Dissatisfied or very dissatisfied	80.0	26.2	22.2	28.6	16.7	16.7	100.0	25.8
Your job security	Very satisfied or satisfied	66.7	73.9	81.3	68.9	61.1	100.0	0.0	74.5
	Dissatisfied or very dissatisfied	22.2	10.9	5.3	24.4	22.2	0.0	100.0	13.5
Prospects for career advancement	Very satisfied or satisfied	62.5	65.2	67.5	53.3	58.8	33.3	0.0	61.5
	Dissatisfied or very dissatisfied	12.5	10.9	14.3	26.7	11.8	50.0	100.0	17.5
The ability to balance your professional & personal life	Very satisfied or satisfied	70.0	41.3	59.7	57.8	50.0	33.3	0.0	53.7
	Dissatisfied or very dissatisfied	30.0	43.5	31.2	33.3	38.9	50.0	0.0	35.5
Ability to meet & network with professionals from your same field	Very satisfied or satisfied	77.8	73.9	75.3	64.4	47.1	66.7	100.0	70.1
	Dissatisfied or very dissatisfied	0.0	13.0	6.5	15.6	11.8	16.7	0.0	10.4

Source: ACRE survey

Table 6.22 -Travel to work time and overall satisfaction with job

Overall satisfaction with job	Time travelling							Total
	I work from home	Less than 15 minutes	15-29 min.	30-44 min.	45-59 min.	60-90 min.	depends on works	
Very satisfied or satisfied	100.0	84.8	84.2	81.8	77.8	66.7	0.0	83.1
Neither	0.0	10.9	10.5	6.8	16.7	0.0	100.0	10.0
Dissatisfied or very dissatisfied	0.0	4.3	5.3	11.4	5.6	33.3	0.0	7.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ACRE survey

Table 6.23 - Income per satisfaction with the job

Overall satisfaction with job	Income			Total
	Less than two times the average salary	Between two and four times the average	More than four times the average salary	
Very satisfied or satisfied	78.5	86.5	89.3	83.0
Neither	11.4	11.5	0.0	9.4
Dissatisfied or very dissatisfied	10.1	1.9	10.7	7.5

Source: ACRE survey

6.5 Multi-variate analysis

Variables:

Dependent variable:

A24: All things considered, how satisfied are you with your life in this city?

Significant variables: the following list shows the variables that are significant in the different equations. Questions from A6 to A10, as well as questions A16 and C3-L

A6: How satisfied you are with the following leisure activities offered in Barcelona?
A6-A: Quality of public spaces
A6-I: Architecture of city/relevant monuments
A6-J: Number of associations/organisations for social activities.

A7: How satisfied you are with the following public services offered in Barcelona?
A7-H: Social security

A8: How would you rate the following environmental aspects of the city?
A8-A: Pavement condition of city streets & sidewalks
A8-D: Quality of drinking water

A9:How worried are you with the following issues in Barcelona?
A9-C: Availability of recreation for teenagers
A9-E: Availability of recreation for seniors
A9-H: Availability of recreation for children
A9-K: homelessness
A9-L: Aggressive/antisocial behaviour

A10: Thinking of the cost of living in Barcelona how expensive is the following:
A10-B: Cost of basic services related to house
A10-F: General cost of living

A16: Is BMR a gay friendly place?

C3-L: Overall quality of life in neighbourhood

Explicative Equations:

A multivariate analysis was done taking into consideration each group of possible significant variables in the influence to the overall satisfaction with the city. Results were as follows:

Equation (1): A24 = A6 + U

Results:

$$A24 = \underset{}{1.915} + \underset{(1.799)}{0.261\ A6\text{-}A} + \underset{(2.342)}{0.333\ A6\text{-}I} + \underset{(2.159)}{0.392\ A6\text{-}J}$$

$R^2 = 0.094$:

Even the low significance (0.094) this equation shows the relative relevance of some soft factors of the question A6 in the explanation of the overall satisfaction. The explanatory variables are:

Quality of public spaces
Architecture of the city / relevant monuments
Number of associations / organisations for social activities

(2) A24 = A7 + U

Results:

$$A24 = 3.096 + \underset{(3.116)}{0.362\ A7\text{-}H}$$

$R^2 = 0.048$;

Social security is the only explanatory variable

(3) A24 = A8 + U

Results:

$$A24 = 1.686 + \underset{(3.298)}{0.493\ A8\text{-}A} + \underset{(2.870)}{0.305\ A8\text{-}D}$$

$R^2 = 0.106$;

“Pavement conditions of City streets and sidewalks” and “quality of drink water” are the variables of question A8 that explains more closely the satisfaction with the city.

(4) A24 = A9 + U

Results:

$$A24 = 5.297 - \underset{(-2.237)}{0.354}\ A9\text{-}C - \underset{(-2.445)}{0.424}\ A9\text{-}E + \underset{(1.566)}{0.218}\ A9\text{-}H + \underset{(2.066)}{0.358}\ A9\text{-}K - \underset{(-2.699)}{0.423}\ A9\text{-}L$$

$R^2 = 0.133$

These results are ambiguous and ambivalent. The equation shows a certain preoccupation for the lack of leisure spaces for some groups, mainly teenagers, as well as preoccupation for the risk of antisocial behaviours in certain groups. Nevertheless, leisure spaces for kids is relevant in explaining the overall satisfaction with the city.

(5) A24 = A10 +U

Results:

$$A24 = 5.208 - \underset{(-3.269)}{0.571}\ A10\text{-}B$$

$R^2 = 0.051$

This equation shows that "cost of basic services related to house" is the most influent soft factor in the overall satisfaction with the city.

(6) A24 = A10-F + A12-A + A13 + A16 + A17+ A18+ A19 + A20 + B9-N + C3-L + D6 + U

Results:

$$A24 = 2.475 - \underset{(-2.546)}{0.501}\ A10\text{-}F + \underset{(2.665)}{0.503}\ A16 + \underset{(3.358)}{0.734}\ C3\text{-}L$$

$R^2 = 0.133$

Finally, we have selected the most relevant hard and soft factors following the analysis shown until now to do a transversal estimation. The results show that factors regarding the quality of lie in neighbourhood are the most influent factors in the overall assessment on satisfaction with the city. Another relevant variable in that direction is the tolerance, reflected in the assessment of the city as a gay friendly place. The last relevant factor is the cost of living, which influences negatively to the general assessment of the satisfaction with the city.

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