HAL
archives-ouvertes.fr

Gender, Subjective well-being and capabilities: an application to the Moroccan Youth

Mehdi Khouaja, Noémie Olympio, Gwendoline Promsopha

▶ **To cite this version:**

Mehdi Khouaja, Noémie Olympio, Gwendoline Promsopha. Gender, Subjective well-being and capabilities: an application to the Moroccan Youth. 2016. <hal-01356682>

HAL Id: hal-01356682

https://hal.archives-ouvertes.fr/hal-01356682

Submitted on 26 Aug 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Gender, Subjective well-being and capabilities: an application to the Moroccan Youth

Mehdi Khouaja*, Noémie Olympio and Gwendoline Promsopha*****

**Aix Marseille University, CNRS, LEST UMR 7317*

***Aix-Marseille University, School of Teaching and Education (ESPE)*

******Aix Marseille University, CNRS, LEST UMR 7317*

April 2016

[VERY FIRST DRAFT]

Abstract :

Our paper investigates how gender shapes youth's aspirations, subjective well-being and capabilities in Morocco. We compare two different informational basis in analysing gender inequalities: the subjective well-being framework, and the capability approach. To do so we propose to operationalize capabilities through mixed methods (qualitative and quantitative) based on: 1. Qualitative data that we collected in Morocco and 2. An innovative dataset collected by the Office of Economic Cooperation for Mediterranean and Middle East (OCEMO), among 1333 young Moroccan individuals aged 15-35 living in rural and urban areas of the Marrakesh region. Our results suggest that subjective well-being poorly reflects gender inequalities among Moroccan youths, as it does not consider adaptive preferences. Capabilities indicators perform much better as they account for both the capability to choose a lifestyle, and the ability to fulfill one's choice; i.e. spaces of freedom. The paper also reveals the striking significance of adaptive preferences among rural young women; as well as the frustrations among young educated men resulting from an inability to fulfill a chosen lifestyle. Gender justice and capabilities - as the freedom to choose and to turn opportunities into valuable outcome - indeed appear significant in understanding the structural transformations of the Moroccan society.

➔ On est bon pour 200 mots.

Keywords : Youth, Gender, Subjective Well-Being, Capabilities, Morocco.

Introduction

The capabilities framework (Sen 2000) has been introduced as a criticism of welfarist approaches which use utility, i.e. satisfaction, as the main benchmark for social outcomes. However, research on subjective well-being (SWB), i.e. a subjective assessment of the concept of "utility" or "satisfaction", has seen a swift development in recent years. This literature is sometimes referred to as "happiness economics". Despite this recent popularity, subjective well-being fail to account for situations of adaptive preferences, an issue widely discussed by Sen (1992).

In this chapter, we propose to compare the capability approach (CA) and the subjective well-being (SWB) framework in an analysis of gender inequalities among Moroccan young people. The literature does not provide consistent evidences about the effects of gender on happiness, while gender inequalities are frequently observed with a CA.

Our research has three objectives: the first is to provide a general framework to understand how SWB and CA relate in their approach of gender issues. We analyse processual capabilities as resulting from two dimensions: the freedom to choose and the achievements of valuable functionings also called capability to achieve. It allows us to identify 4 case scenarios in the capability space applying to the Moroccan case, each of them leading to different SWB levels. Gender differences in SWB are only fully understood if men and women have first been positioned within these 4 scenarios. The second objective is to evaluate the relevance of SWB indicators for the analysis of key gender inequalities in developing countries. The third is to provide new insights on the issue of gender inequalities among young Moroccans, and to shed light on the most relevant indicators of progress or decline in gender equality.

We use mixed methods based on the 2013 OCEMO quantitative survey which collects information on economic status and aspirations of 1333 young Moroccans aged 15-34; and qualitative work with 15 young Moroccan interviewed in August 2015. Qualitative evidences and an innovative methodology to measure capabilities show how young Moroccan women suffer from adaptive preferences coming from a lack of freedom to choose but leading to high satisfaction levels; while young men are subject to frustrations from high constraints on achievements which lead to lower satisfaction levels.

The chapter proceeds as follows: section 1 is a literature review on gender, SWB and the CA ; section 2 presents our theoretical frameworks and its 4 case scenarios. Section 3 reviews the Moroccan context for the Youth. Section 4 presents the empirical methodology and main variables. Section 5 gives the main results, which are discussed in section 6. Section 7 concludes.

1. A review of the literature on capabilities, SWB and gender: when empirical results don't add up

Three different streams of literature apply to our analysis. The first is a growing field of research on subjective well-being (SWB). Subjective well-being (SWB) has been brought up as an alternative to income or consumption as measures of well-being. It broadly covers two generic terms - happiness and life satisfaction – and can be defined as individuals' self-assessment of their lives and choices. Gender inequalities have not been directly targeted by research on SWB, with minor empirical results coming from gender as a control variable in regressions. Yet, the results are surprisingly ambiguous, with some studies reporting lower happiness among women (Clark and Oswald 1994), highest satisfaction among women (Fujita, Diener, and Sandvik (1991), Asadullah, Xiao, and Yeoh 2015; Di Tella and MacCulloch 2005), or no significant results at all (Louis and Zhao 2002). Results for developing

countries are in their infancy, but consistently shows women happier than men, which is a very counterintuitive result in countries where women score poorer in other indicators.

Inconsistent or counterintuitive results can partly be explained by the diversity of methodologies used to measure SWB (Tesch-Römer, Motel-Klingebiel, and Tomasik 2007), the capture of the gender effect by other regression correlates such as education and health (Dolan, Peasgood, and White, 2008), or the fact that gender has an indirect effect on SWB, passing through other factors such as social participation (Humpert 2013) or parenthood (Kroll 2011). Gender appear significant only in specific subgroups, such as age subgroup or the unemployed, or act as an intensifier of other existing inequalities. Yet, if this can explain the lack of significance of gender variables sometimes observed, it does not help clarify why poorer and discriminated women frequently report higher happiness.

The second stream of literature analyses how gender shapes capabilities. According to Sen (1985, 1992, 1999, 2005), individuals' capabilities are defined as a set of freedoms to achieve which enhances individuals' quality of life. Accordingly, a life is made up of a set of '*functionings'* each linked to the other and composed of '*beings*' and '*doings*'. In the *functionings* space, capabilities reflect the individual freedom to choose between different lifestyles. Equality of capabilities represents equality in the freedom '*to lead the lives they [individuals] have reasons to value'* (Sen, 1992).

The CA is particularly relevant for gender issues in that it does not assume atomistic individuals but rather an ethically - or normatively - individualistic theory where individuals' freedom depends on their environment (Robeyns 2003). Robeyns (2000) also accounts for a number of societal features such as social norms or discriminatory practices - called conversion factors - which contribute to the conversion of resources into capabilities and which matter particularly for women. In the CA, gender inequalities have mostly been analyzed with the prism of a definite list of valuable capabilities developed by Nussbaum (2000), a methodology aimed at avoiding adaptive preferences, i.e. women who do not desire what they believe inaccessible. The empirical research using capabilities lists finds women worse off than men except for very specific domains such as social activity, and with context-specific variations (Picchio 2005).

Lastly, an emerging literature looks at the complementarities between SWB and CA in measuring social and economic inequalities, with the underlying assumption that more capabilities correlates with higher levels of well-being (Anand, 2005). As Sen reminds us, SWB is one of the functionings resulting from more capabilities: "*Happiness is not all that matters, but first of all, it does matter (and that is important), and second, it can often provide useful evidence on whether or not we are achieving our objectives in general"* (Sen 2008). Alkire (2015) interprets the CA as a relevant framework or "space" for the evaluation of well-being.

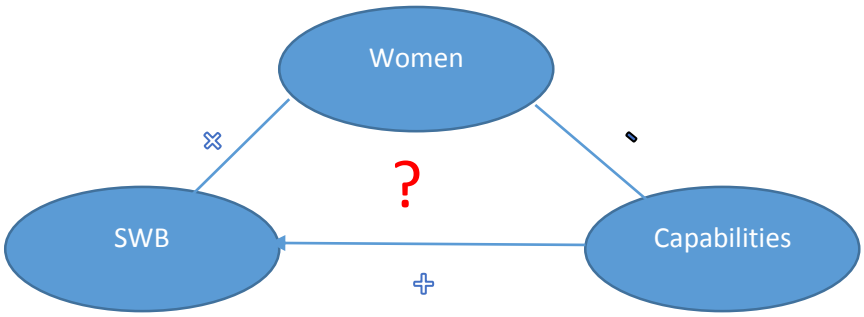
Most of the empirical results in this field confirm a strong causal relation between capabilities and SWB (Anand, Hunter, and Smith 2005; Anand, Krishnakumar, and Tran 2011; Anand et al. ; Suppa 2015). Yet, if most of this literature tackles individual heterogeneity, endogeneity and personality biases, it relies on objective indicators of capabilities, i.e a list of dimensions, therefore not fully reflecting the subjective evaluation of valuable functionings and the idea of freedom theorized by Sen (2000).

To summarize, empirical research in this three literatures gives the following sets of relations:

- Women may report higher SWB than men.
- Being a women systematically leads to lower capabilities.
- People with more capabilities are found happier. Yet, if capabilities positively influences SWB, and is itself negatively affected by gender, then we should also expect a negative effect of gender on SWB.

We conclude that the general results on gender, SWB and capabilities are both incomplete and conflicting, as illustrated in Figure 1:

Figure 1: the impossibility triangle: empirical results on gender, capabilities and SWB



2. Theoretical framework

2.1. Freedom to choose, achieved valuable functionings, and SWB

We now propose a general framework to apprehend concomitantly gender inequalities in terms of CA and SWB and to solve the puzzle in table 1. Such a framework requires to rethink the differences and complementarities between the CA and SWB approaches.

The evaluation of capabilities requires a broader informational basis[1] than the social evaluation of SWB alone. First, focusing on SWB leads to a consequentialist approach in which actions matters only in their outcomes, i.e. satisfaction, therefore conflicting with processual approaches analysing processes and the means of the justice.

Secondly and more fundamentally, subjective measures of individual well-being can produce pernicious effects among which adaptive preferences are probably the most emblematic (Sen, 1992). Adaptive preferences are defined as a situation in which constrained individuals bound their preferences to a small set of 'realistic' choices and as a result stop perceiving their situation as enforced. The 'opportunities space' is thus limited by a low "capability to aspire" (Appadurai, 2004).

However, objective indicators of capabilities such as capabilities lists have their own limits: they involve top-down value judgment sometimes said paternalistic and ethnocentric (Kingdon and Knight, 2006).

Rather than capabilities lists, Bonvin and Farvaque (2006) put forward the importance of a "capability for voice" produced by the individuals themselves. Such a processual approach accounts for what individuals have good reasons to value: in other words, only individuals are entitled to define which functionings matter in their informational basis judgment of justice. On the empirical ground, individuals must participate to the selection of their relevant functionings, hence avoiding exogenous evaluations of what constitutes a good quality of life (Kingdon and Knight, 2006).

To summarize, a good measure of capabilities should stand somewhere between objective indicators – to avoid issues of adaptive preferences – and subjective assessment – to account for individuals' own perception on valuable lifestyles, and avoid external value judgments. An attempt to capture autonomy and not only "means" is proposed in Graham and Nikolova (2015).

We choose to conceptualize capabilities as a **process in two steps** which starts with the capability to make choices or decide which valuable life to pursue, called '**freedom to choose**'; follows with the capability to achieve the subsequent valuable functionings (called **'achievement of valuable**

[1] The informational basis represents: "*the information on which the judgment is directly dependent and – no less importantly – asserts that the truth and falsehood of any other type of information cannot directly influence the correctness of the judgment*" (Sen 1995, p. 73).

functionnings'), and ends with an outcome, i.e. the final functionings and a certain level of well-being[2]. The definition of valuable functionings is by essence subjective and individual.

Observable functionings can be evaluated in terms of capabilities depending on whether they result: 1. From a full freedom to make choices among all the potentially valuable functionings; 2. And from a full capability to achieve the subsequent valuable functionings. Two different individuals may score with equal levels of overall capabilities, but different scores in the freedom to choose and in the achievement of valuable functionings. Such frameworks allows to take into account three different scenarios of capability deprivation (or lack of capabilities) with different consequences on SWB:

Full capabilities deprivation: individuals face a restricted set of choices, and cannot achieve the choice they have been constrained to choose. Such deprivation at each step of the capability building process will negatively affect individuals' well-being.

Adaptive preferences: In this scenario analyzed by Sen (2001) or Teschl and Comim (2005), individuals hold a reasonable level of capability to achieve, but only as a result of a restriction in the choices presented to them as socially achievable (low freedom to choose). We expect adaptive preferences to positively influence subjective responses on happiness or well-being, since individuals may be led to feel that they have 'avoided the worst case scenario' or achieved 'the best they could'.

Frustration: People have a capability to make or pursue free choices, but fail to achieve them: they have both freedom to choose, and to achieve. This may lead them to a feeling of frustration, injustice, grievance, and therefore negatively affects SWB.

These three scenario all contrasts with situations of **full capabilities** (4th case scenario), were individual have the freedom to choose and to achieve the consequent capability to achieve. Analysis such as Ramos and Silber (2005) or Anand, Hunter, and Smith (2005) reflect scenarios of full capabilities and capabilities deprivation, i.e. positive relations between capabilities and SWB, but may also take adaptive preferences for cases of full capabilities, and does not model situations of frustrations. This is explained by conceptual issues: these papers do not account for individuals' freedom of choice but rely on capabilities lists, i.e. a set of functionings assumed valuable according to universal criteria, but not necessary to the individuals themselves.

To conclude, the relationship between capabilities and SWB depends on where individuals stand in the process of capability building, and the four scenarios are summarized in Table 1.

Table 1. The four scenarios of capabilities and their relation to SWB

Scenario	Freedom to choose	Achievement of valuable functionings	SWB
Capabilities deprivation	**NO**	**NO**	**NO**
Adaptive preferences	**NO**	*YES*	*YES*
Frustrations	*YES*	**NO**	**NO**
Full Capabilities	*YES*	*YES*	*YES*

2.2. Understanding Gender and SWB

[2] Our approach can in some way be compared to Ootegem and Verhofstadt (2014) who decompose the effect of capabilities on SWB in actual realizations vs. other aspects of the capability approach – personality in their case.

We believe that our framework helps understand the lack of consistent results on gender variables in SWB regressions. To correctly understand differences in SWB between men and women, they must first be positioned in each possible case scenario. In some instances, women have a lower freedom to choose and a lower capability to achieve than men (women in capabilities deprivation, men in full capabilities), which leads women to declare lower SWB than men.

In other instances, men hold full capabilities but women are in situations of adaptive preferences leading them to declare decent levels of SWB despite clear freedom deprivation: here, no significant differences in SWB should be found – both men and women are satisfied even if their reasons diverge. Lack of results of gender variables in SWB regression can also result from full capability deprivation among women and frustrations for men.

Finally, women may be in scenarios of adaptive preferences while men are in the frustration scenario: men's declared well-being will appear lower than women. This last scenarios may help explain the surprising positive effect of gender variables on satisfaction levels found in (Asadullah, Xiao, and Yeoh 2015; Di Tella and MacCulloch 2005).

3. Context : Morocco, Youth and Gender

3.1 Social and Economic challenges for the Moroccan Youth

The Arab world is currently in a social and political turmoil which primarily affects youths and has brought them into the eyes of public policy and the international community (World Bank 2012). Strong economic growth in Morocco (4.4% in 2013) has not managed to create sufficient employment for all the newcomers in labor markets. Morocco, as other Maghreb countries, faces an unprecedented demographic transition: the 15-34 years old represent more than half of the working age population, creating strong employment pressure. A large population of youth and rapid urbanization creates potential conflicts of values between traditions and modernity and brings a number of socio-economic challenges. Data on the insertion of young Moroccans in the labour market show high unemployment rates and a lack of systematic correlation between education and employment: 24% of youths holding a university degree are unemployed, against 4.4% among the unqualified. Job deprivation and the discontent it creates among young Moroccans is one of the main challenges for the years to come (Serajuddin and Verme, 2015). Morocco also stands for its poor performance in terms of alphabetization and education despite important progress in access to primary school.

Like most other MENA countries, Morocco does not perform well in terms of gender inequalities (Malik and others 2014; Bekhouch et al. 2013). In 2013 Morocco scored 129th on 136 countries in the Global Gender Gap Index (from the World Economic Forum). This poor performance results from social and economic discriminations (Davis 1995). Moroccan women have a lower access to education than men, especially in rural areas. According to the National Observatory for Human Development (ONDH), 41% of Moroccan women have not completed primary education, against 25% for men: in rural areas the numbers jump to nine in ten women with no completed primary education.

Women are also restricted in their access to the labour market (Assaad and Zouari 2003): according to the *Haut Commissariat au Plan*, the activity rate for men was almost 3 times higher than women - 74.7% for men against 25.9% for women. Despite this small rate of activity, women also face high unemployment rates - 9.6% for women, 8.9 for men. Finally, women's occupation are mainly in unpaid agricultural work on family farms - 75% of women - leading to huge wage inequalities (Muller and Nordman 2014): the median wage of men is higher than women's by 48% in the agricultural sector, and 28% in the industry.

Moroccan economic and social conditions are nonetheless changing rapidly, with a recent progress in the legal protection of women and in education, especially for the new generation, which creates an increasing generation gap in social norms on women's role.

4. Empirical methodology

4.1 Mixed methods

We propose in this paper to mix qualitative and quantitative methodologies to approach gender issues with SWB and CA. Measuring CA through the freedom to choose and to achieve implies a careful analysis of what freedom means in a particular context, and of which achievements individuals have reasons to value. How respondents understand questionnaire variables in a specific context may drive statistical results. Quantitative analysis allows statistical significance and detects adaptive preferences where lack of freedom is so well accepted that respondent do not self-report it in interviews. Qualitative methodologies give more ground to the interpretation of results and helps embody the mechanisms underlying regression results, as well as the way actors legitimize and give sense to their action and opinions. Here, we parallel quantitative analysis with a case study of young rural Moroccan living in urban areas – Casablanca and Safi.

4.2 Data

The OCEMO survey

The data that we use in this study have been collected in the region of Marrakech-Tensift-Al Haouz in 2013 and survey the economic situation and aspirations of young Moroccan aged 15-34 years old. Marrakech-Tensift-Al Haouz represents 10% of the Moroccan population and includes both rural and urban areas. The questionnaire has been established by a multidisciplinary expert comity mandated by the Office of Economic Cooperation for the Mediterranean and Middle East (OCEMO), in cooperation with the *Haut Commissariat au Plan* and the National Observatory for Human Development (ONDP). The survey is complementary to the Morocco Household and Youth Survey (MHYS) implemented by the World Bank in 2009-2010, and provides additional information on youths' trajectories and opinions, although at a regional level.

The questionnaire has been implemented with computer assistance and gather information on personal and family situation, employment trajectories, education, opinions, living conditions and social environment. These themes are declined in 8 sections and 457 variables. The random sampling methodology used to collect data and the high rate of responses (94%) suggest data of a good quality.

Overall 1333 youths aged 15-34 years old have been surveyed, but we choose to restrict the sample to those older than 25 years old (541 observations). A portion of the youths under 25 years old are still in the process of achieving their valuable functioning's, which make them irrelevant for our research question and measurement methodology: for instance youths aged 24 years old with a project of professional success may still be in education, which make evaluation of achievements impossible.

We test the effect of gender on SWB and capabilities variables, i.e. freedom to choose, capability to achieve and an aggregated capabilities indicators, with simple logistic regressions controlling for a set of classic correlates.

Case study: interviews with urban youths

OCEMO data have been complemented with qualitative interviews which were implemented in August 2015 in the areas of Safi and Casablanca, and targeted 15 urban youths, among which 3 females and 12 males in 3 focus groups and 4 individual interviews. The Moroccan youths are increasingly urban (41% live in urban areas, and 45% in semi-urban areas according to OCEMO data), with important

consequences on how they value their lives, opportunities, and social change. Respondents were asked to present their personal and professional trajectories, self-assess their satisfaction and freedom, define the meaning of those concepts for them and for the Moroccan Youth in general; define the life they would have had reasons to value, the compromises they feel they have had to make, and their view on gender inequality and women's role in the Moroccan society. Interviews were made in Arabic.

4.3. Measuring SWB and capabilities

SWB measurement methodologies have witnessed considerable developments in recent years (Zeidan, 2012; Teschl and Comim 2005; Kahneman and Krueger 2006), but the multidimensional or experimental data suggested are not widely available – due to heavy experimental designs or big questionnaire spaces. OCEMO data only provides for a global assessment of respondents' life satisfaction, such as is classically found in many SWB empirical literature. To measure SWB, we therefore take the answer to the question "*Are you satisfied with your life*?" We obtain a dummy equal to one if respondents are very or quite satisfied.

Our measure of capabilities diverge from the dominant operationalization through a list of capabilities. As discussed earlier, we prefer a processual approach which takes into account the freedom to choose and the ability to achieve, and relies on functionnings that youth have reason to value. The ability to achieve valuable functionings has somewhat been measured in the literature through indicators of factor/resources conversion, or input/output efficiency analysis *à la* Ramos and Silber (2005). We add to these methodologies that the achievement of valuable functionings works as capability indicator only if the valuable functionings have been freely chosen by individuals.

Our capabilities indicator therefore results from two indicators. The first proxies the freedom to choose with the following question: "*Would you say that you are free to decide of your life?".* We note that such a question asked in the Moroccan context may lead different individuals to understand the notion of `freedom' differently. In qualitative interviews, we therefore asked respondents how they would define the freedom to decide. For some, it was a mix between the freedom to choose and the freedom to achieve[3]. For others, and women especially, being 'free to decide your life' is a matter of choices. To describe freedom deprivation, a respondent even answers: "*There is no choice to make because there is no choice*". Another concern relates to the conditions in which questions were asked: 56% of respondents have been surveyed in presence of an external observer –parents or husband- with 25% of cases where it has potentially influenced the quality of responses. To cope with this issue, we rescale our variable as binary, equal to 1 if the respondent is very or quite free, 0 otherwise[4].

The second capability variable measures the achievements of valuable functionings. We propose to measure it with an innovative variable which matches respondents' declared life project with their actual situation. Youths were asked for their main life project and could choose between having a successful professional life, earning a lot of money/becoming rich, starting a family, being free, working for the public good/commit to a cause, or others. We compare each of the life projects with the actual achievements at the time of interview, and create a binary indicator equal to one if youth have completed their projects, zero otherwise.

Finally, we create a capability indicator which simply aggregates the freedom to choose and the achievement of valuable functionings, taking value from 0 (no capability) to 2 (free to choose and

[3] A respondent define freedom in Morocco as "the fact to do everything you want to do with no constraints", a notion which according to him goes against the "fundamentals in the notion of freedom"

[4] We believe that extreme answers (very free, or not free at all) are the most sensitive to influence by external observers.

achieved valuable functionings). The value of 1 indicates that the individual has one of the two dimensions of the capability to choose –either free to choose or achieved functionings.

The thin SWB and gender literature has pointed at correlates to explain the lack of significance of gender in life satisfaction (Posel and Casale 2015). We therefore add a set of control variables described in Table 1.

5. Results

5.1. Descriptive statistics

We now come to the main descriptive statistics of our OCEMO data. Youths in our sample are 29 years old in average, with 54% being female. 38% of the young Moroccans aged 25-35 live in urban area, and 33% hold a degree from middle school or more.

Generally speaking, female are more subject to inactivity and unemployment than male, and can be said to be excluded from the labour market, even for precarious employment which is - as much as stable employment - men's prerogative. Females hold lower degrees as well: only 24% hold a secondary degree or more, a number which almost doubles for men. It is finally worth noting that only 23% of the sampled women are single, a number which jump to 54% for men. This confirms a widespread feeling of strong marital pressure on men who struggle to find a spouse. Qualitative evidences confirm that marriage is high on young men's agenda; and is contingent on the access to employment and a stable financial situation that many fail to meet (on this issue see Assaad and Krafft 2014).

Basic descriptive statistics give a first glimpse of the gender and SWB puzzle. Young women are in average more satisfied than young men (82% of women declare themselves satisfied with their lives, against 73% of men). Despite the positive relationship between income and SWB found in the literature, women here report more worrisome financial situations than men.

If women are more satisfied with their lives than men but with a more deteriorated financial situation, how do they score in terms of capabilities?

Table 2. Main declared life project, by gender

	Men	Women	Total
A successful professional life	**72.32%**	**27.68%**	**100%**
	52.46%	16.90%	33.15%
Start a family	**28.51%**	**71.49%**	**100%**
	29.10%	61.38%	46.63%
Earn a lot of money, become rich	**53.33%**	**46.67%**	**100%**
	13.11%	9.66%	11.24%
Being free	**27.50%**	**72.50%**	**100%**
	4.51%	10.00%	7.49%
Work for the public good, commit	**50.00%**	**50.00%**	**100%**
to a cause	0.41%	0.34%	0.37%
Other	**16.67%**	**83.33%**	**100%**
	0.41%	1.72%	1.12%
Total	**45.69%**	**54.31%**	**100%***
	100%	100%	100%

*Sample size: 534

Table 3. Completion of life project, by gender

Life project:	Male/Men	Female/Women	Total
Not completed	**56.69%**	**43.31%**	**100%**
	66.26%	43.16%	53.79%
Completed	**33.61%**	**66.39%**	**100%**
	33.74%	56.84%	46.21%
Total	**46.02%**	**53.98%**	**100%***
	100%	100%	100%

*Sample size: 528

As Tables 2 and 3 show, young women's main life project is to start a family (for 63% of them), a project which does not seem the hardest to implement since 57% of them were married and/or with children at the time of the survey. Men seem to have a harder time fulfilling their own choices – which mainly cover professional success and earning money - and to a lower extent to start a family. As both qualitative and quantitative evidences suggest, access to stable employment is a difficult road, and a precondition to achieve marriage. With respect to "achievements", men therefore seem to have a harder time than women: only 34% had completed their life project at the time of the survey, against 57% of women[5].

The capability to achieve seems to result from the selection of valuable lifestyles by individuals, i.e. the freedom to make choices. Women's performance in the freedom to make choices is poorer than men: almost half of the sampled young women declare not being free, against 10% of men. We note that reports of a lack of freedom by surveyed women may have been biased by the presence of external observers during interviews.

Table 4. Freedom to choose one's life, by gender

	Male/Men	Female/Women	Total
Not free	**13.95%**	**86.05%**	**100%**
	9.76%	50.17%	31.79%
Free	**60.16%**	**39.84%**	**100%**
	90.24%	49.83%	68.21%
Total	**45.47%**	**54.53%**	**100%***
	100%	100%	100%

*Sample size: 541

5.2. Results from the quantitative analysis

Regression results show that women are more satisfied with their lives than men, even after controlling for education, living location, marital and family situation, health, social mobility trajectories, unemployment, family income or the perceived financial situation (Table 7). Table 8 shows that this greater satisfaction among women goes pairwise with greater achievements – or completion of the main life project - but a lower freedom to choose a lifestyle. Women are indeed almost twice less likely than men to feel free in choosing their lives, but also almost twice more likely to achieve their choices. As we will discuss in the next section, this seems to indicate an issue of adaptive preferences for women vs. a frustration by lack of achievements for men. Overall, women's capability levels are lower (Table 8, specification 3).

Another central results of these regressions is the coefficients of the capability indicators introduced in the satisfaction regression as explanatory variables (table 7). Overall, the aggregated capability

[5] An alternative explanation is that men's projects take longer to accomplish than women's.

indicator is positively correlated with life satisfaction, a result coherent with the literature (see section 1). Yet, if we decompose this indicator between the two different moments of the capability building process – the freedom to choose and the achievement of aspirations - we find that achievements seems to matter more for SWB – the coefficient of the freedom to choose is not significant. Yet, the results do not hold after introducing all control variables, especially the dummy for being married, suggesting an issue of collinearity – see specification (3),Table 7[6].

TABLE 7 : Logit regressions on satisfaction, odds ratio

Dependent variable: SATISFACTION	(1)	(2)	(3)	(4)
Completion of life project	1.95***		1.45	
Freedom	1.35		1.83*	
Capability indicator		1.46***		1.61**
Female	**1.56***	**1.59*****	**1.90****	**1.77****
Control variables:				
Education			1.06	1.07
Age			1.00	1.00
Married			0.67	0.65
Live with parents			0.96	0.96
Have children			2.45	2.39
Unemployment			1.01	1.04
Subjective health			1.44*	1.45*
Upward social mobility			1.90**	1.90**
Schooling of father			0.94	0.95
Subj financial situation			1.53**	1.52**
Income per conso. unit			1.00	1.00
Live in urban areas			1.17	1.19
Ethnic group : Berbers			2.27**	2.24**
Control classic Arabic			0.72	0.72
Control French language			1.96	1.91
Nb of siblings			1.08	1.08
Rank among siblings			0.92	0.92
Nb of family aid in hsld			1.17	1.10
Nb of civil servant in hsld			1.01	1.03
Nb of unemployed in hsld.			0.84	0.84
Observations	**528**	**528**	**518**	**518**

*90% confidence level ** 95% confidence level ***99% confidence level

Table 8. Logistic regression: Capabilities

Dependent variable	Freedom	Completion of life project	Capability indicator
	(1)	(2)	(3)
Completion of life project			
Freedom			

[6] Being married and having achieved the life project are highly correlated[6], as it is with a number of control variables used in the regression.

Capability indicator			
Female	**0.05*** **	**2.40*** **	**0.45*** **
Control variables:			
Education	1.21	1.19	1.23*
Age	0.97	0.97	0.98
Married	2.55*	10.91***	9.53***
Live with parents	1.21	1.14	1.21
Have children	0.34**	0.77	0.55
Unemployment	1.24	0.34**	0.50
Subjective health	1.25	0.84	1.12
Upward social mobility	0.79	1.25	0.95
Schooling of father	0.98	1.01	0.99
Subj financial situation	0.91	1.66***	1.41**
Income per conso. unit	1.00*	1.00	1.00
Live in urban areas	2.57**	0.51**	1.14
Ethnic group : Berbers	0.94	1.07	0.97
Control classic Arabic	1.85	1.62	1.85*
Control French language	0.25*	1.00	0.61
Nb of siblings	0.93	1.19**	1.11
Rank among siblings	1.01	0.84**	0.86**
Nb of family aid in hsld	0.59***	0.77*	0.65***
Nb of civil servant in hsld	2.94	0.71	1.33
Nb of unemployed in hsld.	1.15	0.95	0.95
Observations	**528**	**518**	**518**

*90% confidence level ** 95% confidence level ***99% confidence level

The results do not pretend to show causal relationships. Still, the three main conclusions that we would like to draw from these regressions is: firstly, SWB indicators are biased due to adaptive preferences - since it reflects achievement rather than the freedom to choose. Secondly, SWB is a particularly unfit measure of gender inequalities in Morocco, where social and cultural norms confine women's position in society and limit their aspirations to a few attainable choices, while men social role in a globalizing economy has generated a wide range of aspirations for young men who lack the opportunities to implement them. Finally, the positive effect of gender on satisfaction can sometimes be considered a "false positive", as it seem to result from a combination of adaptive preferences among women (see Table 1) with lack of freedom to choose leading to a high rate of achievement; and frustration among young men (see Table 1) where freedom to aspire without achievements lead to dissatisfaction.

6. Interpretation of quantitative results in light of the case study

Where SWB leads to ambiguous analyses of gender inequalities and some counterintuitive trends - woman are more satisfied than men, even if they are in a country with obviously large gender inequalities - the processual CA clearly reflects the complexity of gender inequalities in achieved valuable functionings and in the freedom of choice. This two dimensions are fundamental in the CA: achieved valuable functionings represent individual's *achievements* and freedom of choice refers to *freedom to achieve* (and thus to the 'opportunity space'). Both are needed to enhance capabilities: having a large freedom without really reaching our valuable functionings means formal but not real freedom, whereas achievement only without a freedom to choose means a lack of capabilities to aspire.

Our paper shows how gender inequalities can be reflected in each of these dimensions. In our data, women seem to be more satisfied than men, which can be explained by a greater achievement of valuable functionings, i.e. getting married and starting a family. On the other hand, they are less likely to feel free than men in choosing their lives. One can interpret this result as adaptive preferences. Indeed, a woman in deprived situation " *knew that this was how things were and would be...she didn't even waste mental energy getting upset, since these things couldn't be changed*" (Nussbaum, 2000, p. 113). The qualitative data that we have gathered illustrates this fact well.

Many women interviewed express their overall satisfaction when asked, but do not feel free to choose their lives out of the weight or pressure exercised by the family's judgments - parents and brothers - and the society. We find expressions such as: "*On the condition to inform my father and my brothers*"; "*The problem is that of the street, the society and their judgments*". Interviews also reveal how, with more or less self-awareness, women admit to an adaptation away from their first life ambitions. The case of Myriam is very eloquent. During the first part of the interview, she tells of her great satisfaction and how she has achieved her goals. A few questions later, she reports that she can be said free, although not in all choices. At the end of the interview, she confides that she is not really free because of her mother's judgment which has diverted her away from her true project:

"*I am willing to make it [this project], to begin tomorrow if needed, but my mother opposes this project, I cannot contradict her, she is my mother*"

The weight of family and society value judgments is mentioned both by women and men:

"*For women, to be and live independently, it is taking the risk of feeding the rumors on a bad behavior*" or:

"*For today's women in Morocco, it is difficult to be independent, an independent woman in our society arouses suspicions, she will be subject to rumors of the worst kind. Being a grown-up in Morocco today means having a job, but being independent means having a husband, as long as a woman is not married, she stays under the authority of her parents, whatever her age, it is my opinion*".

However, it does not mean that men have significantly higher capabilities. Qualitative and quantitative results show how the lack of capabilities affects different spaces for men and women. Although the freedom of choice or opportunity space is larger for men, it is more difficult for them to achieve their valuable functionings: they have a larger freedom, but which remains mainly formal. Interviews with men helps understand the consequences of a lack of achievements on capabilities: despite formal freedom, poor employment records and lack of status drive strong dissatisfaction among men. Men's frustration with employment is made worth by the fact that it defines marriage opportunities. To get a stable job become the first and inescapable step: "*to me, I did not even reach the first goal to aim others*". Thus, constraints in the labour market and in personal spaces add up to build a growing feeling of frustrations among men, which all initiate in lack of employment opportunities and explains their contradictory scores in satisfaction and freedom.

Our data are of course not sufficient to test such an hypothesis, but the combination of aspirations or freedom and a lack of achievement could become explosive and explain why, under the right political pre-conditions, youths from other MENA countries raised in the Arab Springs : "*The State also has to create jobs, it has the means there!"*

Thanks to its multidimensional nature, the CA therefore allows to point to a sort of "double faced inequality" for women and men: a lack of capability to aspire for the first and a lack of real opportunities to achieve for the seconds.

As concluding remark, the use of mixed method seems particularly interesting for an operationalization of the CA, and this for two reasons. First, given the difficulty to operationalize the CA empirically and the lack of sufficiently precise data, qualitative analysis allows a multidimensional dimension where rough indicators are bounded by the nature of secondary data. Qualitative data can allow a better understanding of what respondents understand behind subjective concepts such as life satisfaction, feelings of freedom, or a life project. It seem more than obvious than young Moroccans may not define freedom as their elder or youths from other countries. Men and women may also put different things behind a same word. As this section also illustrates, general assessments of freedom or satisfaction can be driven by specific aspects of life, such as access to employment for men in Morocco and its

relation to marriage. Secondly, some concepts embedded by the CA can hardly be proved with quantitative data or qualitative data alone. Adaptive preferences is a perfect example: quantitative results point to this direction but adaptive preferences remains interpretative; while in qualitative data, approaching adaptive preferences asks great skills from the interviewer and does not provide the greater picture of its significance. The case of Myriam clearly shows the difficulty to drive out adaptive preferences and the necessity to combine quantitative and qualitative methodologies.

7. Conclusion

We believe that our result can have significant consequences for the research on the link between CA and SWB; on gender and SWB; and on the operationalization of capabilities away from the traditional lists of capability dimensions. First, our study shows that the positive relationship between capabilities and SWB is far from automatic and depends on where individuals are positioned in the capabilities building process. Secondly, understanding capabilities as a process rather than an outcome helps understand how gender inequalities can be correctly or incorrectly reflected in SWB indicators. In the Moroccan case, the conjunction of women with adaptive preferences and men with frustrations through lack of achievements gives the astonishing results of a greater satisfaction among women: a result which we call a 'false positive'. Thirdly, our paper advocates for the use of mixed methods in the operationalization of capabilities, and the uses of a capability indicator which takes into account individuals subjective perceptions on what can be considered a valuable achievement, their capability to make free choices among those, and to achieve it. We believe measuring these dimensions will avoid adaptive preferences issues while reducing external value judgment or paternalistic approaches of capabilities. Our results also have implications for policy making and its evaluation. In Morocco, women primarily suffer from a deprivation in their capability to aspire, driven by social, cultural and family norms which are hard to change through top-down policies. Increasing women's capability to achieve may not necessarily increase their overall capabilities levels if the capability to aspire is not also targeted. It is also important to note that an increase in young women's freedom to choose or aspire could bring them closer to the situation of young Moroccan men, i.e. lower satisfaction levels: in a way, greater freedom to choose will mean a greater equality in capabilities, but also a decline in satisfaction. All in all, this proves that SWB indicators alone cannot serve as guides or evaluation tools in gender policies in Morocco.

REFERENCES

Anand, Paul, Graham Hunter, Ian Carter, et al.
N.d. The Development of Capability Indicators and Their Relation to Life Satisfaction Runing Title: Measurement of Human Capabilities.

Anand, Paul, Graham Hunter, and Ron Smith
2005 Capabilities and Well-Being: Evidence Based on the Sen–Nussbaum Approach to Welfare. Social Indicators Research 74(1): 9–55.

Anand, Paul, Jaya Krishnakumar, and Ngoc Bich Tran
2011 Measuring Welfare: Latent Variable Models for Happiness and Capabilities in the Presence of Unobservable Heterogeneity. Journal of Public Economics 95(3): 205–215.

Appadurai, Arjun
2004 The Capacity to Aspire: Culture and the Terms of Recognition. *In* Culture and Public Action. Stanford University Press. Standford, CA: Rao, V and Walt M.

Asadullah, M. Niaz, Saizi Xiao, and Emile Yeoh
2015 Subjective Well-Being in China, 2005–2010: The Role of Relative Income, Gender, and Location. China Economic Review.

Assaad, Ragui, and Caroline Krafft
2014 The Economics of Marriage in North Africa. WIDER Working Paper.

Assaad, Ragui, and S Zouari
2003 Estimating the Impact of Marriage and Fertility on the Female Labour Force Participation When Decisions Are Interrelated: Evidence from Urban Morocco. Topics in Middle Eastern and North African Economies 5.

Baraka, Nizar
2013 Rapport Annuel. Conseil Economique Social et Environnemental du Royaume du Maroc.

Bekhouch, Y., Ricardo Hausmann, L. D. Tyson, and Saadia Zahidi
2013 The Global Gender Gap Report 2013. *In* . Geneva Switzerland World Economic Forum 2013. http://www.popline.org/node/578350, accessed July 9, 2015.

Clark, Andrew E., and Andrew J. Oswald
1994 Unhappiness and Unemployment. The Economic Journal: 648–659.

Davis, Douglas A.
1995 Modernizing the Sexes: Changing Gender Relations in a Moroccan Town. Ethos 23(1): 69–78.

Di Tella, Rafael, and Robert MacCulloch
2005 Partisan Social Happiness. The Review of Economic Studies 72(2): 367–393.

Dolan, Paul, Tessa Peasgood, and Mathew White
2008 Do We Really Know What Makes Us Happy? A Review of the Economic Literature on the Factors Associated with Subjective Well-Being. Journal of Economic Psychology 29(1): 94–122.

Fujita, Frank, Ed Diener, and Ed Sandvik
1991 Gender Differences in Negative Affect and Well-Being: The Case for Emotional Intensity. Journal of Personality and Social Psychology 61(3): 427–434.

Graham, Carol, and Milena Nikolova
2015 Bentham or Aristotle in the Development Process? An Empirical Investigation of Capabilities and Subjective Well-Being. World Development 68: 163–179.

Humpert, Stephan
2013 Gender Differences in Life Satisfaction and Social Participation. International Journal of Economic Sciences and Applied Research(3): 123–142.

Kahneman, Daniel, and Alan B. Krueger
2006 Developments in the Measurement of Subjective Well-Being. The Journal of Economic Perspectives 20(1): 3–24.

Kingdon, Geeta Gandhi, and John Knight

2006 Subjective Well-Being Poverty vs. Income Poverty and Capabilities Poverty? The Journal of Development Studies 42(7): 1199–1224.

Kroll, Christian
2011 Different Things Make Different People Happy: Examining Social Capital and Subjective Well-Being by Gender and Parental Status. Social Indicators Research 104(1): 157–177.

Louis, Vincent V., and Shanyang Zhao
2002 Effects of Family Structure, Family SES, and Adulthood Experiences on Life Satisfaction. Journal of Family Issues 23(8): 986–1005.

Malik, Khalid, and others
2014 Human Development Report 2014. Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience. New York: United Nations Development Programme.(http://hdr. Undp. org/sites/default/files/hdr14-Report-En-1. Pdf).

Muller, Christophe, and Christophe J. Nordman
2014 Task Organization, Human Capital, and Wages in Moroccan Exporting Firms. Middle East Development Journal 6(2): 175–198.

Nussbaum, Martha
2000 Women's Capabilities and Social Justice. Journal of Human Development 1(2): 219–247.

ONDH
2013 Enquête Panel de Ménages, Synthèse Des Premiers Résultats. Observatoire National du Développement Humain.

Ootegem, Luc Van, and Elsy Verhofstadt
2014 Perceived Capabilities as an Aggregated Indicator for Well-Being. Applied Research in Quality of Life: 1–15.

Picchio, Antonella
2005 Unpaid Work and the Economy: A Gender Analysis of the Standards of Living. Routledge.

Posel, Dorrit, and Daniela Casale
2015 Differences in Subjective Well-Being within Households: An Analysis of Married and Cohabiting Couples in South Africa. African Review of Economics and Finance forthcoming.

Ramos, Xavier, and Jacques Silber
2005 On the Application of Efficiency Analysis to the Study of the Dimensions of Human Development. Review of Income and Wealth 51(2): 285–309.

Robeyns, Ingrid
2003 Sen's Capability Approach and Gender Inequality: Selecting Relevant Capabilities. Feminist Economics 9(2-3): 61–92.
2006 The Capability Approach in Practice*. Journal of Political Philosophy 14(3): 351–376.

Schwarz, Norbert, and Fritz Strack
1991 Evaluating One's Life: A Judgment Model of Subjective Well-Being. Subjective Well-Being: An Interdisciplinary Perspective 21: 27–47.

Sen, Amartya
1985 Sen, Amartya. 1985. Commodities and Capabilities. Amsterdam: North Holland. Amsterdam: North Holland.
1992 Inequality Reexamined. Oxford University Press..
2001 Development as Freedom. Oxford University Press.
2008 The Economics of Happiness and Capability. *In* Capabilities and Happiness. Oxford University Press. Oxford: Nruni, Luigino and Comim, Flavio and Pugno, Maurizio.

Serajuddin, Umar, and Paolo Verme
2015 Who Is Deprived? Who Feels Deprived? Labor Deprivation, Youth, and Gender in Morocco. Review of Income and Wealth 61(1): 140–163.

Suppa, Nicolai
2015 Capability Deprivation and Life Satisfaction. Evidence from German Panel Data. Journal of Human Development and Capabilities 16(2): 173–199.

Teschl, Miriam, and Flavio Comim
2005 Adaptive Preferences and Capabilities: Some Preliminary Conceptual Explorations. Review of Social Economy 63(2): 229–247.

Tesch-Römer, Clemens, Andreas Motel-Klingebiel, and Martin J. Tomasik
2007 Gender Differences in Subjective Well-Being: Comparing Societies with Respect to Gender Equality. Social Indicators Research 85(2): 329–349.

World Bank
2012 Kingdom of Morocco: Promoting Youth Opportunities and Participation. Report.

Zeidan, Jinan
2012 Les différentes mesures du bien-être subjectif. Revue française d'économie me XXVII(3): 35–70.