

# ***Making Women Count***

**An Annual Publication on Gender and  
Evaluation by UN Women Multi Country Office  
for India, Bhutan, Sri Lanka and Maldives**

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## About UN Women

UN Women is the UN organization dedicated to gender equality and the empowerment of women. A global champion for women and girls, UN Women was established to accelerate progress on meeting their needs worldwide.

UN Women supports UN Member States as they set global standards for achieving gender equality, and works with governments and civil society to design laws, policies, programmes and services needed to implement these standards. It stands behind women's equal participation in all aspects of life, focusing on five priority areas: increasing women's leadership and participation; ending violence against women; engaging in all aspects of peace and security processes; enhancing women's economic empowerment; and making gender equality central to national development planning and budgeting. UN Women also coordinates and promotes the UN system's work in advancing gender equality.

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The papers carry the names of the individual authors and should be cited accordingly. The findings, interpretations and conclusions expressed in the papers are entirely those of the authors and do not represent the views of UN Women or its partners.




## Foreword

UN Women is the UN Entity for Gender Equality and the Empowerment of Women created to accelerate progress on gender equality and the realization of women's rights. UN Women is a dynamic and strong champion for women and girls, providing them with a powerful voice at the global, regional and local levels. UN Women's Multi Country Office, based in New Delhi, covers Bhutan, India, Maldives, and Sri Lanka. In South Asia, UN Women specifically focuses on: strengthening women's economic security and rights; ending violence against women, including trafficking and HIV/AIDS; and promoting women's political leadership in democratic governance and peace building.

UN Women places a strong emphasis on planning, monitoring and evaluation to enhance the contribution of its programmes by establishing clear links between past, present and future initiatives and development results. Under the UN Women Evaluation Strategy 2011-2013, UN Women promotes accountability and knowledge sharing on gender responsive monitoring and evaluation. As part of the knowledge sharing and partnership activities, UN Women India MCO supported the Second Evaluation Conclave, organized in February 2013 at Kathmandu, Nepal, by providing bursaries to five evaluators/researchers who work in the field of gender and evaluations and were competitively selected, following a call for proposals. The topics of the bursary recipients represent a mix of thematic and methodological issues in the field of gender and evaluation.

The UN Women bursary recipients presented their research at the Second Evaluation Conclave on Feb 26 – March 1, 2013, in Kathmandu, Nepal. After presenting their research at the Conclave, the researchers developed articles in their areas of expertise under the theme of gender and evaluations. These research articles were peer reviewed by Shreyasi Jha, Yumiko Kanemitsu and Yamini Atmavilas.



Going forward, UN Women India MCO plans to bring out an annual publication on gender and evaluation based on submissions from practitioners/evaluators in South Asia. An objective of this publication is to bring together perspectives of evaluation practitioners/researchers who are grappling with the challenge of evaluating women's empowerment and gender equality. The publication is intended for evaluators, policy makers, development practitioners and students – indeed for all who are interested in more gender responsive evaluations. Through an annual peer reviewed publication on gender and evaluation in South Asia, UN Women hopes to contribute to a more scientific discussion and exploration of evaluating and measuring the gender impact of development programmes.

**Rebecca Reichmann Tavares, Ed.D.**

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# Measuring Gender Attitude: Using Gender-Equitable Men Scale (GEMS) in Various Socio-Cultural Settings

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## Abstract

Changing rigid gender norms to promote gender inequality is increasingly recognized as an important strategy for intervention. Population Council/Horizons and Promundo developed the Gender-Equitable Men (GEM) Scale to directly measure attitudes towards gender norms with a focus on using it in Global South settings. The scale is designed to provide information about the prevailing norms in a community as well as the effectiveness of any programme that hopes to influence them. Though the scale was developed for the young men aged 18-29 years of low income communities, it has been successfully adapted with different age groups ranging from 10 years to 59 years, including women and girls in schools and middle/high income communities in various countries. Using data from International Men and Gender Equality Survey (IMAGES), this paper describes the process of country specific adaptation and construction of the GEM scale; it also highlights its relevance as an important tool to measure gender inequity.

## 1. Background


Men and women's roles and attitude according to gender are classified as traditional and egalitarian roles. Roles attributed to women in traditional roles consist of non-egalitarian accountabilities such as being responsible

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for domestic affairs and not being active in professional life. Roles attributed to men in traditional roles consist of accountabilities such as being the head of the house and also responsible for breadwinning. Egalitarian roles, however, are equal sharing of accountabilities in family, professional, social and educational life (Akin & Demirel 2003; Basow 1992; Dokmen 2004; Kimberly & Mahaffy 2002; Lindsey 1990). Social norms and attitudes which put men in a position of sexual dominance have dire consequences for women's ability to control their own reproductive and sexual health. Social norms frequently hold that it is the male's responsibility to acquire condoms, since for a young woman to carry condoms may be seen as "promiscuous" (Childhope 1997). At the same time, the prevailing norms in many settings dictate that since reproductive and sexual health are "female" concerns, women must be the ones to suggest contraceptive use (Green 2004). Gender-based power dynamics exacerbate these issues and women often cannot negotiate condom use when they wish to do so (Amaro 1995; Pulerwitz et al. 2002).

In most South Asian societies, men mature and develop in a male dominated context, with little contact in the post-pubertal period with female peers and little or no sex education that could possibly acculturate male or female youth to sexuality and appropriate gender relations (Pelto, Verma and Joshi, 1999, Verma and Mahendra, 2004). Under these circumstances, masculinity becomes characterized by male sexual dominance, unequal gender attitudes and behaviour, frequent use of harassment or teasing of young women by men, and a lack of sexual experience and knowledge. It has been pointed out that many men would consider their masculinity compromised by having fewer sex partners and always using condoms (Green 1997). Another relevant example of men's behaviour toward women related to inequitable norms is the use of violence against women. Recent WHO reports document that in 48 population-based surveys between 10 and 69 per cent of women reported being physically assaulted by an intimate male partner at some point in their lives (WHO 2005). A study in India found that use of violent behaviours was an integral component of describing a 'real man' and manliness (Verma et al 2005).



A key part of achieving gender equality is changing the social norms that men and women internalize and that influence their practices. Survey research with men and boys in numerous settings has shown how inequitable and rigid gender norms influence men's practices on a wide range of issues, including HIV/STI prevention, contraceptive use, use of physical violence (both against women and between men), domestic chores, care giving, and health seeking behaviours (Marsiglio, 1988; Kaufman, 1993; Rivers and Aggleton, 1998; Kimmel, 2000; Barker, 2000a; Barker and Ricardo, 2005). Sample survey research using standardized attitude scales, including the GEM Scale, (Pulerwitz and Barker, 2008) has found that adult and younger men who adhere to more rigid views about masculinity (e.g., believing that men need sex more than women, that men should dominate women, that women are "responsible" for domestic tasks, among others) are more likely to report use of violence against a partner, sexually transmitted infection, previous arrests and drug or alcohol use.

Therefore, providing systematic scientific evidence regarding women and men role choices and attitudes requires the development and systematic use of reliable and valid measures of gender role attitudes. Valid and reliable measures of gender attitude allow us to draw conclusions about the degree of public support for married women with children working outside the home (McHugh & Frieze 1997). More importantly, through the development and use of gender attitude scales, researchers explore the nature, causes and consequences of gender role belief systems. Differing theoretical perspectives on the nature of gender attitudes underlie these scales, and use of the scales can help us in the acceptance, refutation, and revision of our theoretical perspectives. Gender attitude scales can be used to identify antecedents, correlates, and/or consequences of particular attitudes towards women. For example, such scales may help us in the understanding of intimate and domestic violence. Do the individuals who sexually harass women hold a distinct gender role attitude? (King & King 1997)



A number of scales have been developed and affirmed to be valid and reliable<sup>50</sup>. These scales on the whole assess the extent to which individuals agree with a specific belief system about masculinity. Similarly, other researchers have developed scales to measure sex role egalitarianism, which measure the propensity to hold views about others, independent of whether they are male or female (King, King, Carter, Surface, and Stepanski 1994). This scale addresses a number of domains, including educational roles, employment roles, parental roles, marital roles, and social roles.

The identification of appropriate gender-related measures is important for developing and evaluating interventions that aim to promote positive health outcomes by addressing the gender norms that function as barriers to health. Gender has been posited as a gateway factor to behaviours that affect health outcomes and health status. While gender norms and power dynamics between men and women have been studied in the context of HIV and gender-based violence, less is known about their role in contraceptive use and their influence on reproductive health behaviours. Many programmes have described gender equity as a programme goal but have rarely assessed how the programme interventions contributed to achieving gender equity and gender-equitable attitudes or behaviours among men (White, Greene, and Murphy 2005). It is important to measure the impact of these programmes on gender-related attitudes as well as on related risk and prevention behaviours (Pulerwitz and Barker 2008). Since the 1970s, various researchers have sought to measure masculine ideologies, defined as “beliefs about the importance of men adhering to culturally defined standards for male behaviour” (Pleck, Sonenstein, and Ku 1993).

It is also important to note that attitudes are fluid, changing over the life cycle, and in the different contexts of an individual’s life. At the same time, attitudes are both held by individuals but also constructed collectively, making their measurement even more complex. In assessing attitudes,

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50. See Thompson and Pleck 1995 for a review of these scales

it is important to acknowledge that they are approximations of what individuals or given social contexts truly believe, and as such we advocate for combining such quantitative measurement of them with qualitative assessments and research.

## 2. The Gender-Equitable Men Scale (GEMS)

Horizons and Promundo developed the Gender-Equitable Men (GEM) Scale to directly measure attitudes toward “gender-equitable” norms. The scale is designed to provide information about the prevailing norms in a community as well as the effectiveness of any programme that hopes to influence them (Pulerwitz and Barker 2008). The original GEM scale consisted of 24 statements across various domains such as gender norms, violence, sexuality, masculinities, reproductive health etc.

The GEM Scale emerges out of a social constructionist perspective of gender identity (e.g., Connell 1987, 1995; Kimmel 2000). According to this, any given cultural setting provides a version, or multiple versions, of appropriate behaviour for men and women. These gender norms, which are passed on to boys and young men by their families, peer groups, and social institutions among others, are interpreted and internalized by individual men. Individuals also “reconstruct” these norms, by in essence, putting their own “subjective spin” on the gender norms around them (Barker 2001), and as members of society, these individuals also influence the broader norms. This conceptual framework highlights that certain models of manhood or masculinity are promoted in specific cultural settings but that individual men will vary according to how much they adhere to these norms and that norms can evolve or change over time as individuals and groups reconstruct them. Furthermore, this conceptual framework also recognizes gender as based in power relations and as relational or created and reinforced through ongoing interactions between men and women (Pulerwitz and Barker 2008).



The development of the GEM Scale was grounded in formative, qualitative research on gender norms with young men in low-income settings in Rio de Janeiro (Barker 2000 and 2001). Horizons and Promundo conducted a second study with men in both low and middle-income neighbourhoods in Rio de Janeiro to test 34 items on attitudes toward gender norms (Instituto Promundo and Instituto Noos 2003). The GEM Scale is intended to (1) be multi-faceted and measure multiple domains within the construct of gender norms, with a focus on support for equitable or inequitable gender norms; (2) address programme goals related to sexual and intimate relationships, and sexual and reproductive health and disease prevention; (3) be broadly applicable yet culturally sensitive, so indicators can be applied in and compared across varied settings and be sufficiently relevant for specific cultural contexts; and (4) be easily administered so that a number of actors—including the organizations that are implementing the interventions—can take on this type of evaluation (Pulerwitz and Barker 2008).

This paper describes the process of country specific adaptation and construction of the GEM scale in six countries via the International Men and Gender Equality Survey (IMAGES);<sup>51</sup> it also highlights its relevance as an important tool to measure gender inequity.

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51. *The International Men and Gender Equality Survey (IMAGES) is a comprehensive household questionnaire on men's attitudes and practices – along with women's opinions and reports of men's practices – on a wide variety of topics related to gender equality. From 2009 to 2010, household surveys were administered to more than 8,000 men and 3,500 women ages 18 to 59 in Brazil, Chile, Croatia, India, Mexico and Rwanda. The report focuses on the initial comparative analysis of results from men's questionnaires across the six countries with women's reports on key variables. Topics included health practices, parenting, relationship dynamics, sexual behaviour and use of violence. IMAGES is a component of the Men and Gender Equality Policy Project coordinated by ICRW and Instituto Promundo.*

### 3. Method


English, Hindi, Croation, Spanish and Kinyarwanda language versions of each item were developed for these first six countries where IMAGES was carried out. All items were written in one language by a bilingual person and then tested through back-translation by a second individual Rosenthal and Rosnow (1991). The items were worded both positively and negatively (DeVellis 1991).

IMAGES followed standard procedures for carrying out representative household surveys in each participating city, with the exception of Rwanda, where the survey is a nationally representative household sample. A semi-structured interview form was prepared to use for the development of survey items that would be used to determine men's attitudes towards their gender roles. The semi-structured interview form was administered to a total of 8298 men in six countries by trained research investigators.

The men's questionnaire had approximately 250 items and took from 45 minutes to an hour to apply. The survey instruments were pretested in the participating countries and the study protocol was approved by the International Center for Research on Women's Institutional Review Board (IRB) and by in-country IRBs, where such existed.

The survey instrument was designed to be relevant for adult men in stable, cohabiting relationships as well as those not in a stable relationship; men who define themselves as heterosexual as well as men of different sexual orientations and practices; and men who have children in the household (biological or otherwise) and those who do not.

Survey locations were chosen to represent different contexts in each country to achieve a mixture of major urban areas and a secondary city or cities. Within a survey location, neighbourhood or blocks were chosen



based on population distributions from the most recent census data. Rural areas were included only in Rwanda and Croatia. Stratified random sampling and probability proportion to size (PPS) sampling methods were used within each neighbourhood or community to ensure the inclusion of adequate sample sizes by age and residence (and also socio-economic status in the case of Chile).

Although all participating countries included questions on all the themes that make up IMAGES, the questionnaire is not identical in all countries, thus data is not available from every country for every question. The questionnaire in Rwanda was the most abbreviated of the six study countries due to the much larger sample size – and thus the sheer number of interviews – required to make the study nationally representative.

As seen in Table 1, the survey was carried out in one or more urban settings in each country (and in urban and rural areas in the case of Rwanda) with men aged 18-59 (in the case of Rwanda, the range was 18-49), with the general ethical parameters exercised in such research.




**Table 1: IMAGES Data Collection Details**

<b>Data Collection Details</b>	<b>Brazil</b>	<b>Chile</b>
Sample size, men	750	1200
Age group	18-59	18-59
Location details	Maré (n=686 men, 408 women) and Vila Valquiere (n= 63 men, 40 women)	Valparaíso (n=200), Concepción (n=200), Santiago (n=800 men, 400 women)
Sample stratification strategy	Two different income groups: low income (Maré) and middle class (Vila Valquiere), household sample proportional to size of community	Stratified by place of living and socioeconomic level
In-country research partner	Promundo	CulturaSalud, EME
Methods of Interview	Paper Survey Schedule (mix of self administered and interviewer's administered)	Paper Survey Schedule (self administered)

Croatia	India	Mexico	Rwanda
1500	1534	1001	2301
18-59	18-59	18-59	18-49
Zagreb (urban), and nearby towns and villages	Delhi (n=1000 men, 300 women) and Vijayawada (n=500 men, 200 women)	Metropolitan Area of Monterrey (n=515 Men, n=171 women)  Cities of Jalapa, Veracruz (n=222 Men, n=127 women), and Queretaro, Queretaro (n=264 Men, n=83 women)	Eastern province (25%), Kigali (11%), Northern province (19%), Southern province (25%), Western province (20%)
Stratified by age and place of living (rural/urban)	Probability proportion to size, Systematic Random Sampling to select household	Primary sampling units and dwellings Age and marital status criteria (for women)	Stratified by age and location (see above)
CESI	ICRW		Rwanda Men's Resource Centre (RWAMREC)
Paper Survey Schedule (mix of self administered and interviewer's administered)	Handheld Survey Schedule (mix of self administered and interviewer's administered)	Paper Survey Schedule (mix of self administered and interviewer's administered)	Paper Survey Schedule (interviewer's administered)


Source: Barker et al 2010



The IMAGES survey also included questions addressing a number of variables that were theoretically related to gender norms, including socio-demographic status, relationship history of physical violence, and current safer sex behaviours. Questions were adapted from several sources, including the World Health Organization instruments on violence against women ([www.who.int/en](http://www.who.int/en)), the Demographic and Health Surveys developed by MACRO, Inc. ([www.measuredhs.com](http://www.measuredhs.com)), and instruments developed by the country partners in coordination with ICRW and Promundo. The topics selected for the questionnaire covered key issues in gender equality and the intimate, family and partner relationships between men and women, along with issues that represent key vulnerabilities (health and social) for men. Based on previous research findings, associations between early childhood exposure to violence and to different gendered practices, related to childrearing items on the childhood antecedents of some of men's practices, were also included.

### **Adaptation of GEM Scale in International Men and Gender Equality Survey (IMAGES)**

Though the GEM scale was developed for the young men aged 18-29 years of low income communities, it has been successfully adapted with different age groups ranging from 10 years to 59 years, including women and girls in schools (and middle/high income communities in various countries). The International Center for Research on Women (ICRW) and Instituto Promundo coordinated International Men and Gender Equality Survey (IMAGES 2010) in six countries, namely: Brazil, Chile, Croatia, Mexico, India and Rwanda. In IMAGES, to measure men's and women's gender-related attitudes, we applied the GEM Scale, a collection of attitude questions that has now been widely used in diverse settings and has consistently shown high rates of internal reliability. The scale also produced very high internal reliability in all the IMAGES study countries. The scale is not the same in all countries. Items have been added to the



scale for cultural specificity and other items that show limited variation and limited contribution to the overall scale in that setting have not been used in the final data analysis.

In IMAGES, the GEM scale was adapted to the older age group and some new country specific items were added. However, care was taken that each country should have at least 10 common GEMS items. Like the original scale, the adapted GEMS for this study are related to multiple domains; gender roles, relationship, masculinity, sexuality and violence. Country specific items were added based on the review of literature and discussion with experts in each of the countries. (Frize et al. 2003; Khalid 2004; Tougas 1995; Uji et al. 2006).

## Weights

As the first step, all the negative items were reverse coded for uniformity of weights for each response category. The table below explains the weights for each of the response categories. Each of the items had three response categories: “agree”, “somewhat agree” and “do not agree”. The least equitable response was given a score of one; two points were given to a moderate equitable response; and a score of three was given to the most equitable response.


**Table 2: GEMS items with assigned weight to the response categories**

GEMS items	Response categories and weights assigned		
	Strongly Agree	Somewhat agree	Do not agree
Woman's most important role is to take care of her home & cook	1	2	3
Men need sex more than women do	1	2	3
Men don't talk about sex, they just do it	1	2	3
There are times when a woman deserves to be beaten	1	2	3
Changing diapers, giving kids a bath & feeding kids are mother's responsibility	1	2	3
It is a woman's responsibility to avoid getting pregnant	1	2	3
A man should have the final word about decisions in his home	1	2	3
Men are always ready to have sex	1	2	3
A woman should tolerate violence in order to keep her family together	1	2	3
I would be outraged if my wife asked me to use a condom	1	2	3
A man and a woman should decide together what type of contraceptive to use	3	2	1
I would never have a gay friend	1	2	3
If someone insults me, I will defend my reputation, with force if I have to	1	2	3
To be a man, you need to be tough	1	2	3
Men should be embarrassed if unable to get an erection	1	2	3

GEMS items	Response categories and weights assigned		
	Strongly Agree	Somewhat agree	Do not agree
If a guy gets women pregnant, child is responsibility of both	3	2	1
Man/woman should know what his/her partner likes during sex	3	2	1
The participation of the father is important in raising children	3	2	1
It's important for men to have friends to talk about his problems	3	2	1
Couple should decide together if they want to have children	3	2	1

## Factor Analysis

Item analysis and factor analysis with rotation were used to test the construct validity of the GEMS. Factor analyses were conducted to clarify scale domains (Pulerwitz & Barker 2008). An oblique rotation was used in the factor analysis to permit some correlation among the factors, which, it has been argued, more accurately represents domains that are related to one underlying construct (Nunnally and Bernste in 1994). It was decided to remove factors having a load less than 0.30 from the scale after the factor analysis. Items which had negative correlation coefficient were also dropped from the analysis. The table in Appendix 2 has a complete list of items which were dropped from the analysis. Thus, the scale was constructed into its final format with 15-21 items in each country. The items' factor load values were between



0.35 and 0.79. The selection of factors was based on the eigen value<sup>52</sup> to be greater than one and factor loading on the vertical arm of the scree plot (Kaiser, 1960, Catell 1966). The scree plot is a plot in descending order of magnitude, of the eigen values of a correlation matrix. In the context of factor analysis or principal components analysis, a scree plot helps to visualize the relative importance of the factors—a sharp drop in the plot signals that subsequent factors are ignorable as the amount of information in each successive factor is less than in its predecessors (Catell 1966). The Eigen value was found to explain 42 to 54 per cent of the variance. A principal component factor analysis was carried out to create the GEM Scale. The scale was scored so that a greater number was equivalent to more support for gender-equitable norms (Pulerwitz & Barker 2008). The scale's reliability was measured with Cronbach Alpha reliability coefficient.<sup>53</sup> This scale was constructed independently for each country based on Cronbach Alpha tests of internal consistency (Barker et al 2010). Estimates of internal consistency varied in different country applications. For the Rwandan adaptation of the GEM Scale, alpha = .72 and for the Croatia adaptation, alpha=0.83 (See Table 3).

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52. *Eigen values are most commonly reported in factor analyses. The eigen value for a given factor measures the variance in all the variables which is accounted for by that factor. The ratio of eigen values is the ratio of explanatory importance of the factors with respect to the variables. If a factor has a low eigen value, then it is contributing little to the explanation of variances in the variables and may be ignored as redundant with more important factors. Eigen values measure the amount of variation in the total sample accounted for by each factor.*
53. *In the psychometrics, reliability is used to describe the overall consistency of a measure. A measure is said to have a high reliability if it produces similar results under consistent conditions. For example, measurements of people's height and weight are often extremely reliable.*

**Table 3: Description of GEM Scale Construction**

Analysis detail	India	Brazil	Croatia	Mexico	Chile	Rwanda
Number of Items for the analysis	15	21	15	15	21	15
Type of Analysis	Principal Component Factor Analysis	Principal Component Factor Analysis	Principal Component Factor Analysis	Principal Component Factor Analysis	Principal Component Factor Analysis	Principal Component Factor Analysis
Number of Items selected for creating GEMS	12	11	13	11	15	13
Min/Max	12/36	11/33	13/39	11/33	18/45	13/39
Mean (SD)	22.9 (4.7)	26.1 (5.0)	34.4 (4.2)	28.3 (4.2)	37.5 (4.9)	27.1 (5.4)
Categorization	Least Equity 12-19 Moderate Equity 20-27 High Equity 28-36	Least Equity 11-18 Moderate Equity 19-25 High Equity 26-33	Least Equity 13-23 Moderate Equity 24-31 High Equity 32-39	Least Equity 11-18 Moderate Equity 19-26 High Equity 27-33	Least Equity 18-26 Moderate Equity 27-35 High Equity 36-45	Least Equity 13-21 Moderate Equity 22-30 High Equity 31-39
Reliability test (Cronbach Alpha)	0.74	0.78	0.83	0.78	0.77	0.72

Source: Barker et al 2010



The final scales included from eleven to fifteen statements based on the country. All the statements were then summed and categorized into three scales as 'least equitable', 'moderate equitable' and 'high equitable men'. The GEM score was segregated into five domains across different countries. Table 4 presents selected GEMS items for all countries. For the ease of analysis, the GEMS response categories 'completely agree' and 'partially agreed' were merged to measure the percent of men agreed to particular items.

Table 4: Selected Gems Statement and Domains for All Countries: IMAGES

Brazil	Chile	Croatia	Mexico	India	Rwanda
<p><b>Gender Norms and Relationship</b></p> <ul style="list-style-type: none"> <li>•Woman's most important role is to take care of her home &amp; cook</li> <li>•Changing diapers, giving kids a bath &amp; feeding kids are mother's responsibility</li> <li>•A man should have the final word about decisions in his home</li> <li>•It is a woman's responsibility to avoid getting pregnant</li> <li>•A man should have the final word about decisions in his home</li> </ul>	<p><b>Gender Norms</b></p> <ul style="list-style-type: none"> <li>•Woman's most important role is to take care of her home &amp; cook food</li> <li>•Changing diapers, giving kids a bath &amp; feeding kids are mother's responsibility</li> <li>•A man should have the final word about decisions in his home</li> </ul> <p><b>Sexuality</b></p> <ul style="list-style-type: none"> <li>•Men need sex more than women do</li> <li>•Men don't talk about sex, they just do it</li> <li>•Men are always ready to have sex</li> </ul>	<p><b>Gender Norms</b></p> <ul style="list-style-type: none"> <li>•Woman's most important role is to take care of her home &amp; cook</li> <li>•Changing diapers, giving kids a bath &amp; feeding kids are mother's responsibility</li> <li>•A man should have the final word about decisions in his home</li> </ul> <p><b>Sexuality</b></p> <ul style="list-style-type: none"> <li>•Men need sex more than women do</li> <li>•Men don't talk about sex, they just do it</li> <li>•Men are always ready to have sex</li> <li>•I would never have a gay friend</li> </ul>	<p><b>Gender Norms and Relationships</b></p> <ul style="list-style-type: none"> <li>•Woman's most important role is to take care of her home &amp; cook</li> <li>•Changing diapers, giving kids a bath &amp; feeding kids are mother's responsibility</li> <li>•A man should have the final word about decisions in his home</li> </ul> <p><b>Violence</b></p> <ul style="list-style-type: none"> <li>•A woman should tolerate violence in order to keep her family together</li> <li>•There are times when a woman deserves to be beaten</li> </ul>	<p><b>Sexuality</b></p> <ul style="list-style-type: none"> <li>•Men need sex more than women do</li> <li>•Men don't talk about sex, they just do it</li> <li>•Men are always ready to have sex</li> <li>•I would be outraged if my wife asked me to use a condom</li> </ul> <p><b>Gender Norms</b></p> <ul style="list-style-type: none"> <li>•Woman's most important role is to take care of her home &amp; cook</li> </ul>	<p><b>Sexuality</b></p> <ul style="list-style-type: none"> <li>•Men need sex more than women do</li> <li>•Men don't talk about sex, they just do it</li> <li>•Men are always ready to have sex</li> <li>•I would be outraged if my wife asked me to use a condom</li> </ul> <p><b>Gender Norms</b></p> <ul style="list-style-type: none"> <li>•Woman's most important role is to take care of her home &amp; cook</li> </ul>

Brazil	Chile	Croatia	Mexico	India	Rwanda
<p><b>Violence</b></p> <ul style="list-style-type: none"> <li>• A woman should tolerate violence in order to keep her family together</li> </ul> <p><b>Sexuality</b></p> <ul style="list-style-type: none"> <li>• Men need sex more than women do</li> <li>• Men don't talk about sex, they just do it</li> <li>• Men are always ready to have sex</li> <li>• I would be outraged if my wife asked me to use a condom</li> </ul>	<p><b>Relationships</b></p> <ul style="list-style-type: none"> <li>• It is a woman's responsibility to avoid getting pregnant</li> <li>• I would be outraged if my wife asked me to use a condom</li> <li>• Either a man or a woman can suggest using a condom</li> <li>• If a guy gets women pregnant, child is responsibility of both</li> <li>• Man/woman should know what his/her partner likes during sex</li> </ul>	<p><b>Violence</b></p> <ul style="list-style-type: none"> <li>• There are times when a woman deserves to be beaten</li> <li>• A woman should tolerate violence in order to keep her family together</li> </ul> <p><b>Relationship</b></p> <ul style="list-style-type: none"> <li>• It is a woman's responsibility to avoid getting pregnant</li> <li>• I would be outraged if my wife asked me to use a condom</li> <li>• A man and a woman should decide together what type of contraceptive to use</li> </ul>	<p><b>Sexuality</b></p> <ul style="list-style-type: none"> <li>• Men need sex more than women do</li> <li>• I would never have a gay friend</li> <li>• Men don't talk about sex, they just do it</li> <li>• Men are always ready to have sex</li> </ul> <p><b>Violence</b></p> <ul style="list-style-type: none"> <li>• If someone insults me, I will defend my reputation, with force if I have to</li> </ul> <p><b>Masculinities</b></p> <ul style="list-style-type: none"> <li>• To be a man, you need to be tough</li> <li>• Men should be embarrassed if unable to get an erection</li> </ul>	<p><b>Gender Norms</b></p> <ul style="list-style-type: none"> <li>• Changing diapers, giving kids a bath &amp; feeding kids are mother's responsibility</li> <li>• It is a woman's responsibility to avoid getting pregnant</li> <li>• A man should have the final word about decisions in his home</li> </ul> <p><b>Masculinities</b></p> <ul style="list-style-type: none"> <li>• To be a man, you need to be tough</li> <li>• Men should be embarrassed if unable to get an erection</li> <li>• If someone insults me, I will defend my reputation, with force if I have to</li> </ul>	<ul style="list-style-type: none"> <li>• Changing diapers, giving kids a bath &amp; feeding kids are mother's responsibility</li> <li>• It is a woman's responsibility to avoid getting pregnant</li> <li>• A man should have the final word about decisions in his home</li> </ul> <p><b>Violence</b></p> <ul style="list-style-type: none"> <li>• There are times when a woman deserves to be beaten</li> <li>• A woman should tolerate violence in order to keep her family together</li> </ul>

Brazil	Chile	Croatia	Mexico	India	Rwanda
<p><b>Masculinity</b></p> <ul style="list-style-type: none"> <li>• To be a man, you need to be tough</li> <li>• Men should be embarrassed if unable to get an erection</li> </ul>	<p>The participation of the father is important in raising children</p> <ul style="list-style-type: none"> <li>• Couple should decide together if they want to have children</li> </ul> <p><b>Sexuality</b></p> <ul style="list-style-type: none"> <li>• I would never have a gay friend</li> <li>• It's important for men to have friends to talk about his problems</li> </ul> <p><b>Violence</b></p> <ul style="list-style-type: none"> <li>• If someone insults me, I will defend my reputation, with force if I have to</li> </ul> <p><b>Masculinities</b></p> <ul style="list-style-type: none"> <li>• To be a man, you need to be tough</li> <li>• Men should be embarrassed if unable to get an erection</li> </ul>	<p><b>Masculinities</b></p> <ul style="list-style-type: none"> <li>• To be a man, you need to be tough</li> </ul>			<p><b>Masculinities</b></p> <ul style="list-style-type: none"> <li>• If someone insults me, I will defend my reputation, with force if I have to</li> <li>• To be a man, you need to be tough</li> <li>• Men should be embarrassed if unable to get an erection</li> </ul>

## Limitations

IMAGES was carried out as a city-based, random household survey. The findings presented here are representative of individual cities where the survey was carried out and not of their countries as a whole (except in the case of Rwanda, where the data are nationally representative). Throughout this paper, the city data are aggregated in order to present overall percentages for each country, but the results presented here are, strictly speaking, only representative of their city or neighbourhood settings.

## 4. Results

In this section, we present the GEM Scale results focusing on responses to individual questions. Further, we tried to look at the men's socio-demographic and cultural background on men's response to GEMS items.

*(Table 4 See Appendix I)*

*Men showed tremendous variation in their gender-related attitudes, with India and Rwanda showing the most inequitable attitudes.*

Table 5 presents the responses to each attitude question by country. As can be seen, in terms of roles in the home, sexuality, reproductive health and gender-based violence, Rwandan and Indian men consistently showed the most inequitable norms among the countries studied. For example, for the statement "changing diapers, giving kids a bath and feeding kids are mother's responsibility," 10% of men agreed in Brazil, 46% in Chile, 20% in Croatia, 24% in Mexico, around two-thirds in Rwanda and more than 80% in India. In India and Rwanda, men also showed high acceptability of men's use of violence against women, and in both countries, a majority affirmed the belief that men need sex more than women do.

**Table 5: Percent of Men Agreeing with Gem Scale Item by Country**

GEM Scale Items by Domains	Brazil	Chile	Croatia	India	Mexico	Rwanda
	% Agree	% Agree	% Agree	% Agree	% Agree	% Agree
<b>Gender</b>						
Woman's most important role is to take care of her home & cook	53.6	54.4	35.8	--	55.6	83.1
Changing diapers, giving kids a bath & feeding kids are mother's responsibility	9.9	45.6	28.7	85.6	25.7	61.2
A man should have the final word about decisions in his home	42.7	40.0	20.3	81.0	23.8	65.9
<b>Violence</b>						
A woman should tolerate violence in order to keep her family together	4.1	--	5.8	67.5	--	53.6
There are times when a woman deserves to be beaten	--	--	12.0	64.8	--	20.5
<b>Sexuality</b>						
Men need sex more than women do	50.1	--	32.4	57.1	26.5	69.7
Men don't talk about sex, they just do it	48.6	--	25.2	58.1	30.7	57.8
Men are always ready to have sex	54.2	--	34.3	61.2	41.7	54.2
I would never have a gay friend	--	46.0	30.6	--	28.9	--
It's important for men to have male friends to talk about his problems	--	89.7		--	--	--

	Brazil	Chile	Croatia	India	Mexico	Rwanda
	% Agree	% Agree	% Agree	% Agree	% Agree	% Agree
<b>Masculinities</b>						
To be a man, you need to be tough	44.3	28.1	61.6	85.8	7.7	19.2
Men should be embarrassed if unable to get an erection	37.0	46.2		90.9	13.0	59.0
If someone insults me, I will defend my reputation, with force if I have to	--	68.8		91.7	38.0	35.0
<b>Reproductive Health</b>						
It is a woman's responsibility to avoid getting pregnant	36.2	46.5	15.5	40.2	22.0	49.4
I would be outraged if my wife asked me to use a condom	20.5	32.9	12.0	47.0	--	38.8
Either a man or a woman can suggest using a condom	--	89.8		--	--	--
If a guy gets women pregnant, child is responsibility of both		98.1		--		--
Man/woman should know what his/her partner likes during sex	--	97.1		--		--

GEM Scale Items by Domains	Brazil	Chile	Croatia	India	Mexico	Rwanda
	% Agree	% Agree	% Agree	% Agree	% Agree	% Agree
The participation of the father is important in raising children	--	97.8		--		--
Couple should decide together if they want to have children		98.2		--		--
A man and a woman should decide together what type of contraceptive to use	--	--	91.9	--	--	--

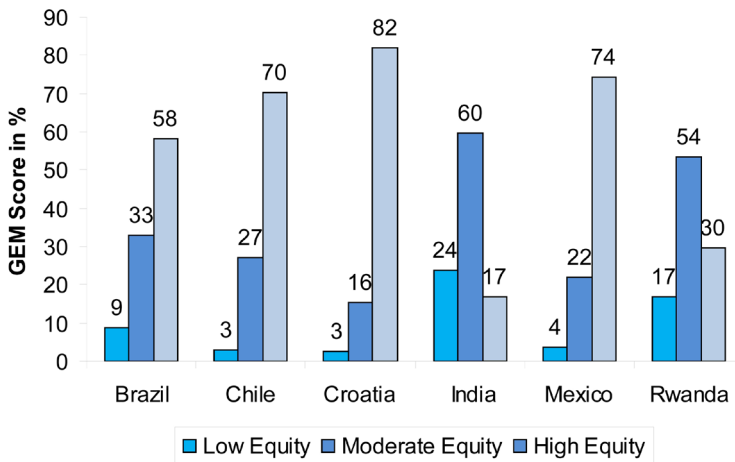
--Items not selected for GEMS in this country

Source: Barker et al 2010



Figure 1 presents the GEM Scale results by the percentage of men who were ranked high, middle or low in terms of overall acceptance of more equitable or less equitable norms. Again, these results suggest that the Latin American countries and Croatia show the most equitable norms overall.


**Figure 1: GEM Scale Category by Country**



Source: Barker et al 2010

Men with higher educational attainment, and married men had the more equitable attitudes; unmarried men had the least equitable attitudes.

In terms of factors associated with whether men were more or less equitable, unmarried men (with or without a partner) have the least equitable gender attitudes across all the countries. This finding suggests that these men are either less interesting as partners for women seeking cohabiting relationships or that men who are married may learn to “soften” or modify their attitudes as they acquire experience in cohabiting relationships with women. In addition, the finding that in



some countries, older men had more gender-equitable attitudes than men in the middle-age groupings further affirms the importance of men gaining experience in cohabiting relationships and its influence on men's attitudes. Years of living in partner relationships and the daily negotiation required may, from a developmental perspective, lead some men to become more gender equitable in their attitudes. In all the countries, men with higher educational attainment (completed primary school and at least some secondary education) had more equitable attitudes than those with less education. This suggests that secondary schools may be a space where more "rights" education takes place.

In terms of age, we see mixed trends. In some countries, younger men show more equitable views. In other countries, men over the age of 50 are more equitable than their younger counterparts, again suggesting the importance of men having experience in cohabiting relationship. (See Appendix 1, Table 4).

*Homophobic attitudes were common although varied tremendously by context.*

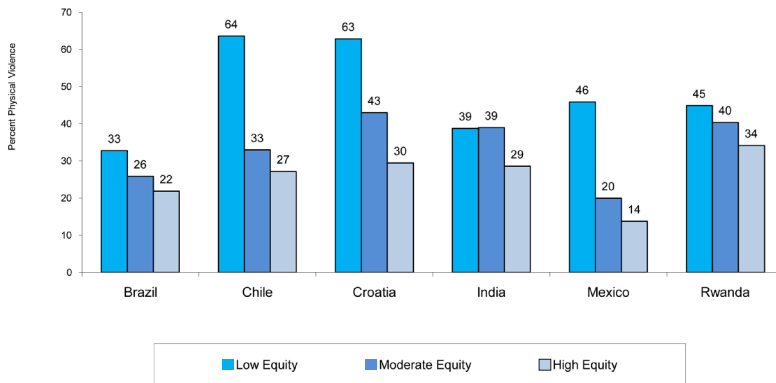
Questions about men's attitudes related to homophobia or acceptance of sexual diversity were added to the one GEM Scale question related to homophobia ("I would never have a gay friend ..."). Men who said they would never have a gay friend ranged from a low of 29 per cent of men in Mexico to a high of 46 per cent in Chile (Table 5). A slightly lower, but still high proportion of men said that being around homosexual men makes them uncomfortable, ranging from a low of 21 per cent of men in Brazil to a high of 89 per cent in India (Not mentioned in the table). Among the four countries where these questions were asked, Brazil and Chile had the least homophobic responses, while Croatia and India had more homophobic responses. Although not presented in detail here, analysis found that younger men were less likely to hold homophobic attitudes

in the cases of Brazil, Chile and Croatia (at statistically significant levels); in Brazil, Croatia and India, men with higher levels of education were less likely to hold homophobic attitudes (at statistically significant levels).

## Association of GEMS with Violent Behaviour of Men

The finding suggests that men who were more equitable also reported less physical violence. In Chile and Croatia, around two third of men who were low equitable reported physical violence towards any partner; in Mexico and Rwanda the corresponding figure was 46 and 45 per cent. Across all countries, men who least supported gender-equitable norms, were most likely to report both physical and sexual violence (See figures 1 and 2); followed by young men with a moderate level of support; and then by young men with high levels of support.

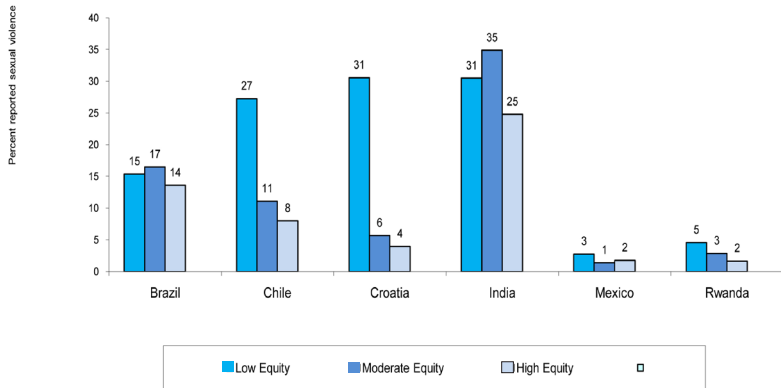
**Figure 2: Association of GEMS with Physical Violence**



$P < 0.05$ , Chi Square test (India, Chile, Croatia, Mexico and Rwanda)

Source: Barker et al 2010

**Figure 3: Association of GEMS with Sexual Violence**




$P < 0.05$ , Chi Square test (India, Chile and Croatia)

Source: Barker et al 2010

## 5. Summary and Conclusion

The findings obtained show that this scale is a valid and reliable instrument at the desired level for determining men's attitudes towards gender roles. We think that the scale developed in this study will make a significant contribution to the subject in this field. It demonstrates predictive validity and possesses good internal consistency reliability.

The findings suggest significant associations between the GEM Scale scores and violent behaviours of men and other key behaviours, which clearly demonstrates that the scale is able to measure the key construct and that measuring gender norms are important factors in reproductive and sexual health decision making. There was substantial inter-country variability in the responses of GEMS items which provides insights into possible opportunities to promote change. The adapted GEM scales in various settings are reliable and thus advocates its use in other complex settings. Further, there was substantial variability in the responses on



specific GEM scale items, and the fact that men from the same social context can report such a range of attitudes, provides insight into opportunities to promote change. In the same neighbourhoods, in the same households, in the same schools, there are some young men with more gender-equitable and other young men with less gender-equitable attitudes. In addition, variation in responses has a methodological implication and indicates that the items are successful in capturing differences and that the men do not all merely repeat agreement with commonly heard and socially accepted statements.

The scale has been used mostly in countries where the gender equality “agenda” is fairly recent and where inequitable norms are still quite prevalent. It may be that different or additional questions and items are necessary in countries with more progressive or equitable prevailing norms, or where the gender equality “agenda” has been more incorporated into national agendas, collective norms and individual realities. The GEM Scale can be a useful resource for decision makers seeking evidence that gender norms can be influenced, and that doing so makes a difference in the well-being of both women and men.

## Annexure I

Table 4: Background Characteristics by GEMS and Country

Background Characteristics	India			Brazil			Croatia			Mexico			Chile			Rwanda		
	Low	Mod.	High	Low	Mod.	High	Low	Mod.	High	Low	Mod.	High	Low	Mod.	High	Low	Mod.	High
<b>Age in 4 categories</b>																		
18-24	24.1	56.3	19.6	8.7	39.3	52.0	1.5	19.2	79.2	2.5	22.6	74.9	1.7	19.0	79.2	17.6	53.1	29.4
25-34	22.9	61.3	15.8	8.1	32.4	59.5	1.7	11.4	86.9	4.0	18.4	77.6	1.4	19.4	79.2	18.3	55.3	26.3
35-49	21.7	62.2	16.2	7.4	26.6	65.9	5.1	14.4	80.5	4.6	22.6	72.8	3.8	31.2	65.0	17.7	55.2	27.1
50+	30.7	54.7	14.6	12.2	36.5	51.4	2.6	20.1	77.3	3.4	25.3	71.2	4.8	38.9	56.3	12.2	47.8	40.0
<b>Educational level</b>																		
No formal education	42.2	50.6	7.2	23.8	38.1	38.1	--	--	--	--	50.0	50.0	--	23.5	76.5	22.6	52.0	25.4
Up to Primary (class v)	25.6	62.4	12.0	12.6	39.7	47.7	7.7	28.8	63.5	12.9	31.0	56.0	4.7	40.2	55.1	16.5	54.9	28.5
More than primary and up to senior secondary	21.8	62.3	15.9	3.8	29.2	66.9	4.0	18.2	77.8	4.9	34.3	60.8	3.5	29.3	67.1	12.6	50.2	37.2
Senior secondary + (bachelors, higher degree, technical/ vocational)	19.8	59.1	21.1	1.1	12.6	86.2	0.2	9.9	89.9	1.6	14.8	83.6	1.9	20.8	77.3	7.5	47.3	45.2

Background Characteristics	Brazil			Croatia			Mexico			Chile			Rwanda					
	Low	Mod.	High	Low	Mod.	High	Low	Mod.	High	Low	Mod.	High	Low	Mod.	High			
<b>Employment Status</b>																		
Not Working (including retired and students)	27.1	55.7	17.2	12.7	34.8	52.5	3.7	19.1	77.2	4.3	18.5	77.3	2.7	24.4	72.9	14.0	58.1	27.9
Working	22.7	60.4	16.9	7.6	32.5	59.9	2.3	14.1	83.6	3.5	22.9	73.6	2.9	28.0	69.1	16.9	53.2	29.9
<b>Marital Status</b>																		
Married or cohabiting	22.8	61.8	15.4	6.6	33.2	60.2	2.2	16.8	81.0	2.9	21.9	75.2	3.6	28.8	67.6	15.5	53.5	31.0
Single with stable or regular partner	37.3	49.3	13.4	11.5	31.0	57.5	2.0	12.8	85.2	6.9	26.7	66.4	--	--	--	18.8	55.9	25.4
Single without stable or regular partner	23.2	57.3	19.5	--	--	--	7.7	15.4	76.9	5.0	23.0	72.0	2.5	25.5	72.0	20.3	51.9	27.8

Source: Barker et al 2010

## Annexure II

### Items that were dropped from the analysis

India	Brazil	Croatia	Mexico	Chile	Rwanda
<p>I would be outraged if my wife asked me to use a condom</p> <p>I would never have a gay friend</p>	<p>A man and a woman should decide together what type of contraceptive to use</p> <p>Men need sex more than women do</p> <p>There are times when a woman deserves to be beaten</p> <p>It is a woman's responsibility to avoid getting pregnant</p> <p>A man should have the final word about decisions in his home</p> <p>A woman should tolerate violence in order to keep her family together</p>	<p>If someone insults me, I will defend my reputation, with force if I have to</p> <p>Men should be embarrassed if unable to get an erection</p>	<p>There are times when a woman deserves to be beaten</p> <p>A woman should tolerate violence in order to keep her family together</p> <p>A man and a woman should decide together what type of contraceptive to use</p> <p>I would be outraged if my wife asked me to use a condom</p>	<p>Men need sex more than women do</p> <p>Men don't talk about sex, they just do it</p> <p>There are times when a woman deserves to be beaten</p> <p>Men are always ready to have sex</p> <p>A woman should tolerate violence in order to keep her family together</p>	<p>I would be outraged if my wife asked me to use a condom</p> <p>I would never have a gay friend</p>



India	Brazil	Croatia	Mexico	Chile	Rwanda
	<p>Man/woman should know what his/her partner likes during sex</p> <p>If a guy gets women pregnant, child is responsibility of both</p> <p>I would never have a gay friend</p> <p>If someone insults me, I will defend my reputation, with force if I have to</p> <p>There are times when a woman deserves to be beaten</p>			A man and a woman should decide together what type of contraceptive to use	




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