Cultural capital and self-rated health in low income women:

A case study from Greater Beirut, Lebanon

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Abstract

Objectives: This paper examines the association between cultural capital and self-rated psychosocial health among poor, ever-married Lebanese women living in an urban context.

Methods: Self-rated general and mental health were assessed using data from a cross-sectional survey of 1869 women conducted in 2003. Associations between self-rated general and mental health status and cultural capital were obtained using χ^2 tests and odds ratios from binary logistic regression models.

Results: Cultural capital had significant associations with self-perceived general and mental health status net of the effects of social capital, SES, demographics, community and health risk factors. For example, the odds ratios for poor general and mental health associated with low cultural capital were 4.5 (CI: 2.95-6.95) and 2.9 (CI: 2.09-4.05) as compared to participants with high cultural capital, respectively. As expected, health risk factors were significantly associated with both measures of health status. However, demographic and community variables were associated with general health, but not with mental health status. The findings pertaining to social capital and measures of SES were mixed.

Conclusions: Cultural capital was a powerful and significant predictor of self perceived general and mental health among women living in poor urban communities.

Keywords: cultural capital, social capital, income, self-rated health, mental health, Lebanon.

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Introduction

The literature on inequalities in health by socio-economic status is vast and growing. Most of the available evidence concerns the impact of income inequality and poverty on various measures of health outcomes across and within countries (Blakely et al 2002; Kawachi and Kennedy 1997; Santana 2002; van Doorslaer and Gerdtham 2003). More recently, attention has shifted toward assessing the relative merit of social capital and related constructs such as social cohesion and social networks in predicting mortality and morbidity differentials net of income inequality and material deprivation (Edmondson 2003; Gilbert and Soskolne 2003; Hyyppa and Maki 2001; Kawachi 1999; Rose 2000). The precise mechanisms relating income, social capital and health outcomes remain elusive, though an emerging perspective conceives of both income and social capital inequalities as features of social hierarchies that engender various negative psycho-social and health consequences (Wilkinson 1996). For once thing, disparities in income at the societal level tend to be associated with 'disinvestments' in human capital, health services and other factors related to health. Studies in non-human primates as well as human populations have shown that inferior social position and social isolation can cause stresses that result in deleterious health effects (Berkman et al 2004; Kristenson et al 1998; Shively et al 1997).

Despite these important findings, however, little attention has been given to the role of cultural capital in the production of both social hierarchies and health outcomes. According to Bourdieu, cultural capital plays a significant role in stratifying people by creating a 'market of symbolic goods' (Bourdieu 1985). Taste, language and other forms of symbolic goods (i.e., cultural capital) are conceived of as commodities that may be used for commercial purposes and personal gain, much as other forms of material and social capital (Bourdieu 1984; Pellerin 2001). Though cultural capital may be discreetly and even subconsciously used, it can play a powerful role in securing knowledge, tastes, and sensibilities for

individuals who in turn may translate these characteristics into competitive advantage among peers for "distinction" and position within their particular social structures (Bourdieu 1984). If it is true that cultural capital has comparable qualities to other forms of capital, then it may also be true that accumulation of such capital leads to improved health outcomes.

To date, a number of studies have investigated the impact of leisure time activities and general participation in the arts on various health outcomes, including survival (Bygren 1996; Glass 1999; Konlaan and Bygren 2000; Konlaan 2002), self-rated health (Johansson 2001), and other bio-medical effects (Konlaan and Bjorby 2000). However, these studies were conducted in Western, and particularly Scandinavian, contexts to directly assess the independent effect of art stimulation on health, controlling for bio-medical factors. To our knowledge, no study has been undertaken to investigate the health effect of cultural capital conceptualized as a fundamental dimension of social status within a social epidemiological perspective, incorporating both income and social capital factors.

This study examines three interrelated questions. First, does cultural capital predict individual-level morbidity as measured by the physical and mental health of women? Second, does the association between levels of household income and morbidity weaken after control is made for cultural and social capital? Third, are the effects of income, social capital and cultural capital similar for self-rated general and mental health outcomes? These questions were examined using household survey data from a representative sample of ever married women living in impoverished communities in the metropolitan area of Beirut, the capital city of Lebanon. The data set is unique in that it includes detailed questions on cultural participation in the arts and related activities as well as a wide range of relevant demographic, socio-economic and health items.

Data and Methods

<u>Data</u>

Data were collected in 2003 by trained female interviewers from ever-married women age 15-59 years residing in three communities in Greater Beirut, Lebanon. The communities – Naba'a, Hayy el Sollom, and Burj el Barajneh refugee camp -- were chosen purposefully on practical and substantive grounds such as overall poverty conditions, lack of infrastructure, presence of rural immigrants or displaced populations, ease of sampling and household listing, and proximity to Beirut proper. Although the three communities share common socio-economic features such as economic hardship and low income, they differ in their ethnic and religious make up. For example, while Nabaa and Hey el Sollom house a predominantly Lebanese population, Burj el Barajneh consists of mostly Palestinian refugees. Also, Nabaa is 80% Christian, while nearly all the inhabitants of the Hey el Sollom and Burj el Baranjeh communities are Muslim.   Of the three communities, Burj el Barajneh is the most disadvantaged in terms of income and other dimensions of living conditions, since Palestinian refugees are a 'socially excluded' group in Lebanon, with no official access to public services or the formal labor market.

A representative sample of 1869 women was selected after stratification by community. The data were collected in two stages. First, 2797 households were selected from a detailed sampling frame constructed specifically for this study, and successfully interviewed in the spring of 2002. At this stage, all household level data (e.g., income) were collected by face-to-face interviews with a proxy respondent. Second, all ever married women aged 15-59 years at the time of the survey were selected from all the sampled households and interviewed in 2003 to obtain subjective and women-specific data from respondents directly. In each stage, a separate instrument was used. All the data used here except household income were obtained from the individual ever-married women

questionnaire. The overall response rates were 88.3% and 77.8% for the household and women questionnaires, respectively.

<u>Measures</u>

Two dependent variables of psychosocial health were used in this study: self-perceived general health and mental health. Self-perceived health was measured by a direct, and widely used, question on self-rated health: "Would you say that in general your health is very good, good, fair, bad, or very bad?". This item was coded into a binary measure (1=very bad or bad; 0=very good, good, or fair). Mental health was assessed in this study by the GHQ 12-items screening instrument (El-Rufaie 1996). The items were dichotomized (1=yes, 0=no) and summed yielding a scale ranging from 0 to 12. A score of 4 or greater was used to indicate poor mental health (Goldberg 1988).

Our main independent variable was an index of cultural capital. Given the multidimensionality of this concept, we used several indicators to tap it. The instruments included thirteen questions about participation in cultural activities including reading (books, poetry, plays or newspapers), watching television (drama or comedy, dance, cultural or news programs), playing a musical instrument, participating in a musical, play or dance, attending the movies, an exhibit, or a public speech, making crafts (e.g. sculpture, painting), or volunteering for a cultural organization. There were 9 dichotomous questions in which 1 point was given for participation and 0 points for no participation. In the case of television watching, respondents were given 2, 1, and 0 points for watching always, sometimes, or never, respectively. A simple index was then calculated by summing all thirteen scores, and individuals were then categorized as having high cultural capital (n=301), medium cultural capital (n=1197), or low cultural capital (n=371). Measured this way, cultural capital index indicates the extent of participation in recreational activities and in the arts.

Two conventional indicators measured social capital: membership in a club or association (yes/no) and whether the woman reported having received help from others over the past month (yes/no). Demographic and socio-economic status control variables included age (15-29, 30-44, 45-59), marital status (currently vs. previously married), education completed (none, elementary, intermediate), and levels of household income (in quartiles) adjusted for household size using the OECD equivalent scale (Buhmann 1988). In addition, three health-related risk factors were used: suffering from chronic health problems (yes/no), reporting of health problems within the past two months (yes/no) and current smoking status (yes/no). Finally, the model included a control for the particular social context impacting health, indexed by community.

Analysis

Stata 8.0 for MS Windows was used in the analysis, with a minimum level of statistical significance set at 0.05. Univariate descriptive statistics for the variables included in our sample were first calculated followed by bivariate analysis using χ^2 tests to examine the association between morbidity and all the independent variables. Unadjusted odds ratios and associated 95% confidence levels were calculated from binomial logistic regressions for the associations between health status and each independent variable. We then used binomial logistic regression models to assess the associations between morbidity and cultural capital controlling for social capital, SES and other relevant demographic and health-risk factors.

Findings

Table 1 presents the characteristics of the sample and the percentages of women reporting poor general health and poor mental health. The majority (64%) of the sampled women had a medium level of cultural capital, with the rest divided between low (16.6%) and high (19.9%) levels of cultural capital. Social capital was generally low among this group of women, with

only about 5.6% belonging to a group and approximately 22.6% engaged in social support with others. The women were generally poor with 27% reporting a total yearly income of 800,000 LL (US $ 517) per equivalent adult. The majority (67.8 %) of women completed elementary (6 years of schooling) education, 19.9% completed intermediate education, and 12.4% had less than 6 years of schooling. Over half (51%) of the women had health problems in the past two months, 31% had a chronic health problem, and 41% reported smoking cigarettes or *argyle* (water pipe) regularly. Half of the women were in their prime reproductive age 30-44, and the rest were divided equally between 15-29 and 45-59 age groups. The vast majority (90.5%) of women were married. Hey el Sollom had a smaller proportion (27.6%) of women compared to either Nabaa (36.2%) or Burj camp(36.2%) .

Overall, 23.9% of women reported their general health as being poor, with essentially no differences between the more economically disadvantaged communities of Hey el Sollom and Burj camp. On the other hand, mental health was more prevalent (39.9%) than general health, and a community gradient was apparent with the camp women having an overall higher (45.6%) percentage of poor mental health than Nabaa (35.6%) or Hey el- Sollom (38.0%). Cultural capital, group membership and social support were negatively associated with both poor general and mental health. Measure of SES, income and education were associated with psychosocial health, but the income gradient was not evident for general health in this population. Presence of a chronic health problem, health problems in the past two months, smoking, age, and marital status were all significantly associated with poor general and mental health.

All unadjusted odds ratios for independent variables using binary logistic regression models for poor general and mental health (Table 2) indicate modest associations with cultural capital. Women with low cultural capital were 4.5 (CI: 2.95-6.95) times more likely to report poor general health, and 2.9 (CI: 2.09-4.05) times more likely to report poor mental

health, compared to women with high cultural capital. Multiple logistic regression models were carried out to uncover the relative effects of cultural capital after adjusting for relevant demographic, SES and health risk factors. Results from the two models in Table 2 showed that low cultural capital was significantly associated with women's poor general health (OR = 2.77, CI: 1.71-4.47) and poor mental health (OR=2.39, CI: 1.67-3.43) after adjusting for all other covariates.

Poor general health status was also associated with social support (OR=1.43, CI: 1.04 - 1.97), chronic health problems (OR=2.26, CI: 1.72 - 2.96), health problems in the last two months (OR=5.13, CI: 3.86 - 6.83), smoking (OR: 1.45, CI: (1.13 -1.88), older age (for 30-44: OR = 1.48, CI:1.04 - 2.11; for 45-59 OR= 2.66 (1.76 to 4.03), and community (for Hey Sollom OR=2.05, CI: 1.46 - 2.88; for Burj camp OR=1.58, CI: 1.13 - 2.20). There were no significant associations between women's poor health and their group membership, SES variables, and marital status in this context.

The patterns of association between risk factors and mental health varied slightly from that of general health for this group of women. As shown in Table 2, poor mental health status was significantly and consistently associated with low income (for 801-1500 LL OR=1.35, CI: 1.00- 1.83; for <800 LL OR=1.78, CI: 1.29 - 2.45), chronic health problems (OR=1.41, CI: 1.13 - 1.77), health problems in last two months (OR =1.82, CI: 1.48 - 2.24), smoking (OR=1.38, CI: 1.12-1.69), and no education (OR=1.66, CI:1.13- 2.46). Social capital variables, age, marital status, and community had no significant associations with poor mental health; nor did 'medium' levels of income or education.

Discussion

This study reports on the association between cultural participation and self-rated general and mental health among poor ever-married women in Beirut. To our knowledge, it is the first study of cultural capital and health in the Middle East and the first of its kind to focus on women in poor urban environments specifically.

The findings of this study show marked associations between self-rated general as well as mental health outcomes and cultural involvement among this group of women. This was the case even after adjusting for income disparity and commonly used social capital indicators such as group membership and social support. This observation should be underscored because it indicates a possible independent or otherwise additive effect of cultural activities on health even after taking into account engagement in other social activities. Our findings confirm previous research done in this area that also found independent effects of cultural participation on health even when taking SES and social networks into consideration (Bygren 1996; Glass 1999; Johansson 2001; Konlaan and Bygren 2000; Konlaan and Bjorby 2000; Konlaan 2002).

A range of mechanisms may be attributed to this association that involve the possibility of certain intermediary emotive states during culturally-oriented activities (Rider 1990; Schimmack et al 2000; Stewart-Brown 1998; Watkins 1995), neuroimmunological explanations of brain signals that trigger or significantly alter critical hormone levels (Ader et al 1995; Harbuz et al 1997; Mater et al 1998), or other positive psychosomatic responses to the experience of cultural immersion (Nuetzel 1995; Pert et al 1998). Although research in this area is nascent, a growing body of literature is confirming the healing potential of creative, arousing, emotionally or intellectually engaging activities (Bojner-Horwitz et al 2003; Spencer 1997; Wickstrom et al 1993). It may be that cultural events produce a more stimulating environment for individuals than social activities alone. This in turn may have great benefits to a person's psychological and physiological well-being.

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Cultural capital could also be conceived of as a main dimension of social stratification, much like income, in that it produces and reproduces material security and hence social hierarchies (Bourdieu 1984). Cultural capital, much like economic and social capital, is fungible (Bourdieu 1986), and some can invest in symbolic and cultural goods (including language and artistic taste) for maintaining and accumulating economic gains. In other words, cultural capital is an important feature of socioeconomic status. Wilkinson (1997) argued that equality and better health are associated because the former leads to improvement in social cohesion, security and high self-esteem. Experimental evidence shows that social hierarchy can be associated with chronic stress, aggression, and coronary artery atherosclerosis (Shiveley and Clarkson 1994).

Although our study is primarily a health survey, it includes a wide range of income, social capital and cultural capital items on relatively disadvantaged women, and this is perhaps its main strength. Still however, our study has several limitations. First, cultural capital is a complex concept that encompasses many dimensions (Bourdieu 1996; Jepperson and Swidler 1994; Marsden and Swingle 1994). Although the instrument included a detailed set of cultural activities (of consumption and production types), prevalence was generally low along virtually all of the activities preventing us from undertaking any detailed analysis. The cultural items in our study covered a wide scope from participation in intellectual endeavors such as reading or attending a speech to creative endeavors such as dancing and making art, to passive endeavors such as watching cultural programs on television. Due to sample size considerations, we constructed an index to measure total involvement in cultural activities in our population.

Further research is needed to analyze the association between specific types of cultural activities and health status. For example, passive participation in the arts (e.g., attending the theatre) may vary from active participation (e.g. dancing). Also, creative involvement may

differ from intellectual engagement. Specific types of cultural activities may also evoke explicit psychological or physiological responses, impacting health to varying degrees and perhaps even in qualitatively different ways. Furthermore, the index was weighed slightly more heavily in the category of watching various cultural television programs, since these questions were based on a point system that allotted up to 2 points for always watching and 0 points for never watching a program. All other questions were based on dichotomous answers (1 for participation and 0 otherwise). Moreover, the time reference for the participation in the various activities varied somewhat. While questions on watching television programs covered the month preceding the survey date, all other activities were asked for the past year owing to their low 'prevalence'.

Another main limitation of our study is the cross-sectional design of the survey, restricting our ability to make causal inferences regarding the impact of cultural participation on health outcomes. Thus, we can only claim significant associations between participation in cultural activities and psychosocial health status in our population. Although the study included controls for health risk factors (smoking, chronic disease and health utilization), the direction of causality in this study design remains difficult to establish. Furthermore, there are many other risk factors for self-reported health, but we included only three of them: current smoking, chronic disease, and having reported health problems in the last 2 months. Other possible confounders such as body mass index and nutritional diet could have been included but were not available in our survey.

Finally, the study took place in three underserved urban communities in greater Beirut with specific socioeconomic and demographic characteristics, and hence the findings may not be generalized to the population of women in Lebanon or elsewhere. The findings may however be of relevance to women living in similar urban contexts.

CONCLUSION

To the best of our knowledge, this is the first study investigating the association between cultural capital and morbidity in women living in impoverished urban places. Further in-depth research is needed to better understand the general context and pathways by which cultural capital may impact physical and mental health in other settings and population groups. Interventions involving cultural programs may provide highly cost-efficient preventive care to citizens in disadvantaged communities.

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Table 1. Characteristics of survey sample, ever married women aged 15-59, Urban Health Study, 2003

	N (%)	% Reporting poor general health status	% Reporting poor mental health status
Cultural capital			
High	301 (16.1)	11.3	26.9
Medium	1197 (64.0)	22.9	39.8
Low	371 (19.9)	37.5	50.7
Group membership			
Yes	105 (5.6)	16.2	35.2
No	1757 (94.4)	24.5	39.9
Social support			
Yes	421 (22.6)	18.8	37.8
No	1141 (77.4)	25.5	40.2
Income, LL (x 100)			
>2400	399 (21.4)	19.1	30.8
1501-2400	437 (23.4)	17.6	36.2
801-1500	528 (28.3)	26.3	40.5
<=800	505 (27.0)	30.7	49.5
Chronic health problem			
Yes	599 (32.2)	43.2	50.8
No	1267 (68.8)	14.8	34.8
Health problem past 2 months			
Yes	953 (51.0)	38.5	48.8
No	916 (49.0)	8.7	30.6
Smoking			
Yes	761 (40.9)	27.7	44.4
No	1102 (59.1)	21.4	36.4
Education			
Intermediate +	370 (19.8)	13.8	32.7
Elementary	1267 (67.8)	23.4	39.2
None	232 (12.4)	43.1	55.2
Age			
15-29 yrs	466 (24.9)	12.9	34.1
30-44 yrs	941 (50.4)	20.8	38.6
45-59 yrs	462 (24.7)	41.3	48.3
Marital status			
Married	1691 (90.5)	22.5	38.7
Divorced/separated/widowed	178 (9.5)	37.1	51.1
Community			
Naba'a	677 (36.2)	17.3	35.6
Hay Sellom	516 (27.6)	27.9	38.0
Burj el-Barajneh	676 (36.2)	27.5	45.6

Table 2. Unadjusted and adjusted odds ratios for individual morbidity (general and mental health), Urban Health Study, 2003

Independent Variables	General Health Status Odds Ratios (95% CI)		p-value	Mental Health Status Odds Ratios (95% CI)		p-value
	Unadjusted	Adjusted		Unadjusted	Adjusted	
Cultural capital						
High	1.00	1.00		1.00	1.00	
Medium	2.26 (1.54 to 3.33)	1.69 (1.10 to 2.58)	.016	1.85 (1.39 to 2.45)	1.73 (1.27 to 2.36)	.001
Low	4.50 (2.95 to 6.85)	2.77 (1.71 to 4.47)	.000	2.91 (2.09 to 4.05)	2.39 (1.67 to 3.43)	.000
Social capital						
Group membership	1.65 (0.96 to 2.81)	1.08 (0.60 to 1.94)	.790	1.12 (0.74 to 1.70)	0.88 (0.57 to 1.35)	.550
Social support	1.45 (1.10 to 1.92)	1.43 (1.04 to 1.97)	.029	1.09 (0.87 to 1.36)	0.96 (0.76 to 1.23)	.762
Income, LL (000)						
>2400	1.00	1.00		1.00	1.00	
1501-2400	0.94 (0.66 to 1.33)	0.81 (0.54 to 1.22)	.302	1.28 (0.95 to 1.71)	1.18 (0.86 to 1.61)	.305
801-1500	1.58 (1.15 to 2.17)	1.24 (0.84 to 1.84)	.272	1.58 (1.20 to 2.09)	1.35 (1.00 to 1.83)	.048
<=800	1.94 (1.42 to 2.67)	1.48 (0.98 to 2.23)	.060	2.19 (1.66 to 2.90)	1.78 (1.29 to 2.45)	.000
Chronic health problem						
No	1.00	1.00		1.00	1.00	
Yes	4.40 (3.50 to 5.52)	2.26 (1.72 to 2.96)	.000	1.98 (1.62 to 2.42)	1.41 (1.13 to 1.77)	.003
Health problem past 2 months						
No	1.00	1.00		1.00	1.00	
Yes	6.67 (5.10 to 8.73)	5.13 (3.86 to 6.83)	.000	2.11 (1.74 to 2.56)	1.82 (1.48 to 2.24)	.000
Smoking						
No	1.00	1.00		1.00	1.00	
Yes	1.41 (1.13 to 1.75)	1.45 (1.13 to 1.88)	.004	1.42 (1.17 to 1.71)	1.38 (1.12 to 1.69)	.002
Education						
Intermediate +	1.00	1.00		1.00	1.00	
Elementary	1.98 (1.43 to 2.75)	1.39 (0.96 to 2.00)	.081	1.32 (1.04 to 1.70)	1.10 (0.84 to 1.43)	.500
None	5.01 (3.36 to 7.48)	1.60 (0.97 to 2.63)	.066	2.63 (1.86 to 3.70)	1.66 (1.13 to 2.46)	.011
Age						
15-29 yrs	1.00	1.00		1.00	1.00	
30-44 yrs	1.82 (1.32 to 2.51)	1.48 (1.04 to 2.11)	.032	1.23 (0.97 to 1.56)	1.01 (0.78 to 1.31)	.937
45-59 yrs	5.07 (3.63 to 7.09)	2.66 (1.76 to 4.03)	.000	1.85 (1.42 to 2.43)	1.09 (.0.79 to 1.51)	.593
Marital status						
Married	1.00	1.00		1.00	1.00	
Separated/divorced/widowed	2.03 (1.46 to 2.82)	1.10 (0.74 to 1.62)	.643	1.68 (1.22 to 2.29)	1.25 (0.89 to 1.75)	.198
Community						
Naba'a	1.00	1.00		1.00	1.00	
Hay Sellom	1.82 (1.37 to 2.40)	2.05 (1.46 to 2.88)	.000	1.10 (0.87 to 1.40)	0.96 (0.73 to 1.25)	.749
Burj el Barajneh	1.80 (1.38 to 2.33)	1.58 (1.13 to 2.20)	.008	1.53 (1.22 to 1.90)	1.19 (0.92 to 1.55)	.192