

Satisficing and structured individuation: A study of women workers in Calcutta's IT sector

Dutta, Mousumi and Husain, Zakir

Presidency College, Kolkata, Institute of Economic Growth, Delhi

 $18~{\rm January}~2010$

Online at https://mpra.ub.uni-muenchen.de/20899/MPRA Paper No. 20899, posted 23 Feb 2010 06:13 UTC

Satisficing and structured individuation:

A study of women workers in Calcutta's IT sector

Mousumi Dutta

Associate Professor, Presidency College, Kolkata (Res) 74 Topsia Road South, Flat 3B, Tower I, Kolkata 700046, INDIA.

Tel: (9133) 22852261

dmousumi@hotmail.com

Zakir Husain

Associate Professor, Institute of Economic Growth
University Enclave, Delhi University (North Campus), Delhi 110 007, INDIA.

Tel: (9111) 2766 7101/7288 (Ext 238) **Mobile**: 9582553984

Fax: (9111) 27667410 dzhusain@gmail.com

Corresponding Author

Zakir Husain

Associate Professor, Institute of Economic Growth
University Enclave, Delhi University (North Campus), Delhi 110 007, INDIA.

Email: dzhusain@gmail.com.

Tel: (9111) 2766 7101/7288 (Ext 238) **Mobile**: 9582553984

Fax: (9111) 27667410

ACKNOWLEDGEMENTS

The survey was part of the Rosa Luxemburg Foundation-Institute of Development Studies Kolkata project, 'Women, Work and Education'. We are grateful to Achin Chakraborty (IDSK), Uttam Bhattacharya (IDSK) and Vinoj Abraham (CDS) for their suggestions.

Satisficing and structured individuation:

A study of women workers in Calcutta's IT sector

ABSTRACT

It was initially believed that the rapid growth of the Information Technology (IT) industry in India would generate less exploitative avenues of employment for women. Further, economic empowerment would strengthen the bargaining power of women within the household and improve her self-esteem. However, recent studies argue that the IT sector has been unable to isolate itself from the social context, so that the organizational process continues to be shaped by the conflicting and asymmetrical gender relationships that prevail in Indian society. This leads to the imposition of a dual burden (of work and home commitments) on working women.

Based on a survey of women workers in Calcutta's IT sector, this paper agues that contextual developments have weakened the patriarchal foundations of the family. This has allowed women workers to break out of a passive mould and attempt to carve out their individual destinies. However, organizational constraints and the family structure impose structural constraints on their agency, so that women workers have to adapt their aspirations to contextual realities. Decision-making of working women may, in this emerging situation, be conceptualized in terms of Simon's satisficing model.

Key Words: Women's agency, Gender, Information Technology, Calcutta, Satisficing.

INTRODUCTION

The integration of the Indian economy with the global economic system from the 1990s created substantial employment opportunities at the high ends of the formal sector. The Information Technology (IT) sector was one of the fastest growing of these sectors. Its share in India's GDP increased from 1.2 percent in 1997-98 to 5.2 percent in 2006-2007. The IT & ITES sector also constitutes the largest organized private sector employer in the country, employing about 12 percent of the workforce in the organized private sector (NASSCOM and Deloitte, 2008).

Given the need to fill the newly created posts, gender discrimination became a luxury that few IT & ITES companies could afford. The entry of women has increased rapidly in recent years – a MERCER-NASSCOM study found that in 2007-2008 alone employment of women increased by 60%, so that by the end of 2008 there were 6.7 million women working in the sector.¹

It was initially believed that the rapid growth of the IT sector would generate less exploitative avenues of employment for women. Further, economic empowerment would strengthen the bargaining power of women within the household and improve their status. Clark and Sekher (2007) argues that growth of the IT sector has led to a partial reversal of the tendency to devalue a daughter within Indian families. Shanker (2008) notes a tendency for social relations to become more gender neutral within and outside the workplace.

However, the majority of studies argue that the IT sector – for all the branding of IT companies as a "global workplace" - has been unable to isolate itself from the social backdrop. As a result, relationships at work in this sector continue to be shaped by the conflicting and asymmetrical gender relationships that prevail in Indian society, so that women remain downtrodden and lack freedom of choice (Mitter and Rowbotham, 1995).

This paper takes a more positive stance. We argue that in the post globalised world, decisions are increasingly becoming individualized, though influenced by the situational and historical context. In particular, patriarchal foundations of the Indian family are weakening, enabling women workers to break out of a passive mould and trying to carve out their own destiny.

The paper is structured as follows: We start with a review of the literature on status of women workers in India's IT sector. This is followed by an attempt to create a conceptual framework. After reviewing sociological theories of the increasingly individuation of agents in the late twentieth century, we try to integrate such theories into an economic framework. We then present findings from a survey of women workers in Calcutta's IT sector in support of this framework.

GENDER, ORGANIZATION AND THE FAMILY

Although there is a considerable body of literature arguing that employment and economic independence empowers women, this proposition is also refuted in many empirical studies. Researchers studying the status of women workers in India's IT sector

(viz. Mitter and Rowbotham, 1995, COD, 2004, Upadhyay, 2005) may be said to belong to the second category.

Women Workers within the Family

To understand the basis of their arguments it is necessary to look at the reasons for entry of women workers into the labor market. The deterioration in standard of living after the Second World War, caused by hyper-inflation, had led to women from middle and low income families being allowed to join the labor force by the men within the family. Since the objective was to simply use women to augment family income, women were not freed from household responsibilities, or from adhering to the social norm of providing care services. They worked in fixed hours jobs, sacrificing their leisure hours to undertake domestic responsibilities.

This situation may be described in terms of the Game of Chicken (Folbre and Weiskopf, 1998), illustrated in Fig. 1a.

Insert Fig. 1a: Household Chores as a Game of Chicken

A husband and wife return home from work, and find that they have to cook and wash the dishes. They can share the tasks, or one spouse can do the work alone. In the latter case, the person who has to do the work becomes even more tired, while the other person relaxes and gets a higher pay-off. There is another possibility – neither does the tasks, so that they both go to bed hungry. It can be seen that the game is characterized by multiple Nash equilibria – represented by the North-east and South-west cells. However, the

equilibria are unstable as the person who has to do the household chores has the incentive to defect.

The crux of the situation is that gender stereotyping of the wife as care provider in a patriarchal society encourages the husband to relax, and imposes a social obligation on the wife to provide the services. The pay-offs to the wife gets modified – under patriarchy, she gains an additional pay-off of (say) θ for adherence to social norms by doing the household chores herself. It can be seen that if θ is greater than 2, in this case, the equilibrium in the North-east cell represents a stable Nash equilibrium. The presence of patriarchal relations, therefore, modifies the pay-offs in the Game of Chicken to Fig. 1b, and results in the wife doing the household chores and the husband taking rest.

Insert Fig. 1b: Household Chores as a Game of Chicken under Patriarchy

Studies show that sharing of household tasks is rarely practiced even in nuclear families (COD, 2004, Upadhyay, 2005). By and large, however, gender stereotyping of household roles persists. Women accepted the practice of husbands being responsible for "outside the house" tasks related to financial matters, while they looked after household chores despite their late nights.

Gender Relations at Work

The picture is more complex within the organization. Kelkar and Nathan (2002) and Upadhya (2007) argue that firms are reluctant to recruit married women with children. Apart from this there does not seem to be any other discrimination against women in the hiring process. Rather, companies like IBM, Microsoft and NIIT have been known to set

targets for recruiting women. These companies also offer incentives to recruitment consultancies fulfilling such targets (NASSCOM & Deloitte, 2008). It is with regards to organizational process and career advancement that a gender difference emerges.

Studies (Kelkar and Nathan, 2002) have found a glass ceiling restricting the career growth of women employees. In an extreme form it may even result in clustering of women in low level areas with lower levels of pay and with limited opportunities for growth (Rothboeck et al, 2001, COD, 2004, Upadhya, 2007). There are several reasons for this:

- (a) The core work hours of IT companies correspond to the office time of their (off shore) clients. Coupled with the individualisation of work² and the need to meet over-ambitious project deadlines (Upadhya, 2007), this typically results in long hours of about 14 hours per day. In many cases, work continues over night. This is a major problem for women workers because of social disapproval, objection from families, domestic responsibilities and security-related issues involved in returning late at night (Upadhya, 2006, Mitter, 1995). As a result, women workers typically work shorter hours than men (Rothboeck et al, 2001).
- (b) Women workers are often reluctant to accept on-site (particularly off-shore) assignments and travel abroad (Ramsay and McCorduck, 2005). An all-India survey found that 63 percent of women workers did not accept off-shore assignments (COD, 2004).
- (c) Women have limited access to the informal knowledge networks important for upward mobility (Upadhya, 2007). This is not only because women workers have

- to return home early, but also owing to men workers feeling uneasy socially interacting with their women colleagues (COD, 2004).
- (d) Pregnancy and the responsibility of child caring impose major limitations on the career growth of women workers, particularly as they are rated even during this leave period. This leads to many women workers postponing marriage and having children. A significant proportion of women workers also leave, being unable to bear the pressure (COD, 2004, Upadhya, 2007).

Sexual Harassment

The late nights also expose women workers to the risk of sexual harassment. While the media has highlighted the brutal rape and murder of women employees by drivers, such incidents are rare. What occurs more frequently is objectionable behavior by colleagues. In our study, almost a third of women workers complained that some of their accompanying colleague behaved objectionably. Six workers reported instances of sexual harassment within the office. In keeping with general trends, most of the women workers preferred not to report instances of objectionable behavior. Unfortunately, even when such behavior was reported, action is at most restricted to transfer to another department. In many cases, particularly if the accused worker has a good relation with clients, companies prefer not to take any action. At the same time, it should be noted that there is no evidence to suggest that the incidence of sexual harassment is higher in the IT sector than in other sectors.

"GRATEFUL SLAVES", OR CONSTRAINED OPTIMIZERS

While the studies of women employees in the IT sector have certainly raised pertinent questions, their approach is limited in the sense that they view women as "grateful slaves", passively accepting the bounds imposed by their families, society and the organizational structure shaping their work environment. This approach overlooks the deliberate nature of career planning by women and the large proportion of women who want to remain in the sector till retirement. For instance, we found that only 23 percent of respondents wanted to leave the sector before retirement. Further, the major reasons for wanting to leave was not related to gender discrimination, but to career platteauing (in 22 percent cases) and monotony of work (20 percent).

The paper argues that "It is time to abandon the concept of women so totally formed and constrained by past patterns of economic activity and sex role stereo-typing that they are unable to shape their own lives to any meaningful degree" (Hakim, 1991: 114). In this section, we start by examining theories of the interaction of agency with social structure. An important theory in this context is Hakim's theory of life patterns of women. The survey of such sociological studies is followed by integrating them within an economic framework based upon Simon's satisficing approach.

Theories of Social Constraints and Agency of Women

In the 1990s Cynthia Hakim let the cat among the feminist pigeons by arguing that:

"We must stop presenting women as 'victims', or as undifferentiated mass of mindless zombies whose every move is determined by other actors and social forces ... Women are responsible adults, who make real choices and are the real

authors and agents of their own lives. Some women choose to be home-centered, with work as a secondary activity. Some women choose to be career-centred, with domestic activities a secondary consideration" (Hakim, 1996a: 186).

Based upon observed polarization of women's employment between full-time and part-time employment, Hakim (1991, 1995, 1996a, 1996b) claimed that there are basically two kinds of women distinguished by their orientation towards work. One group has a long term commitment towards the family, while the commitment of the other group is towards her career – with an intermediary group drifting between the two, and wanting both.³ The former group comprises primarily home-makers and nurturers, holding part-time jobs that give them sufficient freedom to fulfill their household duties. The second group comprises careerist women, who resemble men workers with respect to their continuity of participation in the work-force over their working life. This group takes advantage of the introduction of household gadgets to facilitate household tasks, depends on reliable contraceptive methods to plan (or even avoid) pregnancy and utilizes available child care services to reduce the cost of withdrawal from the labor force.

The stable commitment of each of these two groups is not forced upon them, but is made deliberately and is shaped, Hakim argues, by their early adulthood and family environment. Thus, they are not "forced" into their roles as secondary workers and primary home makers. Rather their choice is made on the basis of values and orientations developed before entry into the labor market (viz. preferences), and their behaviour

molded by the interaction of their preferences with the economic consequences of their action.

Hakim ruffled the feathers of quite a few feminist sociologists. They were quick to draw attention to the loopholes of her theory. Initial criticism stressed the static nature of her theories (Bruegel, 1996) and undue emphasis on attitudes and family orientation (Ginn et al, 1996). Other sociologists were more constructive, attempting to combine the structure of society and agency of the actor. Continental sociologists pointed out that post-War changes in work, education and family structure force/allow people to make their own choice and carve out their destiny in an increasingly complex world (Beck, 1992, Buchman, 1989). Bates and Risebrough (1993) stressed the disintegrative effect of competition for scarce resources on social bonds and the creation of individual competitive identities. Others focus on the adaptive nature of actors. While Chisholm and Du-Bois Reymond (1993) highlighted the tendency of British teenagers to accommodate their aspirations to structural realities, Roberts (1993) noted that the youth do not appear to be moving passively towards societal goals/destinations, but try to carve out a path for themselves towards individual goals, in the face of multiple obstacles.

To sum up, instead of structural determination, we have what Roberts (1994) calls, "structured individuation" – actors have individual aspirations and goals, but the characteristics of their structural locations determine their ability to realize such targets. Faced with obstacles, actors adapt aspirations. However, given the complexity of situational forces and individual nature of targets, each individual has a virtually unique

outcome (Proctor and Padefield, 1998). We argue that constrained decision-making under structured individuation may be analysed in terms of the "satisficing" approach (Simon, 1955).

Satisficing Approach

Satisficing is an alternative to optimization for cases where there are multiple and competitive objectives and in which one gives up the idea of obtaining the "best" solution (Simon, 1955). In this approach the actor sets lower bounds for the various objectives that, if attained, will be satisfactory, or "good enough", and then seeks a solution that will exceed these bounds. The satisficer's philosophy is that in the real world there are far too many uncertainties and conflicts in values thereby negating the hope of obtaining a true optimization. Hence it is more sensible to set out to improve on one's current situation and do "well enough".

In the present context, for instance, women have two conflicting goals – fulfilling family commitments and attending to official duties. To what extent they are able to attain each of these targets depends upon their working, family and social environment - the attitude of their matrimonial family, extent to which their husbands are supportive, attitude of colleagues and superiors, presence of external support, and other factors specific to the situation. In this situation, women are not able to maximize their welfare by choosing the best outcome, but have to embark on a negotiation process with their family and office. This negotiation enables them to test the structural limits on their agency; once such limits are reached, they adapt their aspirations and targets to structural realities to identify

possible actions (like choice of departments, acceptance of off-shore assignments, family planning, etc.) that will enable them to balance the two conflicting objectives. This process may also be discussed in terms of a diagram (Fig. 2).

The two competing goals, fulfilling family commitment and attending to official duties, are represented by F_i and W_i , respectively. Initially, agents are situated at S_0 , representing socially determined minimum levels of both these two goals. It can be seen that movement to the North-East quadrant (Satisfactory Zone) increases their welfare levels. However, as Simon points out, agents may not be able to identify the choices/actions that will lead to outcomes like S^* . In this situation, agents are not able to maximize their welfare by choosing the best outcome in the Satisfactory Zone. Rather they embark on a negotiation process to identify possible actions that will enable them to move to an equilibrium point in the satisfactory zone.

Insert Fig. 2: A Satisficing Framework

It should be recognized that this equilibrium point does not represent an equilibrium common to all respondents. Multiple equilibria are consistent with satisficing, and each agent chooses her equilibrium point on the basis of individual circumstances. In the remaining part of this paper - based on a primary survey of 97 women workers in Calcutta's IT sector - we shall discuss how the behavior of women workers can be analyzed in terms of the satisficing approach.

FINDINGS

Since most companies refused access to women workers we took recourse to convenience and snowball sampling. Respondents were interviewed using a structured, mostly close-ended questionnaire. In addition, about ten percent of the respondents were interviewed in detail by the authors. The study period was June to October 2008.

Insert Table 1: Composition of Sample by Segment

Profile of Respondents

In line with earlier studies of the IT sector it is found that the workforce is quite young. The mean and median age is 27 years. Given that the boom in Calcutta's IT sector is a recent phenomenon, this is expected. However, it imposes the limitation, that long term effects cannot be studied in our survey.

About 46 percent of the respondents are married; this proportion is higher in the software sector (65 percent). The average family size is about four, for both married and unmarried respondents. About 36 percent of ever married respondents (that is, currently married or divorced) had one child, while 6 percent had two children.

Insert Table 2: Age and Experience of Respondents (in years)

Although variations in the age of respondents are not marked, differences in work experience are observed across segments (Table 2). This implies that the age of entry varies sharply.

There are sharp variations in educational profile across the five segments studied (Table 3). In software, an essentially technical line, 84% of respondents are technical graduates

or post-graduates. In the KPO sector, 76% are graduates or above. Interestingly, the proportion of post-graduates is low in both these segments – 22 percent in software companies and 24 percent in KPOs. Quite a few (44 percent) KPO employees also completed Management degrees. About three out of every four BPO employees interviewed is a graduate.

Insert Table 3: Educational Level of Respondents

We also found the economic status of respondents to be high. About 70 percent live in their own houses, while one out of every three respondents has a car. While the respondents from the software segment were most well-off (73 percent owned a house, and 51 percent owned a car), respondents from the Miscellaneous category appeared least well off (only 43 percent owned a house, while 14 percent owned a car).

Findings indicate that women workers in the IT sector are not representative of the Indian society, but belong to an exclusive socio-economic class (Krishna & Brihmadesam, 2006, Upadhyay, 2007). The majority of respondents were from high caste, educated and affluent urban families. As a respondent admitted,

"I have very rarely seen women coming from a rural background ... at most they come from suburbs. Women don't come from a typical rural background ... father teaching in primary school, mother hasn't studied. Women in the IT sector come from the urban middle class."

As we shall see, this characteristic of the women workers is very important in determining the nature of their aspirations, and how they interacts with their environment to create a structured individuation.

Respondents identified possible reasons responsible for this bias. They opined that investment in higher education and coaching for girls is felt to be a luxury in low income and rural households. Further, such families are often averse to the idea of their daughters availing of hostel-based education. Reliance on campus interviews, importance placed on communication skill and ability to communicate in English⁴ during the recruitment process also limits the socio-economic base from which women workers are recruited.

Agency of IT Women Workers

In-depth interviews reveal that education and economic independence provided by employment in a technical, high paying sector are crucial in defining the role of respondents within the family. Respondents felt that employment allowed them to raise questions and issues that would otherwise not have been raised; it also enabled them to avoid questions that would otherwise have been raised:

"No matter how much lip service ... people pay to equality, background, equal partnerships, at crucial moments it (remains) lip service... about independence, freedom to choose what you want to do, equal partnership, unless there is some extent of economic independence."

Another respondent said:

"Every one in my home ... gives me a lot of space ... a lot of freedom I have my own identity as a working woman. It feels so very good that you are productive... You are having your own social status. You are known not only through your husband's name but as an associate of TCS. It gives a good feeling."

A respondent, who had given up her work after marriage to devote time to her family, said that she felt "empty headed ... useless ... I felt that I was not contributing anything

to the family".

The combination of high levels of education and employment in the hi-tech competitive IT sector thus increases the perceived interest response⁵ and perceived contribution response⁶ of women workers (Agarwal, 1994, Sen, 1983). The economic independence, perceived contribution response and greater awareness of women in the IT sector give them the confidence and bargaining strength needed - what Sen (1993) refers to as an improved "fallback position" - to renegotiate their role in the family:

"Economic freedom gives you a say. It is not deliberate, it gives you confidence ... you are more confident in sticking to what you think is correct. ... If you are economically independent then some questions will not rise at all - you have avoided those questions. If you are not, may be the issues are resolved in your favor, but the questions do come up."

Another respondent mentioned that the confidence gained from working enabled her to go against her husband's wishes and insist on having a child.

It was not that the women are always participating in decision-making. In many cases respondents are so bogged down with their official responsibilities that they deliberately did not exercise this power – "If I am so busy in work, how can I take household decisions?" However, they value the feeling that they have the power to make their voice heard.

About 80 percent of respondents were satisfied with their level of control over all types of family decisions. With regard to control in household financial decisions, we found that a negligible 6-7 percent did not have any say in such decisions. The socio-economic background of IT employees and the fact that women from their families have worked in earlier generations usually lowers resistance to women "neglecting the family", by reducing expectations from working women. This is an example of how aspirations of earlier generations lead to situational change, thereby giving women in subsequent generations the scope to renegotiate their role and functions within the household.

The case of Ankita (name changed), a software engineer working in a domestic company, is a typical example of this trend. She works hard to establish her reputation in her company; this entails, on several occasions, late nights at office. She tries to compensate for this by spending time with her family during weekends. Frequent vacationing with her husband is also part of her "balancing strategy". Ankita is also averse to accepting onsite assignments as this will affect her work-home balance. She accepts the fact that this may affect her ratings marginally, but feels that this is a necessary cost of being able to spend time with husband, family and friends. However, her priorities are not static but

adaptable over time; after 10-12 years of marriage, she is willing to prioritize her career over family and accept even long term on-site assignments.

Ankita's in-laws have accepted her careerism and are generally supportive. They realize that the specification of job timings has changed. While they expect that Ankita will return home by 6.30 pm, they accept the fact that this is not always feasible in the new working environment. They retain reservations about her late nights, but Ankita's economic empowerment reduces the probability of outspoken resentment by her in-laws. They also appreciate the fact that she sets aside her weekends for them.

However, given the multiple and often conflicting objectives of women workers, uncertainties involved in identifying actions associated with a particular outcome and differences in attitudes and goals of women workers, an optimizing framework does not appear appropriate for analyzing decisions of respondents. We suggest that Simon's satisficing model offers a more relevant alternative framework to examine their decision-making. This is illustrated with reference to three instances often cited by researchers on IT sector – occupational segregation, undertaking household chores and ensuring child care.

Occupational Segregation

Researchers have pointed out that the existence of gender stereotyping in the IT and ITES sectors has led to occupational segregation within the industry. The belief that women find it difficult to acquire the "hard skills" required in the hardware sector or display the

aggressiveness and drive required from project consultants has led them to concentrate on software design. It has also been argued that difficulties faced by women employees in balancing work and home responsibilities often force them to opt for soft careers like quality assurance, testing and human relations. These sectors have fixed hours; another advantage is that on-site assignments and traveling can be avoided. This is observed not only in other developing countries (Wacjman & Lobb, 2007), but also in New Zealand (Crump et al, 2007) and Germany (Ben, 2007).

As pointed out previously, multiple equilibria are consistent with satisficing, and each agent makes her own career decision on the basis of individual circumstances. Respondents echo Hakim (1991, 1995, 1996a, 1996b) when they stress that occupational segregation is the outcome of deliberate occupational choices by women, based on their orientations:

"Women have to balance – and for balance they have to compromise (on their career). And the only thing that they can compromise is their sector... Different women are molded differently. Some want to give more time to their work than to their marriage. Some women know they can balance their work and married life. It depends upon the women what they want to do."

Viewed from this perspective, occupational segregation may be interpreted as the outcome of a deliberate attempt to balance work-home commitments through choice of career.

Women who attach greater weight to family welfare opt for "soft" careers (in departments like Quality Assurance and Human Relations). As these sectors have fixed hours and do not require traveling and on-site assignments, they enable respondents to look after family needs. At the other extreme, we have women with their focus set firmly on their career. Such women generally choose not to marry, and are prepared to accept off-site assignments, travel frequently, work long hours, and so on. This group prefers demanding assignments like project consultancy. Most women, however, try to balance both work and home. They go only for short term on-site and traveling assignments, delay having children to establish their reputation within the company to facilitate their comeback after a long layoff, and rely on external (often hired) support system for household responsibilities. Such women are also dynamically adaptive. Over time, as their children grow older and require less care, their priorities change and are revised in favors of the office. Such women are willing to work in areas like software development, hardware research and other less "soft" departments.

To some extent, this may also explain the glass ceiling restricting entry of women into higher echelons of the IT industry. Both the first and third group of women workers are hampered by their focus on family and children, so that it is only the second group, forming a minority, which has the ability to break the glass ceiling.

Provisioning of Care Services

We had earlier referred to the pressures faced by working women who had to assume the dual role of a home-maker and income-earner. This is a historical problem. The first women workers from middle income families had entered the labor market solely to supplement family income. They were mainly clustered in lowly paid clerical jobs or in schools – occupations with fixed working hours. Further, the image of women as wife and mother, created by a patriarchal society, was deeply ingrained in their psyche. Bounded by "socially imposed altruism",⁸ these women workers therefore took upon the dual role of bread-earner, and provider of care services.

In the last two decades, as educated women became common, and the Indian economy became more integrated with the global economic system, women – particularly educated women from high middle income urban families - began to shift away from pink collar jobs (like teaching, secretarial assistance, receptionist, etc.) and competed with men for technical jobs. Employment is no longer linked to economic survival in such families; rather, it allows women to seek psychological satisfaction and sense of fulfillment outside the family. For instance, a software engineer said, "It (my job) is so much a part of my identity ... I define myself to a very large extent on the basis of my work". Similarly, another respondent said, "I never had it in my mind that I will quit my job ... Whatever I have learned, if I can apply it in my practical life, that's the best thing." Other respondents referred to the empowering effect of working.

The influences of globalization and western culture also left their imprint on the educated women workers in the Indian society. Not only did these give rise to gendered consumerism, but these also began to chip away at traditional patriarchal values. The earlier values based on the concept of personal care and service by household women

were replaced by a more pragmatic, market-oriented mentality willing to substitute personal care by purchased services. This modified the traditional social altruism by still retaining women as persons responsible for the care and welfare of family members, but no longer making it obligatory on their part to fulfill this responsibility personally. The availability of cheap domestic labor permitted women⁹ to shift away from supplying labor to a supervisory and planning role.

Simultaneously, there was a gradual change in the family structure. The joint structure had disintegrated after the Second World War; now the family became even smaller – consisting of just parents and children, with the grand-parents being gradually discarded and treated as part of an external support system. ¹⁰ The new structure and values, coupled with her new found confidence and sense of identity, allowed the wife to renegotiate her role within the family (Lee, 2004) and modify practices still embedded within the family (Kelkar et al, 2002, Kelkar and Nathan, 2002).

In some nuclear families, sharing of household tasks has become accepted; some husbands help in case of household emergencies.¹¹ This is enough for respondents, who uniformly say "I don't expect him to do (household chores) also", citing his lack of training as the reason – "you suddenly cannot change the demarcation inculcated from childhood." Similarly, a software engineer remarked, "If I don't feel like cooking, it's not that he will cook; he will ask me to eat outside." Gender stereotyping of household roles still persists. An accepted practice is that husbands are responsible for "outside the

house" tasks related to financial matters - "He is otherwise extremely useful in the house – looking after banks and other financial matters".

Although women are still the home makers, the way of doing it has changed so that the modified Game of Chicken (Fig. 1b) no longer holds. Our survey revealed that very few women undertook household chores themselves (Table 4). Only one out of five respondents cook, wash or dust on a regular basis. A significant proportion of such respondents are unmarried women, living as paying guests, or in rented accommodation. If only married women are considered, then also the proportion of women undertaking these tasks is about the same (20 percent). This is contrary to what the game of chicken predicts in the presence of patriarchy, viz. that working women will perform household tasks.

Insert Table 4: Regularity in Performing Household Tasks

Respondents reported trying to balance their commitments to office and home by hiring women from the newly developed "centers" which offer household and other services. Thus, the availability of domestic labor in Calcutta breaks down the analogy of the chicken game by providing wives with a third option. Instead of doing household tasks themselves, they can *purchase* care services and switch to a *supervisory* role.

Another example of satisficing is the way in which our sample spends their hours at home (Fig. 3). Only 20 percent of respondents accorded first priority and 8 percent accorded second priority to household duties in leisure allocation. On the other hand, activities in which the entire family takes part and enables the respondent to

simultaneously undertake household tasks (shop for grocery items and other household requirements, have lunch/dinner) – like visiting shopping malls and watching films – are the preferred ways of spending leisure time.

Insert Fig. 3: Allocation of Leisure Hours by Working Women

Overall, respondents were satisfied with the balance between work and home. About 80 percent of respondents (82 percent of married workers) reported that they were content with the current state of affairs. Although 54 percent did feel that long work hours interfered with their family life, they mostly cited the inability to devote time to their children, husband and social interactions (with friends) as unsatisfactory.

Child Care and Pregnancy

One problem with such purchased services is that the care providers cannot fully meet the emotional needs of children (Ferguson, 1989). A respondent remarked that whenever the time came for her maidservant to leave, she felt tense in case any unexpected development prevented her from leaving at her scheduled time. Respondents reported that men colleagues are generally insensitive to child-related problems:

"There are people ... when you call up to say that you will be working from home because your maid hasn't turned up and you have to look after your daughter ... people don't say it but you feel it that men don't think ... realize that this is an issue - but it matters a lot to you. ... No one will say it why you are doing this ... because that is going against the code of conduct and also that would take away the liberated image from them."

An ITES employee said that when she left at 6 pm, her colleagues perceived her to be slacking. The need to look after children is another reason for the reluctance to travel or accept long term on-site assignments observed earlier, though companies generally accommodate such cases.

This implies that pregnancy has major implications for the working women. It has been observed by researchers (Mitter and Rowbotham, 1995, COD, 2004, Upadhyay, 2005) that pregnancy leads to a break in the career, and women are often unable to return to work thereafter. Respondents admitted that having children affected their careers as they are negatively evaluated during their leave period.

To minimize the effect on their career, women preferred to establish themselves in their companies before having a child, so that they could return after about two years of leave (including unpaid leave). The 25-year old software engineer, Ankita, was aware that pregnancy and rearing up the child is demanding and will mark a difficult phase in her life. Although she wanted a child very much and wanted to give the child "the best of everything", she was equally determined not to sacrifice her career for her child. Other respondents spoke of the fulfillment in having and bringing up a child despite the immense pressure involved.

IT women therefore plan their pregnancy carefully. For instance, Ankita had made up her mind to delay her pregnancy for at least 2-3 years, and then take a leave of about 2 years. This interval would enable her to accumulate enough leave, save enough to compensate

for the temporary loss in income during her leave period and facilitate rejoining her company after her maternal leave by creating a good reputation.

Once leave ends the situation becomes more complex. While some teams had a culture of working late hours - "When you rejoin, people expect you to swing back to work like they used to before ... they expect these people to stay back till late at night" - others emphasized the output from the employee, allowing working mothers to leave at regular hours.

Working mothers generally rely on paid help, parents or in-laws in such cases. In Calcutta, neighbors are quite supportive. If meeting project deadlines prevent Ranjana, an employee in a company developing e-learning modules, from returning home before her maidservant leaves, her daughter is taken care by her neighbors. She also keeps in touch with their child during office hours through the telephone. Respondents also sacrifice leisure hours to look after the child. Three-fourths of the women having children said that they always looked after their children themselves after returning home, while 11 percent of such women kept aside their off-days for their children. We had also seen earlier that about 44 percent of respondents spent their leisure hours in activities that may involve their children (visiting shopping malls, watching films, etc.). Respondents insist that this is deliberate – even those respondents whose households are run by their mother-in-laws find time to supervise their children's education and respond to their emotional needs. This is in keeping with the observation that women often incorporate the welfare of their children into their utility function (Sen, 1993).

At the same time, respondents do not sacrifice their careers for their child. Ranjana had to leave her daughter for five months to participate in an induction program in Mumbai before joining her present company. She also mentioned that sometimes when her daughter rings her up she is busy. Although she realizes that the information that her daughter wants to give may be of significance to the child, in some cases she does not answer the phone. Emotional deprivation of the child is accepted as a cost of careerism.

In all, respondents avail of better reproductive techniques to phase conception at a stage of their career when the perceived cost of withdrawal from the labor force is least. Initially, they look after the child taking leave. Subsequently, they shift the responsibility of child care to relatives and hired helps, but sacrifice their leisure hours to spend time with their children. This again constitutes an example of how respondents adapt their aspirations to attain a satisfactory outcome.

CONCLUSION

To sum up, our findings reveal that women workers in Calcutta's IT sector belong to an exclusive socio-economic category – urban-based, middle income, English-speaking and educated families. As a result their motivations for seeking employment, attitudes towards life and family, and actions are different from the low income women workers (Noronha and D'Cruz, 2008). Predictably, this leads to differences in outcomes. The primary motivation underlying the decision of respondents to work is to create a personal space and to support their consumerist life styles. As a result, they are shedding their

traditional caring and family-oriented behavior, and relying more upon purchasing care services. Instead of personally undertaking household tasks, women are shifting to a planning and supervisory role. Pregnancy, too, is a carefully planned decision. The lives of these women, therefore, represent a careful balancing of multiple, competing objectives. Starting from their choice of occupation, their job decisions, allocation of leisure time, pattern of spending after-office hours, the different choices of these women workers represent a dynamic adjustment of aspirations to structural realities, which may be conceptualized in terms of a satisficing framework.

But have these empowered women? Have their agencies really been enhanced, or is it a mirage sugar-coated by the gendered consumerism that they can afford?

Historically, there has been a division of labor between the affluent men and women, with the former performing the role of bread-earner and the latter the role of house-maker and care-giver. Over time, however, social changes have led to a disintegration of this bipolar outcome. The confines binding women to the home have broken down, offering them a choice between work and home. The burden emerging from the contradictory nature of work and home, however, rests solely on women. Whether this really represents a choice is debatable. Proctor and Padfield (1998) argue that for choice to be meaningful, work and family must be socially organized to permit either one or both to be experienced, as is the every day experience of men in society.

When we raised this issue before respondents, they admitted the validity of this proposition. They referred to the social limits on their aspirations and choices, the asymmetrical gender relations still persisting at home and work. Respondents complained about the long hours of monotonous work. They also suffer from fractured identities, as is evident from their guilt in not giving enough time to their family and particularly to their child. However, they also pointed out that the outcomes now are not hoisted on the respondents by a patriarchal family taking advantage of the employment opportunities created by globalization, but are deliberate choices made by the women: "Earlier it was not the girl's choice. They had to do what their family allowed." Although society may still circumscribe their choice set, the decision to choose their individual outcomes is that of the actors. This, we argue, is the most important effect of the IT revolution on women's empowerment.

Fig. 1a: Household Chores as a Game of Chicken

Husband			
Wife	Do household tasks	Take rest	
Do household tasks	(5, 5)	(0, 10)	
Take rest	(10, 0)	(2,2)	

Fig. 1b: Household Chores as a Game of Chicken under Patriarchy

Husband			
Wife	Do household tasks	Take rest	
Do household tasks	$(5+\theta,5)$	(0+ θ, 10)	
Take rest	(10, 0)	(2,2)	

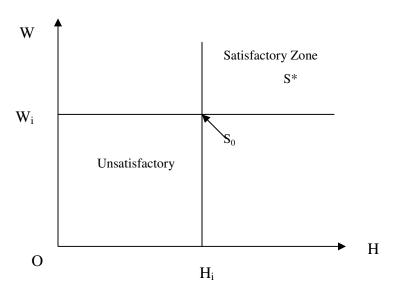


Fig. 2: A Satisficing Framework

Table 1: Composition of Sample by Segment

Segment	Number	Percentage
Software Development	37	38.1
Knowledge Processing	25	25.8
Business Processing	28	28.9
Other ITES segments*	7	7.2
TOTAL	97	100

^{*} Comprising of Medical Transcription, Travel and Tourism, etc.

Table 2: Age and Experience of Respondents (in years)

rubic 2. fige and Emperience of Respondents (in years)				
Segment	Average Average Experie age IT sector		Average age at entry	
Software Devpt	27.4	3.9	23.5	
KPO*	27.2	4.6	22.6	
BPO [†]	27.1	2.8	24.3	
Miscellaneous	28.7	3.1	25.6	
Total	27.4	3.7	23.9	

^{*} Knowledge Process Outsourcing is a form of outsourcing in which knowledge- or information-related work is carried out by workers in a different company in the same country or on an off-shore location to save cost. This typically involves high-value work carried out by highly skilled staff.

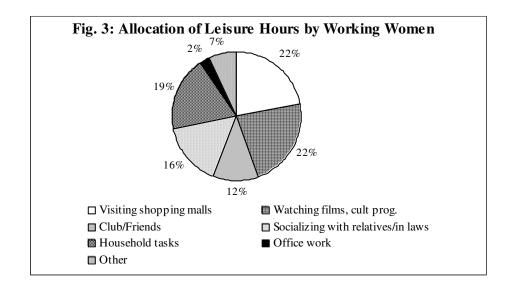
[†] Business Process Outsourcing refers to the transmission of processes along with the associated operational activities and responsibilities to a third party with at least a guaranteed equal service level.

Table 3: Educational Level of Respondents

	Software				
Educational Level	Devpt	KPO	BPO	Misc	Total
HS	2.7	4.0	3.6	14.3	4.1
Graduate - General	2.7	24.0	75.0	42.9	32.0
Graduate -					
Technical	62.2	8.0			25.8
Graduate-					
Management	2.7	8.0			3.1
PG : General	8.1	52.0	17.9	42.9	24.7
PG: Technical	21.6				8.2
Tech Dip/Cert		4.0	3.6		2.1

Table 4: Regularity in Performing Household Tasks

Marital Status	Household Chore	Never	Occasionally	Always
	Cooking	22.4	55.1	22.4
Unmarried	Washing	20.0	54.0	26.0
	Dusting	18.4	59.2	22.4
Married	Cooking	9.1	55.1	22.7
	Washing	20.0	57.8	22.2
	Dusting	17.8	64.4	17.8



REFERENCES

Agarwal, B. (1994). A Field of One's Own: Gender and Land Rights in South Asia, Cambridge: New Delhi.

Badgett, M., Lee, V. and Folbre, N. (2001). Gender Norms and Economic Outcomes. In M.F. Loutfi (Ed.) *Women, Gender and Work: What is equality, and how do we get there?* (pp. 327-341). Geneva: ILO.

Bates, I. and Riseborough, G. (1993). Introduction: Deepening divisions, fading solutions. In Bates, I. and Riseborough, G. (Ed) *Youth and Inequality* (pp. 1-3). Buckimham: Open University Press.

Ben, Esther Ruiz (2007) Defining Expertise in Software Development While Doing Gender, *Gender, Work and Organization*, 14(4), 312-332.

Beck, U. (1992). Risk Society: Towards a New Modernity. London: Sage.

Bruegel, I. (1996). Whose myths are they anyway?: A commen', *British Journal of Sociology*, 47(1), 175-177

Buchmann, M. (1989). *The Script of Life in Modern Society*. London: University of Chicago Press.

Centre for Organization Development (2004). *Final Report on Women in Information Technology*. Report submitted to Department of Women & Child, Ministry of Human Resource Development, Government of India, Hyderabad.

Chisholm, L. and Bois-Reymond, M. Du (1993). Youth transitions, gender and social change, *Sociology*, 27(2), 259-279.

Clarke, A. and Sekher, T.V. (2007). Can Career-minded Young Women Reverse Gender Discrimination? A View from Bangalore's High Tech Sector, *Gender, Technology and Development*, 11(3), 285-319.

Crump, B.J., Logan, K.A. and McIlroy, A. (2007). Does Gender Still Matter? A Study of the Views of Women in the ICT Industry in New Zealand, *Gender, Work and Organization*, 14(4), 349-370.

Ferguson, A. (1989). *Blood at the Root: Motherhood, Sexuality and Male Dominance*. London: Pandora Press.

Folbre, N. and Weisskopf, T.E. (1998). Did Father know best? Families, markets and the supply of caring labor. In Ben-Ner, A. and Putterman, L. (Ed.) *Economics, values and organization* (pp. 171-205). Cambridge: New York.

Ginn, J., Arber, S., Brannen, J., Dale, A., Dex, S., Elias, P., Moss, P., Pahl, J., Roberts, C. and Rubery, J. (1996). Feminist fallacies: a reply to Hakim on women's employment, *British Journal of Sociology*, *47*(1), 167-173.

Hakim, C. (1991). Grateful slaves and self made women: Fact and fantasy in women's work orientation, *European Sociological Review*, 7(2), 101-121.

Hakim, C. (1995). Five feminist myths about women's employment, *British Journal of Sociology*, 46(3), 429-455.

Hakim, C. (1996a). The sexual division of labor and women's heterogeneity, *British Journal of Sociology*, 47(1), 178-188.

Hakim, C. (1996b). Key Isssues in Women's Work: Female Heterogeneity and hte Polarization of Women's Employment, London: Athlone.

Kelkar, G., and Nathan, D. (2002). Gender Relations and Technological Change in Asia, *Current Sociology*, *50*(*3*), 427-441.

Kelkar, G., Shreshtha, G., and Veena, N. (2002). IT Industry and Women's Agency, *Gender, Technology and Development*, *6*(1), 63-84.

Krishna, A. and Brihmadesam, V. (2006). What does it take to be a Software Professional?, *Economic and Political Weekly*, *19 July*, 3307-3314.

Lee, J.C. (2004). Access, Self-Image and Empowerment: Computer Training for Women Entrepreneurs in Costa Rica, *Gender Technology and Development*, *6*(1), 63-84.

Mitter, S. and Rowbotham, S. (Ed.) (1995). Women encounter technology: changing patterns of employment in the Third World. Routledge: New York.

NASSCOM and Deloitte (2008). *Indian IT/ITES Industry: Impacting Indian Economy and Society* 2007-08,. NASSCOM, New Delhi.

Noronha, E. and D'Cruz, P. (2008). The Dynamics of Teleworking, *Gender, Technology* and *Development*, 12(2), 157-183.

Proctor, I. and Padefield, M. (1998). Young Adult Women, Work and Family: Living a contradiction. London: Mansell.

Ramsey, N. and McCorduck, P. (2005). Where are the Women in Information Technology? Report prepared by Anita Borg Institute for Women and Technology for National Center for & Information Technology, Un. of Colarado, Boulder.

Roberts, K. (1993). Career trajectories and the mirage of increased social mobility. In Bates, I. & Riseborough, G. (Ed) *Youth and Inequality* (pp.229-245). Buckimham: Open University Press.

Rothboeck, S., Vijaybhaskar, M. and Gayatri, V. (2001). *Labor in the Indian Economy:* The Case of the Indian Software Labor Market. ILO: New Delhi.

Sen, A.K. (1983). Economic and the Family, *Asian Development Review*, 1, 14-26.

Sen, A.K. (1993) 'Economics and the Family', in P. Uberoi (Ed.) *Family, Kinship and Marriage in India* (pp. 452-463). Oxford University Press: New Delhi.

Shanker, D. (2008). Gender relations in IT Companies, *Gender, Technology and Development*, 12(2), 185-202.

Simon, H.A. (1955). A Behavioural Model of Rational Choice, *Quarterly Journal of Economics*, *LXIX*(1), 99-118.

Upadhya, C. (2005). Gender Issues in the Indian Software Outsourcing Industry. In Gurumurthy, A., Singh, P.J., Mundkur, A. and Swamy, M. (Ed.) *Gender in the Information Society: Emerging Issues* (pp. 74-84). UNDP-AIDP & Elsevier: New Delhi.

Upadhya, C. (2007). Employment, Exclusion and 'Merit' in the Indian IT Industry, *Economic & Political Weekly, 19 May*, 1863-1868.

Wajcman, J. and Lobb, Le Anh Pham (2007). The Gender Relations of Software Work in Vietnam, *Gender, Technology and Development, 11(1)*, 1-26.

² The work is disaggregated into specific components which are allocated to individual members of the project team.

¹ Reported in Economic Times (13 May 2009).

³ "A great many women 'hang loose' and refuse to choose fixed objectives, drifting with events and opportunities as they arise, pretending they can keep all their options open by refusing to close the door on any of them" (Hakim, 1996b: 208).

⁴ A high proportion of the respondents (about 66 percent) had studied in English-medium schools. Only in the BPO sector is this proportion low – about half of the respondents (mostly working in smaller firms) were not from English-medium schools.

⁵ The perception that one's well-being is important in the family welfare function.

⁶ The perception that one is making a significant contribution to family welfare.

⁸ "Social altruism" refers to the norm that assigns women greater responsibility for the care of dependents (Badgett and Folbre, 2001).

For instance, this study found that in about 44 percent households' cases there were no elderly persons within the family; only 14 percent of the households had two elderly members. The family size is quite small (as shown in Table 2), with 74 percent of the families having less than 5 members.

¹¹ Such emergencies arise when sudden visitors come, maidservants' absentee themselves, and so on. In such situations, the introduction of electrical appliances facilitating household work becomes important in involving the husband in household chores. For instance, the husband can wash clothes when the maidservant has absented, or heat food simply by turning some knobs.

⁷ Commitment towards parents is quite high, with about 90 percent respondents reporting that they spent time with their parents (in-laws) regularly or on their off-days.

The emergence of "Centers" has also facilitated this process. Such centers hire out domestic workers on a per hour basis. This permits working women to hire such help for 10-12 hours to perform the needed tasks. Affiliation of the helpers to centers guarantees their reliability and honesty. Further, as a helper becomes 'fixed' to a household, she becomes acquainted with its patterns and requirements.