

**Knowledge Acquisition, Social Status and the Development of
Women in Semi-Rural and Urban India:
Evaluating ICT Programmes Within a Cultural Context**

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Executive Summary

The goal of this study is to examine the effects of Internet technology on the empowerment of women in semi-rural and urban India. For the purposes of this research, the effects of knowledge acquisition from Internet technology were examined on the following dimensions of empowerment: decision-making within the household, self-confidence, increased social value and respect, more meaningful work (intra-household and within the community), self-perceived empowerment and the effects of knowledge on career. In addition, it was also considered of interest to examine the perceptions of women's spouses and children regarding their use of the Internet. Thus, the objective of this research is threefold:

1. Do women who are using the Internet feel more empowered themselves?
2. Do spouses and children perceive these women as empowered?
3. Are the women treated as more empowered individuals as a result of their Internet training?

The data for this study was gathered by means of semi-structured interviews conducted in the participants' native language. Participants consisted of twenty-five semi-rural women from Kolkata, India, who have received Internet training, as well as their husbands and children¹. The time elapsed since receiving Internet training for these women ranged from six months to four years.

The majority of women employed the Internet primarily for e-mail purposes, secondarily as a resource for information. With respect to information, most women reported using search engines and visiting websites to search for financial information

¹ Due to both financial and time constraints, only a few of the husbands and children were interviewed for this study.

(such as banking and housing information) as well as information in the area of child healthcare. This information was often used to make household decisions jointly with the husband, rather than having the husband be the sole decision-maker. Many of the decisions participants made using information from the Internet were minor rather than major household decisions: for example, downloading recipes on what to cook for dinner or planning family vacations.

It was also found that women would often search for information on the Internet, and share their newly acquired knowledge with more high status family members in order to help them make better decisions. For the most part, the effects of the women's use of the Internet on social status, more meaningful work and respect within the household seemed to be negligible. Although information derived from the Internet clearly did not result in greater empowerment of these women, according to the traditional Western concept of empowerment, the women claimed that they felt more self confident and empowered by their new found autonomy in using the Internet, to find information by themselves, without dependence on others.

The families of the participants also provided some promising feedback. Husbands reported being very supportive and encouraging of their wives' use of the Internet, and did not see it as a threat to their authority within the household. In direct contrast to their wives, they employed the Internet more as a resource for information than a technology for sending e-mail to loved ones. Children were also supportive of their mother's use of Internet technology, and were found to employ it both as a recreational activity as well as an educational resource.

1.0 Introduction

Throughout history, the relationship between technology and culture has been a dynamic one: with the advent of every new tool, an idea has been created and embedded into the prevailing culture that supersedes the original utility of the technology itself, thereby informing human consciousness. As Mumford (1934) observed, by rendering time as independent and sequential, the invention of the clock in the fourteenth century, had the effect of disassociating time from the authority of Nature and hence ‘had more to do with the weakening of God’s supremacy than all the treatises produced by the philosophers of the Enlightenment’ (cited in Postman, 1986: 12). The promise of information and communication technologies (ICTs), arguably the most revolutionary type of technology of the twentieth century, has been to make knowledge universal, by rendering reason (information) separate from the body in time-space. Knowledge, as a primary ingredient of the exercise of power, becomes a tool for empowerment.

As an interactive information and communication technology, the epoch-making merit of the Internet lies in its ability to transform information from a static entity to a dynamic one. In Cyberspace information is in a constant state of flux; it is both produced and transmitted instantaneously, creating a body of knowledge that is both ever-changing and accessible to all. However, for this constantly produced information to have value, it must be meaningful for the end-user.

But what constitutes ‘meaningful’ information? Is information portrayed through ICTs meaningful for the user and is this what motivates the user of ICTs to utilize the technology? Does s/he become more socially empowered through exposure to information? How do knowledge/power relations shape subjective perceptions of ICT

users as more empowered individuals within their own social group? The complexity of human action with its layers of motivation and time-bound context, warrants a socio-cultural examination of how humans interact with technology and how this might lead to development.

1.1 Issues Confronting Implementation of Information and Communication Technologies for Development

In order to further our understanding of how ICTs lead to development, it is necessary to examine what is meant by development. It may be argued that the concept of development is, by virtue of its origin in liberal Western thought, undeniably a value-laden one. Replacing exploitative colonialism as the European/North American response to non-industrialized cultures, it initially adopted a top-down ethnocentric approach. Recent trends in development however, seek to correct this imbalance by attempting to employ a more holistic method, adopting a grassroots approach and trying to engage the people involved as participants or partners in the process. This new philosophy of development is gradually transforming the way in which development agencies and NGOs view their aims and assess their results, through the goals of the development objective: sustainable growth, democracy, human rights and an increased standard of living.

In evaluating development (objectives and success) the following issues must be and are being considered:

How much is development concomitant with Westernisation?

In other words, does development necessarily impose a Western industrialized, capitalist, secular (or Judeo-Christian) model on or at the expense of indigenous

culture? Mere exposure to this Euro-American paradigm may be seen by some as an agent of disintegration.

If power results from knowledge and knowledge from exposure to information, is presentation of information sufficient to result in empowerment?

This is a practical problem that should be addressed since the failure of development projects often results in attempts to improve the delivery of information (e.g. making the technology less intimidating) without considering other social and psychological factors (cf. Thorngate 1995). Essentially, if the information is not actively employed by the end-user, it cannot result in greater empowerment.

Are ICTs themselves neutral instruments?

Some of the responsibility for the success or failure of ICT use for development lies with the technology employed, though this is often overlooked or minimized by researchers. Rather than the efficiency of the tool, the nature of the tool itself must be considered. Each instrument informs its own culture which may or may not be at odds with the culture in which it is being utilized.

When dealing with women and development, could an apparent failure to empower in fact be successful?

It has been found that sometimes cultural norms have been internalized so that empowered women (i.e. women given opportunity to choose) will perpetuate the status quo such that the result of empowerment may be negligible (cf. Kabeer 1999). For example, when women are given more control over their lives, they may actively chose options that will actually undermine their status due to fear of cultural sanctions or social

disapproval by members of their in-group. Yet within the context of their own culture, these women may be perceived/perceive themselves as more empowered.

All of these concerns are the result of cultural issues and to address them we must acknowledge and work within the context of socio-cultural parameters, which vary according to the specific environment. In terms of the development of empowerment this context involves three elements: the culture of the users, the culture of the medium and the culture of power.

1.2 Culture of the Users

When implementing a development project or conducting research with regard to development issues, it must always be taken into consideration that the objects of that research or project can not be viewed as merely neutral materials. Thus, no universal model for the employment of ICTs for development can be formulated or utilized. A psychological assessment of users' own assumptions, goals, expectations and judgments must be included both in the creation and evaluation phases of development.

1.3 Culture of the Medium

As we know from our own experiences with the communication technologies permeating our society, each medium brings with it its own culture by virtue of its very nature. Some technologies are interactive while others are not. Some include a visual component while others do not. Some require users to be passive and attentive. Others respond to the user's demands more easily. Marshall McLuhan brought attention to the overwhelming influence of communication media in shaping the surrounding culture irrespective of the information communicated by them. Along similar lines, importers of ICTs into developing cultures should be aware of the effects the cultures inherent within

the media themselves have both on the information disseminated and on the end-users of them.

For example, it was found in the introduction of different media into Ashaninka communities in Peru that the use of the radio was by far more successful than initial attempts to introduce the Internet. This was primarily due to the fact that the radio met the needs of and supported the culture that already existed (cf. a discussion of the early success of radio Schech, 2002).

1.4 Culture of Empowerment

Again and again in the literature of development, the idea of empowerment must be explored and defined. This should not be surprising. Power, lying at the root of the concept, is one of the most complex factors influencing human relationships and behaviour. In contemporary discourse there have evolved several different ways of viewing the nature of power.

For example, there is the dichotomy of *power within* versus *power over* which finds its origin in feminist discourse (cf. Kabeer, 1999). Power within involves autonomous freedom to make choices and act upon them while power over refers to the authority which allows one person or group to make choices for and impose them on others. When speaking of empowerment it should be identified which of these two types of power or what combination thereof is meant.

Secondly, there is an isomorphic correlative relationship between power and knowledge. Knowledge and power are constantly involved in a dynamic process in which each implies and supplies the other: power produces knowledge, while knowledge cannot exist without a corresponding power relation (cf. Foucault, 1977). At the same time, on

the level of the individual within society, those with more or more useful knowledge may be able to achieve a greater amount of power than those lacking it. The third element of this nexus is the idea of agency. In order for empowerment to occur, it is necessary for the individual or group to translate the power attained as knowledge into behaviour as agency. This involves both decision-making and authority (cf. Kabeer, 1999).

Another important way of looking at power is as an object of subjective perception. Like beauty, power is in the eye of the beholder. Researchers are primarily concerned with the objective (i.e. external) perception of power relations within a social group. This is frequently at the expense of a thorough investigation of the perceptions of power within the group. The question of whether the users themselves and the members of their community perceive changes in knowledge, power, status or esteem is often overlooked in assessing the results of empowerment projects.

1.5 Integrating the Internet with Indian Culture

One way we can begin to address these issues of culture is by employing interdisciplinary methods. The fields of anthropology, sociology and history, for example, all provide perspectives which give attention to the relationships of individuals, groups and cultures. In addition to these, the approach and method of social psychology employed within a specific cultural context cannot fail to yield significant results.

Using the socio-psychological approach, the way in which the three cultural elements discussed above combine and relate with one another will be assessed within the context of the use of the Internet by Indian women. Firstly, some significant characteristics of both the Culture of the Users/Participants and the Culture of the

Medium will be identified, following which appropriate research questions will be formulated to assess various issues of empowerment.

1.5.1 Indian Women: Cultural Issues

Mutual obligation and self reliance within the extended family structure are valued in Asian cultures. If there is a conflict between an individual's needs and the family's goals, the family's goals are given priority. Maintaining family harmony is often at the expense of women, particularly wives and daughters-in-law. Interdependence of family members and the importance of mutual help and support are deeply ingrained values.

Thus, emotional control is considered to be a mature trait in Asian culture. Open displays of pain or anger are thought to be immature and unworthy of adults, particularly women. For this reason, Indian women seldom express their true feelings and emotions, except among very close relatives or friends. Instead, Indian women are socialized not to question the commands or decisions of persons in authority and to refrain from expressing their own wishes or opinions. The Western values of direct self-expression and self-determination are unfamiliar concepts.

1.5.2 Internet: Cultural Issues

Given the culture of Indian women, it may be argued that the following features of the Internet may be facilitate its use as a tool for empowerment:

De-centralized/Anarchical

The Internet has no rules beyond those governing other media (e.g. copyright law; obscenity laws/child pornography) and no central authority. Behaviour is generally constrained by custom (i.e. Netiquette) rather than by regulation.

Individualistic

An individual can achieve the same presence on the Internet as a group, company or country (taken as a collective). Each person can have his or her own website, can have his or her e-mail address and can post to newsgroups and listservs where each individual voice can reach millions.

Anonymous

Since the Internet is largely faceless and voiceless (at least at the current time), it provides a forum where class distinctions, race, religion, origin, gender and many other cultural factors are invisible unless specified by the choice of the individual.

Rapid

The Internet, once reliably established in a given location provides relatively instantaneous information retrieval and communication with others.

Content:

- Information

When considering the Internet as a resource for information, the type and content of that information should be considered as well. Is the information relevant to the users? Is it available in a way that it can be understood and utilized?

- Literate; Auditory; Visual (i.e. iconographical) components

The means of communication on the Internet is principally through the written word, though secondarily through visual and sometimes auditory channels. It is thus a literate culture.

Impact of the Internet On Facilitating An Empowering Mindset for Indian Women

<u>Internet Feature</u>	<u>Implication/Effect for Indian Women</u>
De-centralized De-hierarchized	‘Classless’/‘powerlessness’ (vs. hierarchies in class etc.)
Instantaneous registration of many voices and viewpoints	Speed = power No waiting and reaching MANY at once (vs. reaching an individual)
Written word	In an oral culture, the written word has more prestige than the oral speech
Visual focus of the internet	Perceptual revolution from ear to eye ‘to be able to see one’s utterance rather than only to hear them is no small matter.’
Anonymous	All same class status, how does this effect?

1.6 The Internet in India Today

The future of the Internet in India is promising, and its use is expanding greatly. For example, Internet services in India are expected to earn \$250 million (Cdn.) in 2001-2002 (Ramaraj, 2002). However, much of the Internet's success is still contingent upon government policy and the infrastructure developed by the industry (Chandran, 2002). Fortunately, the Internet remains a central concern for government officials. According to President Kalam of India, as stated in his inaugural address of the fifth conference of Information Technologies in Bangalore, India, information technology can be an integral tool for improving the quality of life and empowering the people of India, creating an urgent need to make India a superpower in knowledge and economy:

“The rapid growth of the information technology industry has enabled us to march towards the knowledge network. The building of the quadrileneal national highways and linking of the village roads will lead to a transport network through greater connectivity...

The first vision took India about 90 years to achieve independence through a hard fought freedom struggle. We need a second vision to achieve economic strength that will be driven by competitiveness. Competitiveness is driven by knowledge power that is powered by technology.” (Chand, 2002).

Considering the welcoming attitude towards integrating Internet technology in India numerous projects have been undertaken to examine the acceptance and use of the technology among Indians, particularly among rural villagers. One of the most noteworthy projects in bringing the Information Age to Indian villagers in the form of Internet access is the M.S. Swaminathan Foundation Research project which is currently being carried out in Pondicherry, Chennai, and is being funded by the International Development Research Centre (IDRC CRDI). The project, which began in 1998, aims to provide villagers with access to information, and intends to examine if people could get

the information they wanted in the way they wanted. A subsequent survey by the M.S. Swaminathan Foundation found:

"that community members have a genuine thirst for information -provided that it is locally or personally relevant. Villagers want access to daily weather reports and news that have an impact on their lives. And while rural Indians are interested in agricultural and fishing information, at the top of their wish list is bulletins about government programs and information releases. This information was also of interest to female agricultural workers, who receive part of their wages in grain." (Shore, 2002).

Considering the findings of the M. S. Swaminathan project, that rural villagers exhibit a strong interest in acquiring personally relevant information, the present study attempts to extend this research by examining if this is also the case for Indian women of higher social strata. From a developmental standpoint, it is important to ascertain the more advanced women's use of technology, as they: (1) are not necessarily as dependent on technology as rural villagers, and it is of interest to determine whether they make use of the technology when not obligated to do so, (2) have both an educational and financial advantage over their village counterparts, and it is worthwhile to examine if they make use of their benefits, (3) may constitute the group who will eventually advocate poor women's rights/empowerment within their country, thus, it is critical to ascertain if these women are themselves empowered through the use of technology.

In light of this approach, questions that guide this investigation are: do semi-rural and urban Indian women become more empowered through the use of Internet technology, if so, do they feel more empowered themselves, and are they treated as more empowered individuals by family members and in the community?

As the family is of paramount significance in the Indian woman's life, it is believed that the process of empowerment begins in the family unit, especially as

husband-wife dynamics constitute a vital aspect of the Indian household. As Boserup (1987) elaborates:

The problems come when women challenge practices within the home and men's control over them. [. . .] Empowerment is therefore not only an external process, but a process that has to bring about these intrinsic changes in women, but in also in men.

Women's empowerment is the process by which unequal power relations are transformed and women gain greater equality with men. On the individual level, this includes processes by which women gain inner power to express and defend their rights and gain greater self-esteem and control over their own lives and personal and social relationships. *Male participation and acceptance of changed roles are essential for women's empowerment.*

In fact, men's acceptance of 'empowered women' is critical, since if men feel threatened by women's greater strength, the development process can actually lead to the deterioration as opposed to the uplifting of women's role and status vis-à-vis men. Consequently, the spouses of these women will also be interviewed in the present study.

2.0 Research Design

2.1 Method

This section overviews the methodology employed in the present study. This includes a delineation of the participants sampled, followed by detailed descriptions of the materials and analytical procedures employed in the study. The chapter concludes with a consideration of various safeguards that were taken to ensure the validity and reliability of the data.

2.2 Procedure

In line with the focus on examining indigenous women's empowerment through the use of technology from a non-biased, non ethnocentric approach, the traditional academic research methodology advocated in the West (positivism) was not utilized in

the present study. Although Westerners have long held that the objective quantification of knowledge is best acquired through the positivist paradigm, it was believed to be an unsuitable method for the current research, as the researcher (in this method), rather than the participants under study, determine the direction of scientific enquiry. As a result, the present study employed a participatory methodology that was founded on the idea of involving community people as an integral part of the research process.

As a result, numerous steps were taken to involve community participants as much as possible in the research process and make them as comfortable as possible in order to encourage meaningful self-disclosure.

For example, much care was given to ensure that all participants were interviewed in the comfort of their own home. The purpose for this was two fold: first to ensure that the interview was carried out in a non-hurried and relaxed tone, and secondly to ensure that the participants felt as comfortable as possible, since many were somewhat nervous at the idea of being questioned by a Westerner, and good rapport was deemed essential to the quality of the data.

The importance of conducting the interviews in the participant's native language was also taken into account (all interviews were conducted in Bengali, the main language of Kolkata). As Wightman (2002) wrote of her difficulties that she encountered due to her limited knowledge of the language of the women she interviewed in rural India:

"Language is definitely a problem even with an interpreter. I am handicapped by not being able to communicate directly with the women. This is an area I am working hard at resolving."

In view of the importance of this problem, data were gathered by means of semi-structured interviews in Bengali in this study. Conducting the interviews in the

participants' mother tongue was believed to safeguard against confounds dealing with how comfortable the participants are, by facilitating rapport between interviewer and participants and minimizing miscommunication.

Finally, the interviews were conducted in an open-ended style, in which participants, rather than the researcher, were encouraged to determine the flow of the dialogue. For example, when it became apparent that many participants felt overly anxious at the idea of being interviewed, two additional questions were added to the beginning of the interview (*How do you use the Internet? What do you like about it?*) in order to instil a more conversational tone, and put the participants as much as ease as possible. On the spot modifications to the questions were also made if it was found that the questions were not leading anywhere, for example, if participants mentioned that they used the Internet solely for e-mailing purposes, participants were encouraged to go into detail about what this meant to them, how they felt about e-mailing, etc. in order to maximize the quality of the data and acquire participants' own perspectives and stories about what the technology meant to them. This approach was taken to the extent that two interviews were completely modified (when none of the questions seemed to apply to the participants, they were asked to provide their own stories about how the Internet has affected them and their families).

2.3 Participants

Participants consisted of twenty-five, randomly selected semi-rural women and their spouses from the city of Kolkata and neighbouring semi-rural villages within a 45 kilometre radius from Kolkata. Participants came from a diverse background. As the focus of this research was to examine the social after-effects of internet training

programmes, effort were made to include a cross-section of women of various ages, socio-economic status (semi-rural and urban) who differed in the length of time since they have received Internet training.

2.4 Materials

2.4.1 Development of Interview Questions

According to the empowerment literature, the process of reaching empowerment has to begin with gaining and raising the awareness and conscious levels of women. This explains why even when women are bringing in the bulk of the resources they continue to allow the male to hold the power, and why they continue to participate in their own subordination. This ideology is embedded in their consciousness. Consequently, it became important to assess what the concept of empowerment meant for these women. Thus, the following question was developed:

Do you believe the knowledge you are attaining to be a tool for your own empowerment, and if so, how would you define ‘empowerment’?

This model also highlights the importance of the intrinsic process, that is, the change of the ideological environment. Women need to increase their self-confidence, in order to give them the strength and motivation to sustain their empowerment. Hence a question assessing women’s self-confidence upon enrollment in an ICT programme:

Does participation in the educational programme enhance your self-confidence?

Having become more confident, these women can then go through a process of identifying their own priorities and can explore the possible strategies they could use for positive change, whether it is to gain resources or cause changes in gender relations at home. Thus:

Do you feel you have more say in decision-making around the household (ex. economical: how income should be spent? social: decisions/rules re: the children?)

and:

Are you participating more within the family, or given more 'meaningful' work to do within the family unit or the community?

Women will then start to experience new avenues and see the new options available for positive change. This often leads them to start identifying needs outside the home such as bettering education for their children, health care, or a community need. Success in their struggle makes them gain confidence to also address the situation in their households. Hence the following question was formulated:

Do you feel that you have more access to knowledge that will make you more employable? If so, how should this lead to an increased social status and feeling more empowered?

According to the work of Emile Durkheim, it is because the individual is conceptualized as a social being, that a person fully develops humanity in and through society. In this sense, autonomy itself is socially construed, as the function of the individual is to contribute to society through action. Essentially it is through one's contribution to society, through work, that an individual becomes more than an embodiment of the group by being rendered more independent in their own behaviour (Durkheim, 1982; 1984).

As it is through the attainment of knowledge that an individual becomes more empowered, in the sense that s/he is able to contribute more effectively to the social group. As a consequence of one's increased social value, then, it should be expected that the empowered individual will enjoy higher social status, and both perceive themselves and be perceived by society as more valued individuals. In this respect, the role of ICTs

by imparting information should act as a tool for social empowerment. As empowerment is a social process, and depends on how others perceive and treat the 'empowered' individual, two more questions were developed to assess this effect:

Do you feel that the knowledge obtained translates into an increase in your value to your spouse and family?

and:

Have you noticed that others are treating you with more respect?

Finally, perhaps the most important question was constructed: how do these women themselves feel about the ICT programmes, and the impact on their lives.

Do you think enrolling in the training programme has been a good or bad change? How has it effected your life?

The empowerment of women can lead to both the disempowerment and empowerment of men. The redistribution of rights and responsibility within households and in the communities could mean that men may be forced to give up what have been ideologically and gender based privileges.

Therefore, for the purposes of this research, which examines the effects of empowerment within the household, a critical question becomes: do the spouses of women in ICT training programmes feel disempowered? If they do not view their wives as more empowered this may hinder the very empowerment of these women.

Conversely, the empowerment of women may lead to gains for men. Men are in some ways also oppressed by gender systems, since gender stereotypes may disable a man from being a balanced and whole person. If women become equal partners and be able to share "male" work and responsibilities, the men will be freer psychologically of

the "oppressor" role that can have very serious implications. They will discover new ways of being, living, and working.

Consequently, a second set of interview questions were designed for the spouse's of women enrolled in ICT training programmes to capture any shifts in gender roles, as well as changing perceptions and behaviour towards these newly 'empowered' women:

How do you feel about your wife using ICTs?

Do you think it's changed the way you think of her and treat her?

Has she changed after starting to take ICT training programmes?

Has it changed her behaviour in the house? Is she for example, making more decisions within the household?

Do you think your wife's enrolment in the training programme has been a good or bad change?

Consequently, three sets of interview questions were developed; one for the women who have participated in ICT training programmes; a second set for their spouses and a third set for their children.

Questions for Women

Concept	Question
Decision-making and power	Do you feel you have more say in decision-making around the household (ex. economical: how income should be spent? social: decisions/rules re: the children?)
Self-perception and empowerment	Does participation in the internet training programme enhance your self-confidence?
Status and knowledge	Do you feel that the knowledge obtained translate into an increase in your value to your spouse and family?
Social status and knowledge	Have you noticed that others are treating you with more respect?
Social status and behaviour	Are you participating more within the family, or given more 'meaningful' work to do within the family unit or the community?
Self-perception and empowerment	Do you believe the knowledge you are attaining to be a tool for your own empowerment, and if so, how would you define empowerment?
Knowledge, career and empowerment	Do you feel that you have more access to knowledge that will make you more employable? If so, how should this lead to an increased social status and feeling more empowered?
Self-perception and knowledge	Do you think enrolling in the training programme has been a good or bad change? How has it affected your life?

Questions for Spouses

Concept	Question
Social perception of women and technology	How do you feel about your wife using the internet?
Social perception, and changed behaviour, women and technology	Do you think it's changed the way you think of her and treat her?
Social perception, and changed behaviour, women and technology	Has she changed after starting to take internet training programmes?
Social perception, women, technology and changes in decision-making	Has it changed her behaviour in the house? Is she for example, making more decisions within the household?
Social perception of women and technology	Do you think your wife's enrolment in the training programme has been a good or bad change?

Questions for Children

Concept	Question
Social perception of women and technology	How do you feel about your mother using the internet?
Social perception, and changed behaviour, women and technology	Do you think it's changed the way you think of her and treat her?
Social perception, and changed behaviour, women and technology	Has she changed after learning the Internet?
Social perception, women, technology and changes in decision-making	Has it changed her behaviour in the house? Is she for example, making more decisions in raising you? Is she giving you more advice?
Social perception of women and technology	Do you think your mother's enrolment in the training programme has been a good or bad change?

It should be noted that considering the importance of soliciting the participants' unbiased views on how they believed the ICTs effected their lives, great care was taken in ensuring that questions were designed to be as open-ended as possible, based on the recommendations of Patton (1990) in this regard. According to Patton, the open-ended responses of qualitative findings enables the researcher to understand the world through the eyes of respondents. The purpose of employing open-ended questions is to allow one to capture the points of view of other people and in the process understand their points of view without predetermining through prior selection of questionnaire categories (Patton, 1990: 24). Lofland further elaborates on this point:

“In order to capture participants ‘in their own terms’ one must learn *their* categories for rendering explicable and coherent the flux of raw reality. That, indeed, is the first principle of qualitative analysis,” (Lofland, 1971: 7, italics added, cited in Patton, 1990: 24).

3.0 Research Findings I: The Impact of the Internet on Semi-Rural Indian Women

At the beginning of each interview, participants were asked two questions: to identify the primarily purposes for Internet use, as well as how life has changed for them as a result of the new technology. Over sixty percent of the women interviewed reported that they only employed the Internet for e-mail purposes. Of the forty percent who employed the Internet for other reasons, most reported that they still used it primarily for e-mail (more than half their time) and for the remainder it was utilized as an information resource. Regarding the second question, participants reported that among the positive impacts of the Internet, the most noteworthy ones were: being able to maintain familial and other social contacts that might have been lost or not as strong, acting as a time saver

and allowing for an improved capacity for reflection and less on-the-spot decision making.

3.1 The Impact of Information on Various Dimensions of Empowerment

3.1.1 Information and Decision-Making

Although the majority of participants in this study reported employing the Internet mostly for e-mail, some decisions were made by those who used this technology as a resource for information. Further examination revealed, however, that the information obtained by these women were not necessarily utilized for purposes of their *own* empowerment, but rather was often used to *aid others* in their decision-making:

R 1: “[It hasn’t made any] real difference in decision-making per se, but IS helping me help my family make more decisions (I’m giving them information from the ‘Net, which they use to make their decisions.”

R 2: “[I] can get information from the ‘Net [...] which I do use for decision-making, albeit indirectly. For example, if I can get information about five different universities I would tell my parents (when I was unmarried) or my in-laws (now that I’m married) so that they can compare the course fees and reach a decision themselves. In this way, I feel like I’m contributing. For example, I will give my father information about something and in this way I feel like I’m helping him make a decision.”

Notwithstanding the finding that women sometimes gathered information for other people’s use, women also reported gathering information for their own decision-making purposes, though often decisions were made in conjunction with their husbands:

R 17: “I’ve noticed that I now make more decisions with my husband than I did before we got our home computer. For example, since I can now get banking information, or information on traveling, we are more likely to decide on which bank to open our account in *together* (rather than just letting my husband decide on his own.”

The types of decisions made were also of interest. In order to better understand how the Internet impacted women's decision-making, and how this in turn effected the empowerment of women, it may be helpful to compare the types of decisions made by

women in the current study with Jejeebhoy's (1997) index of six typical decision-making indicators for Indian women²:

- (1) purchase of food
- (2) purchase of major household goods
- (3) purchase of small items of jewellery
- (4) course of action if child falls ill
- (5) child discipline
- (6) decisions about children's education and type of school

The first three decisions, which involve choices about purchases, are economic in nature and were expected to be done more easily on-line. The results of the study however, suggest that the Internet was rarely, if ever, used to make major (or even minor) purchases, though this may in part be due to cultural hesitations about using technology in this way:

R 3: "I feel hesitant to make any major financial decisions from information I get from the Internet because it may be too risky with all the fraud going on these days."

The last three decisions in Jejeebhoy's index may be more indirectly affected by information of these issues acquired from the Internet. For example, Indian women may become more empowered by making better, more informed and confident choices about their children by actively searching for information on these issues independently on-line. According to the findings of this study, this is exactly what many participants did:

R 5: "I have two small children. I've used the Internet to get healthcare information especially regarding food and nutrition guidelines, after friends suggested I go online to get this kind of information."

R 13: "The main area of decision-making around the household I've used the Internet for has been for my daughter and her school admission. I've surfed various sites to find out what the best schools are, and after discussing this with my husband, we've made this decision together."

² This study was taken from a UN report on women's empowerment, (Kabeer, 1999); the significance of the study is that Jejeebhoy's index is reflective of typical decisions made by Indian housewives.

What is of interest is to examine if in addition to greater quality and/or confidence in traditional decision-making, there is a shift to more traditionally 'male' economic decision-making for these women. According to the results of this research, greater exposure to on-line information did not lead to housewives making significantly more powerful decisions centering around the marriage of children or major purchases, rather decisions were more in-line within the realm of traditional household decisions in the area of cooking (searching for recipes) and child-welfare.

Finally, there was the finding that the Internet helped some housewives make more informed choices about issues that concerned their own well-being. This was particularly the case in the area of 'women's health issues' an area that has traditionally been very difficult for women to get information on, due to women's reluctance to openly discuss these matters in public. In this way, technology³ was able to help women overcome cultural limitations, and acquire potentially life saving information:

R 5: "I think the 'Net is good for getting urgent medical updates on healthcare issues. If it weren't for the Internet, then I would have gone to the newspaper or T.V., but the Internet is preferable since it has more frequent, up-to-date information and I can get answers to specific questions which is something I like very much."

R 10: "I personally find Websites with questions and answers on important health issues very helpful for finding out information about health concerns that are too private to discuss even with my family doctor or close friends. The anonymous quality of the Internet is much appreciated in this area."

3.1.2 Information, Technology and Self-Confidence

In line with the expectations of this study, exposure to the Internet increased women's self confidence in a variety of ways, but particularly so in its ability to make the women more self-sufficient, which in turn made them more assertive both in their

³ The structure of the Internet itself, particularly the secretive, (anonymous) question and answer style of many websites may have helped women to have the courage to ask questions more openly.

decision-making capacities and their abilities to accomplish a task without the help of others:

R 18: “[B]efore when I’d consider doing something, I’d ask my husband or my in-laws or friends for their advice, to help me weigh the pros and cons of the problem at hand. Now though I don’t make all my decisions via the Internet, I’m more likely to get information and get my own questions answered myself through using the Internet...Being able to do things on my own (finding information without depending on others) has been a great asset in terms of making me more assertive and confident.”

Feelings of greater autonomy and corresponding self-confidence were also the result of being able to master the technology by oneself - an area women have often been reluctant to try due to self-doubts about female capabilities in a traditionally male dominated domain.

R 14: “The fact that I *taught myself* how to use the Internet has increased my confidence enormously. I feel very good about learning the computer by myself, before I wouldn’t have thought it possible, and would have asked others for help, now I’m more confident in my abilities in this area, as well as in other areas, as I feel more able to learn and master new things.”

R 16: “I feel more self-confident about myself that I was able to learn something technological! I never thought I’d be using the computer so much, I would have been scared to think of it even a few years ago!”

In addition to instilling a greater feeling of autonomy, information solicited from the Internet also made women feel more confident as a result of their newly acquired knowledge. This in turn often made women more open and willing to participate in daily conversation with elders, and/or other authority figures due to greater confidence in being more ‘informed.’ As a result of participating more, women reported the positive impact of social approval (such as the case of a professor becoming more impressed, or a husband indicating his validation of his wife’s opinions) on their self-esteem:

R 4: “Now when I talk with others and we have a disagreement, I’m not so afraid of appearing saying something dumb. I can now check the Internet and see who’s right or wrong. This gives me more confidence in talking to other people, since I have more assurance in the validity of my own knowledge.”

R 1: "If there is any recent information on a topic that isn't available in books I can get it earlier from the Internet and can perform better than those without access to the Net so I often end up impressing professors which in itself increases my confidence."

It may be argued that women's greater confidence in teaching themselves how to work and use a computer (their ability to learn and master technology) in addition to their greater social confidence as a result of their knowledge acquisition, as well as their greater confidence in being able to solve problems more independently, may have translated to a more positive outlook and self-assertive attitude in other areas of their lives, such as their ability to pursue a career outside the home:

R 13: "It's [the Internet] has really helped my self-confidence a lot. When my child grows up I feel more confident now that I've been able to open up a new circle and will be able to go outside into the world and gain employment. I feel more confident that I will have this capacity."

3.1.3 Knowledge and Increased Value

Findings were not consistent with expectations, that is, participants' use of the Internet did not result in their being treated as more 'valuable' members of the family, in the Western sense (to be valued as an individual) but *were* treated more 'valuably' in the Eastern sense of helping others' and thereby becoming more valuable and contributing more to the social group, in this case, the family unit. In the cases of the housewives interviewed, many reported feeling more valuable to their household as a consequence of being more able to help and supervise their children in the educational work:

R 2: "Yes, because I can get information more easily to help others in my family (before my father-in-law would have to run to the train counter, now I can easily look this information myself and save him the hassle). So in this way I feel more valuable since I am making his life easier."

3.1.4 Social Status, Respect and Knowledge

Initially, most participants reported that the Internet has a negligible effect in this area. Consequently, the women were further questioned on how their new found

knowledge, both in learning a new technology, as well as the information acquired from it, had affected the women's social relationships. It was revealed that knowledge sharing, as well as teaching others how to use the Internet, did cause some family members and friends to turn to the participants for help and in this way earned the women more respect:

R 1: "Yes, indirectly (when I share knowledge with friends) then yes I get more respect for all the 'neat' new things I have learned from the Internet. At school, I can get more admiration if I can somehow demonstrate the knowledge I have attained, whether in schoolwork or in everyday conversation."

R 3: "My parents, sisters and friends don't have much exposure to the Internet, so they often come to me when they are seeking information on a particular problem. When people come to get my help it makes me feel like I'm important because I know how to use the Net, a lot of people assume that I can help them with their computer problems, because I'm familiar with 'technology' so they ask me questions that deal with the basics of computers, even my husband."

R 5: "Yes, people ask me a lot more questions now than they ever did before. Even my husband asks me how to do things on the computer, as well as my in-laws. This makes me feel, gee, I guess I really KNOW something and I feel happy about that."

3.1.5 Knowledge and Meaningful Work

Though at first glance, the majority of answers to this question seemed to be negative, (i.e. that on-line exposure did not result in housewives having more meaningful work within the household) it was later discovered, that since 'meaningful work' often meant helping other family members for Indian women, that in this sense the Internet did have a positive impact in this area for many women:

R 2: "Not more meaningful work per se, but yes, in a way: at least in terms of helping others in my family by giving them useful information."

R 5: "Often I'll get information regarding news, job profiles etc. feeling that I got this information and tell my family and friends about it, which makes me feel important to be able to share this information. Two recent examples...when I learned about an important medical conference coming to Kolkata, and when I told my brother that there is a job vacancy he might be interested in, it really makes me feel like I am *contributing* since he actually went and applied for the job after I told him about it. It's like I'm able to indirectly help others make important life decisions, and in that makes me feel I am making a meaningful contribution."

Another finding that augments the previous finding, is that some women reported feeling that they were more interested in finding more 'meaningful work' outside the home as a result of more on-line activities:

R 13: "Not more meaningful work. Though now I'm more interested in finding more meaningful work (i.e. working outside the home) now that I've been exposed to the outside world more through the Internet."

3.1.6 Technology and Empowerment

Consistent with expectations, most women, irrespective of the manner in which they used the Internet, reported feeling more empowered as a result of their use of this technology. This sense of greater empowerment centered on feelings of being more self-sufficient, that is, being able to access information on one's own, without relying on other people:

R 2: "I feel much more independent. If there was no 'Net, the I would have had to rely on others and asked friends or seniors. Thanks to the Internet, I can make independent decisions by myself."

R 8: "I feel really independent in being able to find my own information, recipes, patterns etc. without having to trouble anyone but myself. This is really great and revolutionary for me."

A second manner in which the Internet empowered women was by giving them more freedom to make decisions at their convenience instead of on the spot; as a result women were more likely to feel more confident about the decisions they made since they had more time to reflect on their choices. This was of particular significance when it came to important decisions like one's career, as one participant explains:

R 1: "A really great thing is that thanks to the Internet, I have all this information at my fingertips, it helps me decide whether or not I will go for a certain job or not. But the main thing is that I can take my time and think about it, which makes me feel a lot less pressured since I have more time to reflect."

By allowing women more time to reflect on their decisions, the Internet also increased women's feelings of empowerment on another level, by allowing women to save time, which they could choose to devote to more meaningful and empowering pursuits such as their careers:

R 5: "By getting information fast I'm now working in the office; it saves me time which I use more for my office work."

In addition to the positive impacts of knowledge acquisition on the women's own self-perceptions of empowerment, results suggest that e-mail may have had a less direct but still potent effect in this area, for some of the women in this study. For example, a few women reported that the power of e-mail to strengthen their ties with family and friends provided them with significantly more mental strength, which added to their overall feeling of empowerment and ability to deal with obstacles in their lives:

R 1: "[B]eing able to e-mail friends and family makes me feel closer to them; these close relationships are what gives me more mental strength and the feeling of being able to DO more..."

It may be argued that the inherent structure of e-mail, in which both the senders and recipients of mail are able to communicate with relative anonymity (i.e. as the physical body is not a factor, the social aspects of communication dynamics are completely different from face-to-face communication, allowing for greater personal freedom) also encouraged the empowerment of women, in the sense that women were more able to communicate with those in authority in a different manner than had they been obliged to deal with them face-to-face. An example of this idea may be found from a mother-in-law's story about her e-mail communications with her daughter-in-law:

R 11: "My son married a Thai girl and they live in Thailand, so as a result I have never met my daughter-in-law to this day. One day I was delighted to receive an e-mail from her (out of the blue)

and of course I replied to it and we began our relationship which has grown closer and closer all via e-mail.

In our Eastern culture many mothers-in-laws are not very close to their daughters-in-laws especially due to the authority structure. But I suspect that the physical distance coupled with the fact that in a way it is much easier to talk via e-mail (you feel more free to talk without having the face-to-face awkwardness) has made her open up a lot more to me than I think she would have had she lived in Kolkata with us. She's revealed a lot of her secrets and intimate feelings about many things to me and I really feel close to her and grateful for our relationship."

3.1.7 Knowledge, Career and Empowerment

Although the majority of women reported that the Internet had a negligible effect on their careers, of those who reported a positive effect, subsequent analyses revealed that this impact was multidimensional.

For example, while some women were simply not interested in the idea of a career outside the home, others reported that the experience of surfing on-line opened their minds to more options including the possibility of working outside the home:

R 13: "...[N]ow I'm more interested in finding more meaningful work (i.e. working outside the home) now that I've been exposed to the outside world more via the Internet."

R 18: "Before I started surfing, I was never really interested in a career outside the home. But the Internet, by exposing me to a whole new world, has opened my eyes to new possibilities. Now, for the first time, I'm considering having a career outside my housewifely duties..."

In addition to psychologically motivating some women to consider working outside the household, for those who were already career minded, the Internet provided useful information on job vacancies, allowing women to simultaneously seek and compete for jobs from the comfort of home. It may be speculated whether or not these same women would have gone through the trouble of seeking employment had they been forced to go through the hassles of doing so the old fashioned way (i.e. waiting in line, getting on crowded buses with small children etc.) as their household duties may not have allowed for sufficient time for such undertakings.

Of the women who utilized the Internet as a resource to get information on jobs, a few were able to successfully gain employment in this manner. However, the utility of the Internet was not limited to simply being a resource that listed job vacancies; the additional information it provided, particularly about the background of companies seeking employees was a definite asset for job applicants. As one young college girl who applied for and got a job through information she found from the Internet, explains when asked how things would have been different had there been no Internet:

R 1: "There wouldn't have been as much information for the interview, [so] I wouldn't have been as well prepared. In India, during a job interview, employers favour candidates who demonstrate solid knowledge about the company from whom they are seeking employment. I feel that having the information from the 'Net may have made a difference between getting the job and not. ...[The] most important function of the 'Net for me is to update my knowledge. In my opinion, if there are two identical candidates, and one has access to the Internet and gets more 'background' information about the job etc. then this candidate will probably get the job."

In addition to opening up job opportunities for those women interested in a career, the Internet, as an information and communication technology, was found to have an equally powerful effect on a more covert level. As was illustrated by one participant's story, the technological component of the Internet revolutionized this woman's ability to have both a career and a family after having her first child, something that would not have been possible a decade ago (before the advent of the Internet) by allowing her the flexibility to work from home. The story provided by this participant, provides an illustration of how technology has the power to revolutionize culture, by re-defining the structure of work:

R 6: "In my case, the Internet has really empowered me. Without it I wouldn't have been able to work from home. Since I now have a small child, who is my first priority, if I couldn't work from home, I wouldn't be working at all, and would have no choice but to give up my career that I have worked so hard for (I have been working for the past ten years).

When I first brought up the idea of doing my work from home using the Internet, my company basically thought I was crazy. India is pretty conservative, even now, and the idea of someone working from home, especially a woman, was really quite unheard of. I still persisted, and when I

convinced them that I could do my job just as well, in addition to being a more cost-effective option for them, my employers gave it a chance. I can't imagine how different my life would have been today, had I been forced to give up my career for my baby. Now I can enjoy both."

4.0 Research Findings II: The Impact of the Internet on the Families of Semi-Rural Women:

In order to assess the impact of other family members on the empowerment of the housewives interviewed, some of the women's husbands and children were also interviewed in this study. The original intent of these interviews was to ascertain the extent to which husbands and children supported their wives' and mothers' use of the Internet. However, as it soon became clear that all the husbands and children were very supportive, even encouraging, interviews were modified to a more conversational format, in order to gather more information on how spouses and children used the Internet themselves.

4.1 Spouses

All husbands interviewed, were highly supportive of their wives' use of the Internet. They perceived the technology as progressive and felt that it was necessary to keep up to date with current affairs. In contrast to their wives, the men reported using the Internet more as a resource for information (i.e. frequent use of search engines) than as a social resource (i.e. for e-mailing purposes). In terms of observing any changes in their wives' behaviour after using the Internet, one husband reported noticing his wife coming out of her shell more than before:

R 1: "Since _____ has started spending time on the Internet, I've noticed that she has become less shy. She talks more with her friends, and I'll catch her saying things like, "Did you know 'X'? and just generally give her opinions more than she used to."

4.2 Children

Like their fathers, children⁴ were also highly supportive of their mothers' use of the Internet. Although the children, like their mothers, gained considerable pleasure from e-mailing their friends and family, many also reported that they got a lot of satisfaction from using the Internet as a tool for helping them with their schoolwork, often getting information from the Internet that gave them a definite advantage, both in their schoolwork and in extra-curricular activities where knowledge was a definite asset:

R 1: "I e-mail my friends and family a lot (both inside and outside India). I also enjoy surfing the Internet for information, both to satisfy my own curiosity and for school. For example, once I needed a formula for a physics class, and I discovered an extremely cool physics tutorial with questions and answers which was extremely helpful. I felt a lot more self sufficient, since before I would have had to ask my teachers or other students which I could figure out all by myself."

R 2: "Using the Internet gives me an 'edge' on others especially regarding extra-curricular activities such as quizzes. I can get a lot of extra knowledge preparing for activities such as these. This makes me feel really good about myself and my scholastic abilities."

One girl commented that she particularly enjoyed learning with the Internet rather than television, since she liked the active learning feature, and that she would sometimes watch something on television which would peak her interest, and later use the Internet to find out more information and learn more about her topic of interest. In this way, children exhibited a quest for learning that was more exploratory in nature, than their mothers':

R 2: "In terms of learning, I like the fact that the Internet encourages active learning (you're participating more than when you're just watching T.V. for example, and also being able to learn visually is a good change. It makes me even more interested."

R 1: "Another example of how I use the Internet is to supplement information I get from T.V. For example, I'm very interested in Egypt and pyramids, I just can't get enough information about these kinds of things! So recently I was watching a documentary on pyramids on the Discovery channel, and spent an hour afterwards just surfing for all kinds of stuff and had a blast that I got introduced to through T.V. and was able to explore in detail through the Internet."

⁴ The children interviewed in this study were all very good students, and above average in their ambitions (two wanted to go to university, the third wanted to go to medical school) so it may be that they were more motivated to learn than other children their age. Clearly, then, although this may constitute a somewhat biased sample, it gives a good idea of how the technology was used by children motivated to learn and utilize it as an information resource.

5.0 Discussion

The results of the present investigation, when compared to the results of the M.S. Swaminathan Research project⁵, suggests that the picture did not drastically differ for semi-rural or urban women, rather, Indian women of all strata basically sought information that would improve the lives of their families (including financial and health information). The only noteworthy difference found was that the more affluent women were more likely to use the Internet for social purposes (i.e. e-mailing) and were more likely to pursue career information for more personal self-advancement such as getting a job for themselves.

Essentially, then, obtaining information for the benefit of one's family was a common objective for all Indian women. Women from a higher economic status had more likelihood of having more disposable leisure time, which they could afford to employ for less utilitarian purposes and use to bridge social ties through greater e-mail correspondence. Also due to their financial advantage (i.e. as few of the urban housewives were obligated to work outside the home out of necessity), they had the option of pursuing the Internet more as a recreational activity, as well as for more individual benefits such as in the area of career choices and opportunities.

6.0 Concluding Remarks

In order to further our understanding of the findings of this research, it may be helpful to recall a central issue addressed earlier in this paper: does development impose

⁵ The M.S. Swaminathan Research project found that the central areas women sought information were: sources of supplemental income, including information about public welfare schemes and low-cost insurance, as well as information on health-care issues (especially child-bearing and rearing). It was also found that certain women used the information centres to acquire more information on how to start up new family businesses (such as manufacturing incense sticks).

a Judeo-Christian model at the expense of indigenous culture? Subjecting the results of the present study to an analysis from a Western perspective (traditionally advocated by major theories of development) the most apparent conclusion is that the Internet did not significantly empower the Indian women interviewed in this study. Clearly, the results indicate that women did not utilize the information they acquired from the Internet to make major household decisions, and instead were sometimes found to give the information to others within the family to help them make decisions. Viewed from this light, the conclusion reached is simple: technology did not result in greater emancipation of women in India.

If these same results are analyzed within the context of Indian culture, that is, if we re-shape our concept of what development entails so that it conforms more closely to the ideological basis of Indian culture, our conclusion may be quite different. Thus viewed from a paradigm of development that is more Eastern in nature, an apparent failure to empower may have in reality been successful since the use of technology may have actually empowered Indian women *within the context of their own culture*. More specifically, it may be necessary to re-define *empowerment* in a manner that is more congruous to Indian women's own sense of the term. Doing so warrants an appreciation of how Indian women fit into their role within the family⁶, which is arguably more integral to their sense of self than for women in the West.

⁶ The issue is not merely how Indian women fit into their role in the family, but to a large extent, the broader Indian authority structure (which begins at home). In India, power is so directly associated with one's age (i.e. elders having more authority than younger people) that the idea has infiltrated Indian culture in terms of customs and rituals (special holidays reserved to honour elders, and the custom of 'pranam' in which one prostrates oneself at the feet of an elder), as well as in the Indian language (a person even a year older is expected to be addressed by his/her juniors with the suffix 'da' or 'di' out of respect). Consequently elders have exerted considerable power in India, - for example parents have had the authority to make marriage arrangements for their children (thus deciding the welfare of their children's future sometimes without the children's involvement in the process).

For example, in the Indian household, lines of hierarchy and authority are more clearly drawn than in Western households, providing the structure and foundation of all family relationships. All family members are socialized to accept the authority of those ranked above them in the hierarchy. Traditionally, the father, who is considered the head of the family, is the principle authority and decision-maker. From an early age, males learn to order others within the household but expect to accept the direction of senior males, even in adulthood. Ideally, even a mature adult man living in his father's household acknowledges his father's authority on both minor and major matters. As women are especially strongly socialized to accept a position subservient to males, they often learn to subordinate their personal preferences to the needs of the family as a unit.

Consequently, there is a tremendous emphasis on the unity of the family grouping, especially as separate from individuals outside the family circle. Within the family unit, there is a focus to de-emphasize ties between spouses and between parents and their own children in order to enhance a wider sense of harmony within the entire household.

Psychologically, this may manifest in family members feeling an intense emotional interdependence with each other and the family to the point where the family may be perceived as an 'organic unit'. In this way, ego boundaries are permeable to others in the family, and any notion of a separate self is often dominated by a sense of what psychoanalysts have termed a more inclusive "familial self," (Roland, Alan). Interpersonal empathy, closeness, loyalty, and interdependency together become valuable qualities, crucial to survival in life within the family.

For the Indian woman, then, this sense of 'familial self' may be even more emphasized due to her role as principal role as housewife and mother. Whereas in the

West, we are more inclined to separate our sense of self (power over) to a more independent one in our definition of empowerment, empowerment, in the Indian sense, might refer more to (power within) or power within the family unit⁷. In power within, the social or ‘familial self’ becomes more empowered by being more endowed with power within the social group, in this case the family. As Starhawk (1982) elaborates on the perception of the self in Eastern societies:

“[T]he individual self can never be seen as a separate, isolated object. It is a nexus of interwoven relationships, constantly being shaped by the relationships it shapes. Integrity also means integration – being an integral and inseparable part of the human and biological community.”

Thus, Internet technology, in this study, was found to empower Indian women’s sense of familial self by allowing them to make more meaningful contributions within the family as a unit. While the Indian household authority system remained intact (i.e. the elders were still the ultimate head of the family and made decisions for the benefit of the family as a group), the Internet did allow Indian housewives to acquire meaningful information that was subsequently utilized to inform other members of the family in making their decisions. Through their greater contributions to the family unit, Indian housewives thus became less dependent on elder family members, and in the process acquired greater emancipation as a result.

The Internet also made a positive impact in the area of housewives’ careers, by motivating some women to try for job openings, and providing information that sometimes made the difference between getting the job or not. The long term effect of

Starhawk traces the origin of the Western conception of *power over* to Judeo-Christian beliefs of God as external, and Eastern notions of *power within* to Eastern religions where deities are more likely to be perceived to be residing within us and nature.

housewives' greater participation in the job market, which will lead to their greater financial independence, may have important implications for the empowerment of these women. For example, since there is an economic basis for the Indian authority structure (i.e. elder male relatives typically hold the most power due their role as financial supporters of the family) women's (particularly newly married housewives who are at the lower end of the status hierarchy) financial independence may clearly have a loosening effect on the rigidity of these power relations, which form the basis of the Indian family structure.

Technological features of the Internet also had indirect impacts on Indian women's empowerment. First, by acting as a time saving option for acquiring information, Indian housewives became more free to spend their extra time in the manner they chose, whether it be more personal leisure time, more time for their career, or more time to spend on their family.

The high use of the Internet for e-mailing purposes warrants some attention to addressing the following questions: first, why was the Internet so heavily used in this manner, second, what speculations can be made regarding the long term effects of e-mail as a method of communication for the empowerment of Indian women? An understanding of the Indian social structure provides some insight as to why establishing and maintaining social relations via e-mail may have been such a high priority with Indian women. As Roland (1988) elaborates:

“Compared to Americans, there's much less of a sense of an individual self among Asians. They experience themselves as far more embedded in a net of extremely close emotional relationships. They have what might be called a familial self, one that includes their close relationships in their

own sense of who they are. This kind of self simply does not exist in the West to nearly the same degree⁸.”

Finally, it may be argued, that the ability to create and maintain social relationships through the use of e-mail, which fostered the development of social relationships devoid of the physical body, may have made it possible to establish more harmonious relationships, as many of the inherent power relations, unavoidable when social interaction involves the presence of the physical body, were not present. For example, it is common knowledge that the body embodies a host of social cues such as posture, gender, ethnicity, gaze, intonations reflected in the voice that play a prominent role in social interaction.

The dearth of these social cues in on-line communication, re-defines the communication environment as one that is more democratic, since one's thoughts and ideas become the focus of attention without the distraction and prejudice of judging one by their outward appearance, as one's physical self remains hidden throughout the process of interaction. The connection between surveillance of the body (and the resulting knowledge of it) and power relations was outlined by Michel Foucault. According to Foucault, it is through a supervision of the conduct of each individual that allows a person's behaviour to be assessed, judged, analyzed and calculated. This surveillance is both a condition and a consequence of the development of a knowledge of an individual. This is particularly the case when social interaction takes place between two people of differing social status. For example, it is by making an individual conscious of his/her

⁸ The close familial ties that Indians typically hold, to some extent based on economic interdependence, also provides insight as to why it may be useful to maintain close familial ties as much as possible, despite less close physical proximity. For example, there are often strong networks of kinship ties through which economic assistance and other benefits are obtained. Not infrequently, clusters of relatives live very near each other, easily available to respond to the give and take of kinship obligations. Even when relatives cannot actually live in close proximity, they typically maintain strong bonds of kinship and attempt to provide each other with economic help, emotional support, and other benefits. Clearly, e-mail can provide a useful means of bridging this gap.

visibility (and any deviations from culturally appropriate behaviour) that the person of higher social status is assured of his/her power: in this way visibility (knowledge of the body) becomes both the instrument and object of power. But when communication takes place in the absence of the body, as in e-mail, this inherent power dynamic is lost. As was mentioned in one case study⁹, the effect can be revolutionary to the extent that women would have been more inclined to avoid interacting with elders, do so more freely and openly. In this way, power relations may be changed, not in an overt hostile attack, but in a more covert way so that interaction takes place on more egalitarian terms and empowerment is gradually asserted, harmoniously, *within* the system.

At this stage, it is difficult to speculate on the long term effects the Internet may have exerted on the authority system in India. As previously noted, authority has traditionally been delegated to elders in India, as they have been perceived to be the bearers of wisdom. According to the Webster's Ninth Collegiate Dictionary, wisdom is defined as 'accumulated scientific knowledge.' From the results of the present research, it is clear that the housewives interviewed did not accumulate a vast quantity of information through their use of the Internet, favouring instead, to seek out specific answers to specific questions they had when employing this technology as a resource for information.

However, some hint that the picture may be changing for future generations to come may be ascertained from the self-reported use of the Internet from some of the children interviewed in this study who reported more keen interest and aggressive use of the Internet as a resource for obtaining information. It is too early to tell, but if the trend

⁹ See interview eleven. The participant recounts a story about how she felt the Internet made her daughter-in-law more open and free in her interactions with her, something she did not think possible if they had

continues to women of later generations who use Internet as a resource for accumulating knowledge, and perhaps even use the technology as a means of opening up their circle to include more opportunities that enhance their financial independence they may become more independent from the elders' authority over them. The long-term impact of this technology in perhaps changing the authority structure and in turn, the thought process and social structure, so central to the Indian consciousness, remains to be seen.

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