

A Theoretical Synthesis
Of Telecommuting and Incidence of Family Violence

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(ABSTRACT)

The rapid advancement of computer and telecommunications technology has made working in the home a practicality. Dubbed “telecommuting,” this manner of work describes a circumstance where the employee, through the use of some form of telecommunications device (most often a computer with some form of modem), works at a location other than a centralized office (Hill, Hawkings & Miller, 1996). In many cases, the location of work is the home. Current estimates place the number of telecommuters in the United States at 19.6 million and growing (Swoboda & Grimsley, 2000). However, while emphasis has been placed on the positive consequences of telework, thus far little attention has been given to the latent negative consequences of telecommuting.

The focus of this work is to develop a theoretical paradigm that explains how telecommuting may potentially contribute to abuse in home. The types of abuse targeted by the theoretical paradigm are: child, spouse, and elder abuse. In particular this model helps identify those telecommuters who are at greatest risk for the perpetration of abuse. This model is informed by a stress paradigm of abuse and identifies five variables that are considered to be crucial in affecting violent outcomes among telecommuters: 1.)

socioeconomic status / occupational status; 2.) gender; 3.) crowding; 4.) social isolation; and, 5.) boundary control. How these variables interact within the telecommuting paradigm is described. Ultimately this work serves as a platform from which future empirical research may be conducted.

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CHAPTER ONE: INTRODUCTION

The last several decades has seen a proliferation of computer and telecommunications technology, both at work and in the home. A direct consequence of this mobilizing technology, is that the worker is no longer tied a central place or location in order to accomplish their work. The term “telecommute,” first coined in 1973, describes a type of working “model” wherein the employee, through the use of some form of telecommunications device (most often a computer with some form of modem), works at a location other than a centralized office (Hill, Hawkings & Miller, 1996). This new place of work is in most cases the home, often referred to as a “home-office” or “virtual office” (Braus, 1983; Snizek, 1995; Eldib & Minoli, 1995).

As telecommuters themselves are espousing the benefits of telecommuting, so to are the employers as they begin to see substantial increases in their employee productivity and their own “bottom line” (Snizek, 1995; Hill et al., 1996; Eldid & Minoli, 1995; Kugelmass, 1995; *American Demographics*, 1999). Thus a great many employers are instituting telecommuting as a flexible employee option or as a standard position. In some cases these employers are giving incentives in order to encourage their employees to telecommute (Kugelmass, 1995). It is unquestionable that telecommuting provides a plethora of benefits to the employee and the employer, but perhaps too great an emphasis has been placed on the positive manifest consequences telecommuting, while the potential latent consequences have been largely ignored. As Merton (1968) informs us, manifest functions refer “...to those objective consequences for a specified unit, which contribute to its adjustment or adaptation; the second (latent functions) refer to unintended and unrecognized consequences of the same order” (Merton, 1968). In short,

while telecommuting has been praised for its positive intended and recognized consequences, it may have certain negative, unintended consequences that have largely gone unrecognized. It is those potential negative latent consequences of telecommuting that are the subject of this thesis.

It has been reported that child abuse perpetrator rates are higher for mothers than for fathers (Straus & Gelles, 1995; Wauchope & Straus, 1995; Renzetti & Curran, 1998). This rate of difference may, in part, be a function of women's greater frequency of contact with children, in their role of primary caregiver, rather than an intrinsic quality that women are thought to possess (Wauchope & Straus, 1995). It therefore begs the question of whether the increased contact of a telecommuter with home and family will increase abuse incidence.

1.1 Statement of the Problem

The focus of the proposed research is to develop a theoretical paradigm that explains how telecommuting may potentially contribute to abuse in the form of physical violence, the types of abuse targeted by the theoretical paradigm are: child, spouse, and elder abuse. The theoretical paradigm that is developed in this thesis hopefully will be tested empirically in future research in the form of my dissertation.

1.2 Importance of the Research

As the rate of telecommuting continues unabated, it becomes increasingly important that we understand all the consequences of its implementation. By doing so we may be able to maximize the benefits of telework and minimize its potential negative consequences. The potential negative consequence of family violence is of primary concern in this thesis. It is the hope of this author that the research proposed here will increase our understanding of this social phenomenon, and perhaps contribute knowledge that will help assuage this serious social problem.

CHAPTER TWO: REVIEW OF THE LITERATURE

2.1 Home-Work

Though telecommuting is a recent phenomenon, working in the home is not. Since the inception of the home, from the earliest periods of human history, some form of production has taken place there. According to Albrect (1983), work in the home may be organized into one of three categories: one, "...the production of goods within the home, primarily for the purpose of home consumption; two, handicraft or artisan production which is carried out within the household and sold by household to local markets; and three, production where urban entrepreneurs put out work to home workers to be completed in return for piece rate wages" (Albrect, 1983: 414). The last category has also been referred to as the "putting-out" system, cottage industry, outwork, or industrial homework. (Albrect, 1983; Dangler, 1986). Telework may be considered to be the latest incarnation of the "cottage industry".

The earliest form of a "putting out" system has been recorded as occurring in the textile centers of Flanders in the twelfth and thirteenth centuries (Albrect, 1983; Dangler, 1986). By the fifteenth century the putting out system had become prominent means of producing textiles in England. With the coming to the "Industrial Revolution" in the nineteenth century and the development of factory-based production, the contributions of the cottage industry declined (Dangler, 1986). However, despite advancements in production and the prominence of factories, "home-working" continued to occur well into the twentieth century. In May 1981, the Labor Minister of Japan estimated that as many as 1.4 million homeworkers were being employed in the country (Dangler, 1986). With development of the personal microcomputer and advanced telecommunication

technology, home-working had become revitalized and has ushered in the new era of telecommuting.

2.2 Telecommuting

Telework was foreseen as early as the 1950s, but limited communications technology made telework on any practical scale prohibitive (Hill et al., 1996). “Companies first seriously considered the possibility of telework as a means to make them less vulnerable to fuel shortages during the OPEC oil crisis in the early and mid-1970s” (Hill et al., 1996: 293). The availability of the microcomputer in the late 1970s and early 1980s began the process, which would make the possibility of telework a reality. In the early 1990s there were around one million employees that telecommuted at least 8 hours a week (Eldid & Minoli, 1995; Hill et al., 1996).

By 1995 this number had increased to upwards of 8 million persons (Braus, 1993; Snizek, 1995; Hill et al., 1996), with a projected increase of 20 percent to 30 percent a year through the year 2000 (Eldid & Minoli, 1995). Current estimates place the number of telecommuters in the United States at 19.6 million and growing (Swoboda & Grimsley, 2000). “In the last several years, the number of employees with virtual office arrangements has grown exponentially, increasing most rapidly in among the large corporations” (Hill et al., 1996: 294). For instance, 28,000 of AT&T 58,000 employees telecommute at least part-time (Flynn, 1999). The advancement of relatively affordable sophisticated computers and reliable but likewise affordable telecommunications technology has made telecommuting not only efficient, but also practical.

With its increasing popularity among corporations and employees, the federal government has come to recognize the potential complications that may be incurred by the use of telecommuting. In early January 2000, Labor Department Advisory in conjunction with the Occupational Safety and Health Administration (OSHA) declared that companies that allow employees who worked at home, would be responsible for federal health and safety violations that occur in home work sites (Swoboda & Grimsley, 2000). Though the Labor Department and OSHA recanted this declaration the next day (to await further investigation) because of protests from large corporations, the initial action taken by government underscores the concerns that telecommuting has elicited.

Thus far, substantive, empirical research in the area telecommuting has been limited. What little research that has occurred has been largely exploratory in nature. Researchers are just beginning to grasp the scope and far reaching implications of telecommuting. Early research has tended to focus on boundary issues, that is to say, researchers have been concerned with how telecommuters are able to balance their “work time” with “family time,” or work task with domestic chores (Bailyn, 1986; Hill et al., 1996; Mirchandani, 1999).

Research by Trent, Smith and Wood (1994) suggested little difference among telecommuters and office workers in terms of the perception of stress generated by work. However even the authors admitted that their limited sample size (N=29) may account for the lack of a difference. A study by Hill et al. (1996) found that the telecommuters responded in one of two ways to telework. Some of the telecommuters thrived because of greater self-autonomy, while others felt they had greater difficulty maintaining

boundaries between work and home life. However, in general, the telecommuters in both categories were quite positive about telecommuting.

A study by Norman, Collins, Conner, Martin, and Rance (1995) found that the stress felt by telecommuters, was related to whether they attributed work related problems internally or externally. Those telecommuters who were likely to attribute work problems to internal factors (those who felt they themselves were directly at fault) were subject to greater degrees of stress, than those that attributed problems to external factors. In most of this early research the primary subject of analysis has been the telecommuters themselves; little research has examined the effects of telecommuting on the family of telecommuters (Hill et al., 1996).

2.2.1 The Telecommuters

Most telecommuters tend to fall into one of two categories. One type is the white-collar telecommuter who tends to be a well-paid, valuable associate of a large corporation or business (Mirchandani, 1998). This type of telecommuter also includes managerial employees who practice remote managing from home. These professionals seem to benefit from the increased degree of self-autonomy afforded by telework, and increased time spent with family at the home.

The second category, one that researchers have largely neglected, is clerical teleworkers. These clerical teleworkers primarily do data entry work for modest wages. Unlike the white-collar teleworkers, it has been suggested that clerical workers may become the new “sweatshops” of the modern age. Dangler (1985) states that clerical teleworkers are isolated from their co-workers, and are less likely to organize in such a way as to protect their interests from businesses that would take advantage of them. No

systematic research has specifically addressed clerical teleworkers. Thus, very little is actually known about their situation. However, it is logical to assume that their position as teleworkers is probably complicated by a lack of resources that white-collar teleworkers do not have to contend with. As a result, clerical teleworkers may be more vulnerable to the potential negative consequences of telecommuting. It will be the place of future research to substantiate such hypotheses. Needless to say, more study is necessary to define the parameters and classification of teleworkers.

2.2.2 The Positive Consequences of Telecommuting

Researchers and telecommuters alike have discovered that telecommuting offers a number of advantages over office work. A commonly cited benefit of telecommuting is flexibility (Hill et al., 1996; Mirchandani, 1999; Mogelonsky, 1995; Kuglemass, 1995; Eldib & Minoli, 1995; Baylin, 1989; Kurland & Baily, 1999). By virtue of working at home, the telecommuter does not have to schedule their work in regular hourly intervals. As long as the telecommuter remains productive s/he can choose when and how long they want/have to work. “Flexibility in work arrangements can empower individuals with the control to integrate and overlap work responsibilities and family responsibilities in time and space, leading to a positive spillover and helping to achieve a healthy work and family balance” (Hill et al., 1996: 294). The obvious corollary to this flexibility is that teleworkers are also able to now spend more time with their families. Olson and Primps (1984) found that telecommuters with professional positions reported improved relationships with their families.

Another common advantage of telecommuting is the greater degree of self-autonomy that is afforded to teleworkers (Mirchandani, 1999; Eldib & Minoli, 1995; Mogelonsky, 1995). Teleworking in the home means that there is no official superior to watch over you as you work. It also means that you are not officially bound by the office rules and regulations, as you would be at work.

Telecommuting also allows employees to save money on child and elderly care. According to the American Association of Retired Persons, 14 percent of elderly caregivers were forced to switch to part-time jobs, 12 percent were forced to quit altogether, and 28 percent had considered quitting because of stress between family and work life (Kugelmass, 1995). An internal study by IBM in the early 1990s indicated that approximately 30 percent of its employees include some degree of care for an elderly relative among their responsibilities (Kugelmass, 1995). As of 1995, there were an estimated 36.4 million children of working parents that required some form of childcare. As the generation of America's population, also referred to as "baby-boomers," grow older and families are required to maintain double incomes to survive, child and elder care will continue to be a problem. Telecommuting serves as a possible remedy, in part for the costs associated by both child and elder care.

Reduced commuting time is another benefit attendant to telecommuting. It is estimated that by the year 2005, commuting by automobile will cost Americans 50 billion dollars in wasted wages and gasoline (Kugelmass, 1995). The average commute time increased 2 and half minutes between 1980 and 1990, and there is little sign that such conditions have improved over the last ten years. Telecommuting offers an opportunity, by virtue of ending the practice of car commuting to work, of reducing auto accidents,

limiting harm to the environment (as a function of reduced automobile chemical emissions), and reducing the occurrence of “road rage” acts of violence.

The employees are not the only ones to benefit from telecommuting; the organizations that permit telework also benefit. Perhaps the most immediate benefit that work organizations realize is the saved cost in real estate. IBM has reduced its office needs by as much as 75 percent in offices where telecommuting is used (Eldib & Minoli, 1995). State agencies in Texas have reduced their real estate from 200 square feet to 153 square feet per person (Flynn, 1999). In alignment with saved real estate costs are savings in equipment and utilities. Companies estimate that they save approximately \$8,000 annually, per telecommuting employee (Eldib & Minoli, 1995).

There also has been some evidence that telecommuting increases the productivity of its employees, as high as 15 to 20 percent (Snizek, 1995; Kugelmass, 1995). “Telecommuting programmers and system support personnel at Aenta Life and Casualty routinely complete their tasks 25 percent faster than their full-time office worker counterparts” (Kugelmass, 1995: 52). Though such reports of productivity increases could benefit from more systematic empirical study, most companies that utilize telecommuting report positive productivity gains.

Absenteeism is another area where companies see gains from the implementation of telecommuting. It has been estimated that companies lose approximately \$100 a day, plus wages, for every clerical worker who is absent (Kugelmass, 1995). “For every one-and-half percent increase in U.S. absenteeism, the gross national product declines by some 10 billion annually” (Kugelmass, 1995: 55). Telecommuting dramatically minimizes the issue of absenteeism.

2.2.3 Negative Consequences of Telecommuting

Of course, just as there are benefits to telecommuting, so too are there potential negative consequences. One of the most remarked upon problems associated with telecommuting is the issue of boundary control (Hill et al., 1996; Mirchandani, 1999; Bailyn, 1989). That is to say that by virtue of bring one's work home, the boundary between work and private life becomes blurred.

In this connection, a host of problems present themselves. By working at home the teleworker is now confronted with the possibility of having to do domestic tasks, such as cleaning or childcare, which may interfere with work productivity. Thus increasing one's degree of stress (Hill et al., 1996; Mirshandani, 1999). Also, with the easy availability of one's work equipment, there is the possibility that telecommuters may fall prey to a workaholic pattern, thus interfering with their family life or/and negatively impacting their health (Hill et al., 1996).

Another serious problem associated with telecommuting is isolation. Snizek (1995) warns there "...is a tendency for full-time telecommuters to quickly feel a sense of alienation due to their isolation from fellow workers and the organization" (Snizek, 1995: 16). As social networks serve to help one deal with daily stresses, this lack of support may exacerbate one's degree of perceived stress (Tseng, Jackson, & Karlson, 1991). A related issue to isolation, is the lack of legitimacy telecommuters may feel as a result of not giving "face-time" at work, or the concern that their fellow "office-based" companions or supervisors may think that they are not actually working or holding up their "end" (Snizek, 1995; Kugelmass, 1995). Rather, it is suggested that the

telecommuter is at home “lounging”, while their office-bound counterparts are toiling in the office.

There is also the issue of neglect. Though it may seem paradoxical that neglect would be an issue for telecommuters, properly balancing work time and family time may present a problem in terms of childcare. Employees often engage in telecommuting in order to provide affordable care for their children or elderly relative. For such employees, there is the perception that since they are working at home they will be able to spend more time with their loved one, or to provide adequate care without resorting to professional services, or. However, telecommuters sometimes discover that tasks in one sphere, (work or family) usurps or dominates their time, thus their performance in one (or possibly both) sphere(s) suffer. When this is the case, it is reasonable assume that in some telecommuting families, child, spousal, or elderly neglect may occur (Kugelmass, 1995; Hill et al., 1996).

To date, however, there has been no systematic, empirical research investigating the rate of abuse among telecommuters. There is related research however, which indicates that frequency of contact among family members may contribute to incidence of abuse (Straus & Gelles, 1995). It is only logical to question whether there is a higher incidence of abuse within the families of telecommuters now that they spend more time at home. It is the question which frames the theoretical model formulated in this thesis.

2.3 Violence and the Family

Child abuse, spousal abuse, and elderly abuse have all fall under the category of family violence. Yet, there has been some difficulty in generalizing the definition of

abuse, since researchers and law makers have tended to use idiosyncratic definitions, as a result there are difficulties in generalizing results of research studies (Gelles, 1987; Hampton, Gullotta, Adams, Potter, & Weissberg, 1993). In general terms, family violence refers to physical assault, sexual abuse, educational or medical neglect, malnutrition, failure to thrive, and mental abuse (Gelles, 1987). In many definitions, the component of “intent to do harm” is essential in determining whether an incident is considered abuse (Gelles, 1987).

Early research on abuse tended to focus on the individual traits of abuse perpetrators, suggesting that a psychological disorder as the cause of abuse. But current research takes a more holistic approach, wherein it is recognized “...that a broad array of social factors related to both the perpetrator and to social systems have been associated...” with physical and mental abuse (Hampton et al., 1993).

“Social and societal factors also must be considered when working with families engaged in domestic violence. Social isolation or inadequate social support has been found in perpetrators of child abuse and neglect as well as wife battering. Likewise, economic underprivilege and unemployment also have been linked to family violence.” (Ammerman & Hersen, 1990: 9)

“With respect to perpetrator demographic characteristics, abusers are more often single, young, poorly educated, and report a childhood history of observing and/or receiving abuse” (Hampton et al., 1993). Furthermore, their situation tends to be exacerbated by multiple environmental stressors, including crowded living environment, a large number of children in the household, and occupational difficulties (Milner & Chilamkurti, 1991). For the purposes of the proposed research three categories of abuse will be considered: child abuse, spousal abuse, and elderly abuse.

2.3.1 Child Abuse

Child abuse has been defined as the physical or mental injury of, sexual abuse or exploitation of, negligent treatment, or maltreatment of a child under the age of eighteen (Meir, 1985). The rate of child abuse has varied from study to study, but estimates indicate there are approximately 7 million incidents a year (Renzetti & Curran, 1998). Straus and Gelles (1995) have indicated that mothers have higher rate of abuse than fathers, that abuse tends to occur more in lower income families, and that working mothers have a higher rate of abuse than non-working mothers. Research indicates that as many as one-third of all incidents of abuse go unreported (Straus & Gelles, 1995).

In many causal models of child abuse, characteristics of the child are considered a key factor in the incidence of abuse. “Child related characteristics and problems include the premature child, the low birth weight child, the child with handicaps, and the child with difficult temperament” (Hampton et al., 1993: 40). In a general sense, the child, in many theoretical models, is seen as a contributor to the parent’s level of stress, thus increasing the likelihood of abuse (Gelles, 1987; Tzeng et al., 1991; Hampton et al., 1993).

2.3.2 Spousal Abuse

Spousal abuse is defined as an act of physical violence or mental abuse performed by one marriage partner on another. Such an act can occur in the direction of either husband to wife, or wife to husband. Violence is initiated at approximately the same rate (Straus & Gelles, 1995). As of 1985 it was estimated that as many as 1.8 million women were assaulted by their partner (Straus & Gelles, 1995). Today it is thought that about 12

percent of all couples in the United States experience some incident of violence (Renzitti & Curran, 1998). Again there is the problem of unreported incidents, thus the rate may be much higher (Straus & Gelles, 1995; Viano, 1992).

Straus (1995) in a study, which examines the mediating effect of stress on the incidence of spousal abuse, finds that men who experience the least amount of stress also have the lowest levels of abuse perpetration. Wives who experience the highest levels of stress are found to be more aggressive than husbands at similar levels of stress (Straus, 1995). It should be pointed out that violence is not considered a necessary outcome of perceived stress in marital relationships, but merely one among a number of possible outcomes. However, level of stress is viewed as an important mediating factor in spousal abuse.

2.3.3 Elder Abuse

Elderly abuse is a relatively newly recognized form of abuse and may be defined as the willful infliction of pain, injury, or debilitating mental anguish; unlawful restraint of, depriving of caretaker services from, or financial exploitation of a senior citizen. It is estimated that from 700,000 to one million elderly individuals are abused each year in the United States (Renzitti & Curran, 1998). The typical abuser is often a relative, with the most likely abuser to be the son, followed by daughter and spouse (Renzitti & Curran, 1998; Bennett & Kingston, 1993, Schlesinger & Schlesinger, 1988).

A component of elder abuse that differs from the previous two forms of abuse is that of fiscal abuse. Under these circumstances, the elderly are subject to fraud and embezzlement of their money often by their caregiver, be they a relative or a professional care service. Victims of elder abuse are "...usually very old, and mentally and physically

impaired with little social support” (Bennet & Kingston, 1983). Whereas the abusers tend often to have histories of mental illness or alcoholism, live with the victim, and be financially dependant on the elder victims they care for (Bennet & Kingston, 1983).

As with the other forms of abuse, stress is an important mediating factor in the incidence of abuse. The caregiver often feels that the elderly are a source of a great deal of stress. Unfortunately, empirical data is still somewhat limited in the area of elder abuse as it is has only recently been considered a prevalent form of family violence. In the United States, as the population of the so-called Baby Boomers begin to age; elderly abuse will certainly become an increasingly important issue.

2.4 Theories of Attribution

It has become generally recognized that only multi-dimensional models have any realistic hope of explaining the incidence of abuse, be it child abuse, spousal abuse, or abuse of the elderly (Straus & Gelles, 1995; Meir, 1985; Hotaling, Finkelhor, Kirkpatrick, & Straus, 1988; Browne, Davies, & Stratton, 1988; Tzeng, Jackson, & Karlson, 1991). Such models must consider personal/psychological elements, as well as, sociological and ecological factors. While there has certainly been no shortage of theories of explaining various forms of abuse; several of these theories lend themselves well to explaining abuse, in the context of telecommuting. Any one or a combination of these theories offer a plausible explanation of why telecommuting may lead to an increased rate of abuse with respect to children, spouse, or the elderly.

2.4.1 Etiological / Ecological Model of Abuse

Etiological models of abuse are “...sophisticated approaches that consider multiple pathways and interactive effects among factors that contribute to,” abuse (National Research Council, 1993:107). Rather than a specific theory, the etiological model refers to a class of abuse theories that emphasize understanding abusive behavior in the context of the family, community, and society as a whole; as opposed to, being the result of individual characteristics of parent, child, or spouse (Garbarino, 1977; National Research Council, 1993). “This perspective suggests that maltreatment results from complex constellations of correlated variables whose influence may increase or decrease during different developmental and historical periods” (National Research Council, 1993:109).

Ecological models of abuse may be considered a precursor to the etiological models, and originated from Bronfenbrenner’s (1979) research on human development. Garbarino (1977) first applied this paradigm to the study of child abuse. The ecological theory of abuse “...conceives the child maltreatment as occurring on four different ecological levels: (1) individual, (2) family, (3) community, and (4) society” (Tzeng et al., 1991: 28). At the individual level, cognitive/perceptual processes and socialization factors are considered. The abusive individual is considered to be a product of family, community, and cultural influences.

Family values, child rearing practices, and associated stressors are examined at the family level. “The most vital factor at the community level is the role of support systems, which may be formal (i.e., those available to all members of the community,

such as health care, welfare, hotlines, and child-care education programs) or informal (e.g., extended family members, neighbors, and friends) (Tzeng et al., 1991: 28). The relationship between product and result in the ecological model is considered circular rather than linear. An analysis of the ecological model by Tzeng et al. (1991) led them to conclude that this model has arrayed a significant amount of empirical evidence to support this paradigm, but that "...this paradigm often lacks specific statements and hypothesis about child abuse and neglect causality" (Tzeng et al., 1991: 30).

2.4.2 General Stress Theory

This theory holds that violence in the family is a result of underlying stress. According to Farrington (1986), "...the etiology of family violence can be reduced to three primary principles" (Tzeng et al., 1991: 66). First that families experience a great deal of stress. Such stress is inherent in the structure, function, and position of the modern family in larger society. Second, some families are not adequately equipped to handle that stress. Mediating resources in managing stress include (all at the familial level): the internal resources of the family (such as family cohesiveness, and financial resources), the social support that the family may reach out to including extended family and the larger community, and the combined personal resources of the family members.

Finally, family violence is intuitively reasonable and socially acceptable in American society. Farrington (1986) states that norms in the United States encourage and even legitimize the use of violence as a response to stress and frustration. The vulnerability of the family to stress is based on two factors, how the family defines stressor stimuli and the response capabilities of the family and its individual members.

Empirical research by Giles-Sims and Finkelhor (1984) found that stress is related to child abuse in stepfamilies, and Straus (1995) found stress to be a major contributing factor to abuse in his study of spousal violence. However it bears noting that in both studies, stress was found to be a significant, but not a sufficient determinant in a violent outcome (abuse). Rather, stress was one of a series of contributing factors that produce violent outcomes. In terms of telecommuting this becomes important since the telecommuter is now exposed to a greater degree of domestic stress in addition to work-related stress. Telecommuters and their families may not be equipped to handle this new combination of stress; resulting in violence.

2.4.3 Social System's Theory

According to Straus's (1973) social systems theory of family, there are two major causes of abuse, structural stress and cultural norms (Tzeng et al., 1991; Browne et al., 1988). Structural stresses include such things as inadequate financial resources, low education, unemployment, or social isolation. Cultural norms refer to beliefs and attitudes concerning the use of force and violence as a means of obtaining goals or disciplining children (Tzeng et al., 1991). Due to inequalities in the structure of society, the needs of individuals are met unequally. This then results in frustration and increased levels of perceived stress. According to Tzeng et al. (1991), systems theory of family is more of a descriptive model describing family systems, rather than a causal model.

A theory that may be subsumed under systems theory is encounter theory advanced by Zimrin (1984). Encounter theory states that characteristics of the child and characteristics of the parent interact and affect one another (Tzeng et al., 1991). “This theory holds that an abusive situation will be a result of the encounter between character traits and the needs of both the parent and the child in interaction” (Tzeng et al., 1991: 85). It is important to note that within general systems theory and encounter theory, stress plays a central role.

2.5 Frequency of Contact and Crowding

For purposes of the present theoretical model, two additional variables are believed to markedly contribute to an increased likelihood of abuse within the families of telecommuters. These variables are, the frequency of contact that telecommuters have with family members and the degree of perceived crowding that telecommuters experience while working at home.

As has been reported, child abuse perpetrator rates are higher for mothers than for fathers (Straus & Gelles, 1995; Wauchope & Straus, 1995; Renzetti & Curran, 1998). The rate of abuse for mothers is approximately 17.7 percent; and 10.1 percent for fathers (Straus, 1980). As stated earlier, this finding is probably a function of women’s greater frequency of contact with children, in their role of primary caregiver, rather than intrinsic quality found in women (Wauchope & Straus, 1995). The real mechanism at work in this circumstance is likely to be far more complicated than merely frequency of contact. Most likely, the teleworkers increased contact at home, exposes them to domestic sources of stress, that are compounded by the telecommuters work related stress. Thus the result

of poor stress management may be an act of violence. Note again, stress should be viewed as a significant factor but not sufficient determinant for violent outcomes.

2.5.1 Crowding

There long has been a concern among social researchers that crowding has detrimental effects on people's well-being. Early research in animal studies indicated that crowding can result in aggressive behavior (Gove & Hughes, 1983). In a review of crowding research, Gove and Hughes (1983; 44) conclude the following:

1. "When comparing micro-level crowding (person per room) with crowding at the macro-level (person's per acre), it appears that crowding at the micro-level may have causal effects on social-pathology" (Gove & Hughes, 1983: 44).
2. "Studies performed in the laboratory have produced mixed results, but a majority demonstrates that crowding has a negative impact on adults and children alike" (Gove & Hughes, 1983: 44).
3. "Density and Density related social phenomena that are the consequences of the number of housing units per structure and the floor of residence appear to have certain negative consequences" (Gove & Hughes, 1983: 44).
4. There is a relationship between living in crowded institutional settings and feelings of dissatisfaction with the "...living environment, alienation, problems performing certain tasks, and poor physical health" (Gove & Hughes, 1983: 44)

It bears mentioning that Gove and Hughes found many methodological flaws in past studies that may offset research results. In Gove and Hughes own research on crowding they conclude:

“We found for the overall sample the effects of crowding were very strongly related to a number of direct responses to crowding, ranging from physical withdrawal from the home to psychological withdrawal in the home (where the person consciously ignored others), to lack of planning, and to feeling physically and psychologically drained. Crowding was also found to be strongly related to poor mental health, to having poor child care, to an inability to adopt the sick role, and to being dissatisfied with one’s home.” (Gove & Hughes, 1983: 223)

In research on crowding in Thailand, performed by Edwards, Fuller, Vorakitphokatorn, and Surmsri (1994), the researchers found that subjective notions of crowding had a greater relationship to distress in the family, did than objective measures of crowding. That is to say, “...those who feel more crowded are more likely to report marital instability, more marital arguments, feel greater tension in the parent-child relationship, and discipline their child more” (Edwards et al., 1994: 129). Also in relation to subjective crowding, those who felt “...they lacked privacy are even more likely to experience marital instability and arguments,” report less companionship, report having more adverse relationships with their children, and report more wife abuse (Edwards et al., 1994: 129). It is important to note that the Edwards et al. (1994) model of crowding was informed by stress theory. That is to say, their model of crowding operated under the belief that crowding contributed to one’s level of felt stress, and that as stress increases so to does the incidence of negative outcomes (arguing, violence, and distress) (Edwards et al., 1994; 34). The negative consequences of crowding should not be underestimated, and as the telecommuter works in the home, perceptions of crowding may have dire consequences for teleworkers and their families.

The next step to be taken in this research is to identify the pertinent variables that influence incidence of abuse, and to develop a theoretical model that would explain the incidence of family violence or abuse, in the context of telecommuting.

CHAPTER THREE: VARIABLES INCLUDED IN THE MODEL

3.1 Mediating Variables

The plethora of research studies in the area of family violence has garnered an enormous amount of data pertaining to the characteristics of the perpetrators and victims of domestic violence. Such characteristics have ranged from individual factors (including the personality traits and demographic features of the abuser and abused), to broader categories like intra-family relationships and structural elements of society like poverty and unemployment. Much of the initial research into family violence focuses on individual characteristics, attributing acts of violence to abnormal behavior or distinct psychiatric syndromes and disorders (Tzeng et al., 1991; National Research Council, 1993). However, in point of fact only a very small percentage of individuals involved in the perpetration of violence generally are diagnosed with a psychotic disorder (National Research Council, 1993). A consistent profile of mental disturbance among perpetrators has not been substantiated by research (Polansky, Chalmers, Bittenwieser, and Williams, 1981; National Research Council, 1993).

Recognizing the limitations of an analysis of the personal traits of abuser and the abused, researchers began considering environmental and situational factors. Ensuing studies determined that factors such as social isolation, poverty, life stress events, the dynamics of family interaction, cultural norms, and many other (situational)

factors were related to, or influenced (to some degree), the perpetration of violence in families (Tzeng et al., 1991; Hampton et al., 1993; National Research Council, 1993; Straus & Gelles, 1995). Psychological models of violence have become supplemented or integrated with sociological models in order to better explain the incidence of violence.

For purposes of the theoretical model being developed in this thesis, a sociological approach will be utilized. This Chapter outlines a number of correlates, hypothesized to be influential in the relationship between telecommuting and the incidence of family violence, and literature pertaining to them. These correlates are considered important because of their predictive nature in determining the risk of potential violence in telecommuting families.

3.1.1 Personality Characteristics of the Abuser

While this thesis focuses on the sociological factors which influence the incidence of family violence, it is important to note that researchers have found a number of personality traits among abuse perpetrators that appear influential in the incidence of violence, especially when considered in interaction with broader situational factors. Among child abusers a number of attributes have been identified, they include: low self-esteem, poor impulse control, negative affectivity, anxiety, and anti-social behavior (Milner & Chilmamkurti, 1991; Tzeng et al., 1991; National Research Council, 1993). Research indicates that attributes like anti-social behavior and anxiety are associated to social isolation and disrupted social support (Crittenden, 1985). The National Research Council (1993) further states that such characteristics are likely to increase the probability of such individuals encountering stressful life experiences and shunning those resources

that would allow them to cope with stress. Thus, it is important to remember the role of individual personality traits in this proposed model as these act to markedly influence abusive behavior.

3.1.2 Socioeconomic Status / Occupational Status

Consistent in much of the research pertaining to family violence, is the fact that there is a greater incidence of family violence among low socioeconomic status families, than among higher status families (Straus, 1995; Straus & Smith, 1995; Wauchope & Straus, 1995; Milner & Chilamkurti, 1991; Hampton et al., 1993; Finkelhor, Hotaling, and Yllo, 1988). This finding holds across all three forms of family violence considered here. In the 1975 and 1985 Family Violence Surveys by Straus & Gelles (1985), they find that those families earning less than \$20,000 per year have the highest rates of child abuse. Cazenave and Straus's (1995) examination of spousal abuse by race, show that among both white and black families, there is a greater rate of violence among low status families, than high status families. Elder abuse research indicates that perpetrators of said abuse are often of lower socioeconomic status and financially dependant on the abused elder (Bennett and Kingston, 1983).

Occupational status, a sub-category of socioeconomic status, also has been found to be significant in terms of the rate of violence. The rate of child abuse by blue-collar parents is found to be almost double that of white-collar parents, in the 1975 and 1985 Family Violence Studies (Wauchope & Straus, 1995). Straus (1995) in an examination of occupational status in relation to marital violence finds that blue-collar husbands have an assault rate 70 percent higher, than white-collar husbands.

If projections concerning the increase in telecommuting hold true, it is extremely likely that the blue-collar segment of telecommuters will increase dramatically in coming years. Currently, according to a survey by Cyber Dialogue approximately 24 percent of telecommuters are considered to be blue-collar workers (Langhoff, 2000). Furthermore a study commissioned by the International Telework Association and Council (ITAC) has reported that 15 percent of teleworkers earn less than \$20,000 a year (ITAC, 2000). Given the results of family violence research, this places a significant portion of the nineteen million telecommuters at risk; some five to six million persons.

3.1.3 Gender

Gender in social research may be approached in two ways: as a social construct (which includes a multitude of properties) or as a biological distinction (female or male). This thesis focuses primarily on the biological aspects of gender (sex). In much of the empirical research pertaining to family violence, gender plays a significant role in rate of incidence and the nature of violence. There is a general perception in the field of family violence that males, because of ascribed traits of aggressiveness, are the primary perpetrators of violence in families (Straus & Gelles, 1995; Hampton et. al., 1993). This is in part supported by the high rate of assault among males and the low rate of assault by females outside the family system. Furthermore, crime reports show that female homicides occur at a higher rate than male homicides within spousal relationships (McCue, 1995). However within families, the level of violence is far more level. Research by Straus and Gelles (1995) indicate that the husbands and wives initiate violence at near equal rates.

While Straus and Gelles (1995) acknowledge that violence rates may be similar between husbands and wives, they suggest caution in interpreting the data. It's possible that while the rate of violence remains the same, the consequences of violence may be different, particularly pertaining to the degree of harm that is experienced. In this case, wives may experience more harm because of the size and strength advantage husbands typically have. Although Stets and Straus (1995:158) determined that "...the differences between woman and men victims in terms of the rate of needing to see a doctor, taking time off from work, and being bedridden are not particularly strong or large." Thus in terms of spousal violence we may expect violence to occur at similar rates, though we should be aware of the potential differences in type and degree of violence occurring within this relationship.

As indicated earlier, Straus and Gelles (1995) made a remarkable discovery when analyzing data in the 1975 National Family Violence Survey. They found that 17.7 percent of mothers and 10.7 percent of fathers abused their children (Straus & Gelles, 1995). This finding also went against the common perception that males abused more than females. Based solely on these data Straus and Gelles could not arrive at an explanation for this finding, however, they did suggest that the rate of violence most likely was not because of an inherent property of mothers, but instead a result of the frequency of contact woman had as the primary care giver in most families. When Straus and Gelles repeated their survey in 1985, the rates of violence leveled off. Husbands and wives were abusing their children at approximately equal rates. Again, Straus and Gelles could not determine a precise explanation for this fact. They did posit that mothers had increasingly, over the previous ten years, been entering the workforce. As a result,

fathers had started to take a greater responsibility for domestic work and childcare (Thorten, Alwin, and Cambum, 1983). In addition, because of their working outside the home, mothers were becoming increasingly dependent on childcare services. Thus, as mothers' frequency of contact with the children decreased, the incidence of abuse had leveled off between mothers and fathers. Again, the explanations pointed out are speculative, but none-the-less the rates remain a significant issue. As there has been little follow-up in this specific area, it is difficult to determine what the rates of child abuse are today, by parent gender. It is likely however that currently rates have remained level in the last several years. Thus we should expect that the rate of violence by telecommuters should be distributed similarly among fathers and mothers.

Examination of the 1975 National Family Violence Survey by Gelles and Hargreaves (1995) also indicates some interesting findings that have a bearing in the context of telecommuting. In their analysis of maternal employment and violence towards children they find that "...mothers who did not work and mothers who reported working part-time were the most likely to have used some form of violence towards their children during the previous year," as compared with full-time working mothers (Gelles & Hargreaves, 1995; 267). While the researchers conclude that employment over-all is not positively related to incidence of abuse, they did determine that there were a number of factors related to employment that do contribute to the rate of violence (Gelles & Hargreave, 1995). Key among these factors is the amount of domestic work that a mother is responsible for in addition to her regular work duties. "If a working mother felt that she had too much responsibility for financial matters and child care, then her chances of hitting her child rose to the level of violence reported by non-working mothers"

(Gelles & Hargreaves, 1995; 275). Based on this information we can make the following conclusions. First, the low rate of abuse among full-time working mothers provides some evidence for Straus and Gelles's hypothesis that frequency of contact is a factor in the incidence of abuse. And second, that telecommuting mothers are at risk of using violence against their children depending on the distribution of their work and domestic duties.

In the situation of elderly abuse, research has indicated that the son is most likely to abuse the elderly, followed by the daughter (Schlesinger & Schlesinger, 1988). Sengstock and Liang (1982) note in their study that the abuser was a relative in 49 percent of cases. Of those relatives, the son was the abuser in 26 percent of the cases and the daughter in 23 percent of the cases. In the circumstance of the abused, women comprised nearly 70 percent of the victims (Schlesinger & Schlesinger, 1988; Bennet and Kingston, 1993). There is a limited amount of information available on elder abuse on a national scale. As the population of elderly continue to grow as a result of aging "baby-boomers" it becomes increasingly important that more current information be gathered.

In summary, though there is a perception that males perpetrate acts of family violence at rates greater than females, the evidence points to the contrary (Straus and Gelles, 1995; Stets & Straus, 1995). In the case of spousal relationships, acts of violence appear to be initiated by the husband and wives at nearly equal rates. For child abuse, mothers' acts of violence and abuse appear to equal, if not exceed, the rates of violence perpetrated by the fathers. For elderly abuse however, it appears that the rates of violence is greater for males when compared to females.

3.2 Telecommuting Variables

Implicit in the concept of telecommuting is the notion that the work location becomes variable. This means that the teleworker can work virtually anywhere. In most circumstances however, the new work location is the home. As the home takes on the additional role of workplace, teleworkers face circumstances that can bring new complications to both their work situation and their “home life.” For the purposes of this thesis three distinct situational factors are considered important regarding the potential relationship between telecommuting and the incidence of family violence: crowding, social isolation, and boundary control.

3.2.1 Crowding Variable

The issue of crowding and its effects on individuals has long been a concern among researchers. There is a general perception that crowding is detrimental to the physical and mental health of those subjected to it. As the world’s population and urban centers continue to grow, crowding will become an ever-greater concern. Though it is not an obvious factor, there is the potential for crowding to play a roll in telecommuting.

As indicated earlier, a number of researchers have found that crowding can have potential harmful effects on individuals and family life. Gove and Hughes (1983) report there are a number of laboratory studies which indicate that crowding has “deleterious” effects on human behavior. From these studies come three important findings (Gove & Hughes, 1983). One, that the more control people have over their environment, the less

they experience the effects of crowding. Two, males' react more to crowding than females. And three, members of high-contact cultures maintain less interpersonal distance, than do persons in low contact cultures such as the United States and Northern Europe, and thus they are less affected by crowding.

Gove and Hughes (1983) own study of household crowding in the United States (the city of Chicago) further collaborates the negative effects of crowding. This study is an attempt to understand the effects of household crowding and examining those factors that magnify or minimize such effects. Their analysis "...showed that crowding was strongly related to poor mental health, poor social relations in the home, poor child care, inability to adopt the sick role, ...and being dissatisfied with their home" (Gove & Hughes, 1983; 233). Defining crowding as persons per room, they further delineate the effects of crowding along two dimensions, the experience of excessive demands (role strain) and lack of privacy (Gove & Hughes, 1983; 223). The two dimensions appear to have considerable impact with respect to poor mental health, poor social relationships, and poor physical health. Furthermore, their analysis indicates that these two dimensions explain as much variance as six other control variables combined (including sex, ethnicity, marital status, education, family income, and age) (Gove & Hughes, 1983). "In short (their) analysis showed crowding in the home to be a variable of significant substantive importance" (Gove & Hughes, 1983; 223).

The research of Gove and Hughes also indicate some variation in crowding effects based on race. They indicate that Hispanics exhibit a "close-contact" culture, thus crowding issues were less problematic. Whites and blacks did not represent a "close-contact" culture. In fact they find that blacks were more crowded than whites, and that

they were more reactive to crowding (lack of privacy and social demands). The “...analysis demonstrated that...the crowding variables uniquely explain substantially more variance for blacks than for other ethnic groups” (Gove and Hughes, 1983; 224). In terms of household composition, Gove and Hughes (1983) note that households of unmarried parents and children are most affected by crowding.

Edwards et al. (1994), who examined the effects of household crowding more recently, found effects similar to those reported by Gove and Hughes (1983). Their analysis indicates that subjective measures of crowding (felt demands and lack of privacy) “had a more reliable relationship with their dependant variables, than did objective measures (Edward et al., 1994). “Lack of privacy and perceived crowding both have a significant impact on arguments or fights with members of the family” (Edwards et al., 1994; 129). However, Edwards et al. caution against the interpretation that subjective crowding is directly responsible for negative outcomes in family relationships. They find that subjective crowding effects are mediated though feelings of distress and felt demands, “...that the impact of subjective crowding on wife abuse and serious arguments or fights with other non-nuclear family members disappear when the effects of distress and/ or felt demands are taken into account” (Edwards et al., 1994; 129).

Taken in sum, for purposes of this thesis, we can see that perceived crowding may have serious detrimental effects on family relationships. Evidence presented by Gove and Hughes (1984), and in particular by Edwards et al. (1994), indicates that those experiencing subjective crowding are more likely to experience marital instability and adverse relations with their children. Although there is some question as to the actual mechanism by which crowding influences family relations, whether there is a direct

relationship or whether crowding is mediated through other variables, it is apparent that crowding can be a significant factor in determining a family's well being.

3.2.2 Social Isolation and Boundary Control Variables

As indicated earlier, social isolation and boundary control issues have been listed as potential negative consequences of telecommuting. These factors are also proposed by this author to be potential contributing factors in the incidence of family violence. Social isolation of a family increases the potential for abuse since the isolated family is less likely to seek outside help" (Tzeng et al., 1991). Garbarino (1977) in his study of child abuse, concludes that isolation is the most important condition necessary for child maltreatment to occur. Cazenave and Straus (1995) in their study of social networks, families, and violence; indicate that for both white and black respondents, that social network embeddedness was related to fewer incidents of violence. That is to say the more contacts one has with extended family members, work network or other social networks, the less chance there is for a violent incident to occur within the family.

Perlow (1998) defines boundary control as the ability of a manager to affect how an employee divides their time between work and non-work. Teleworkers operate under unique circumstances, and exercise a large amount of control over how they manage their own time. Thus the definition of boundary control can be expanded to include one's own ability to compartmentalize their work roles and family roles. It is not uncommon that one role or task interfere with the functioning of another, the resulting in role conflict. In work systems, workers must often contend with balancing their "work life" with their "family life". This balance is in part assisted by the fact that these roles often take place

in separate environments, allowing an individual to more easily negotiate their varying responsibilities.

But telecommuters, since they work at home have a much more difficult time separating work time from home time; the demands of one can interfere with the demands of the other. Such role conflict can result in extreme amounts of stress. In one of the few studies examining teleworkers, Hill et al. (1996) finds that all their respondents remarked that telework had made it difficult to balance work and home life, and some even stated that this lack of boundary control had a negative impact on family life.

CHAPTER FOUR: THEORY OF TELECOMMUTING AND FAMILY VIOLENCE

Figure 1 displays a model which details a theory of telecommuting and family violence proposed in this thesis. This model finds its roots in Bronfenbrenner's (1979) ecological paradigm and Farrington's (1980) General Stress Theory of Physical Abuse. In essence the model recognizes that family violence is the result of a complex array of interactions at both the individual level and the societal level. However, it places special emphasis on the context of telecommuting and the inherent complexities and stressors derived by from that context.

The ecological model is particularly efficacious, since it considers multiple pathways and interactions, thus allowing an analysis of family violence to consider a great number of possible options for explanation. Panels A-D represent four levels of human interaction: (A) the societal level, (B) the individual level, (C) the family level, and (D) the community level. Within this model, I have selected factors which I believe to be the most significant for determining violent outcomes for telecommuting families, as informed by family violence research.

Panel E represents telecommuting, which in this model acts as the primary mediating factor in the incidence of family violence. Within the telecommuting panel three factors are hypothesized to be crucial: 1. Crowding, 2. Social isolation, and 3. Boundary control. The telecommuting category operates under the premise that telecommuting, though conceived as a liberating work model, presents new challenges to teleworkers. These new challenges take the form of stressors that as presented by Farrington's General Stress Theory, are the primary factor responsible for family

violence. The three factors, crowding/social isolation/boundary control are hypothesized to increase the amount stress perceived by a family, thus resulting in violent outcomes. Finally, panel F represents the outcome, violence, which I have further delineated as including child, spousal, or elder abuse. It is important to note that violence in this model is thought to be a product of multiple factors, and that it is unlikely that any one of the factors examined here is likely to result in violence, without the mediating effects of other factors working in tandem.

This model therefore represents a stress model of family violence. Where stress is mediated through a complex interaction of societal and individual characteristics as related to telecommuting. It is important to mention at the outset that this author operates under the premise that stress is merely a sufficient and not necessary for the incident of violent outcomes in the form of abuse. Not all families that experience similar levels of stress are expected to react with violence. While this model advocates stress as an important impetus for violence, it recognizes that violence can be the result of any number of factors (point of fact: the ecological paradigm of physical violence expects that there are any number of possibilities, hence the direct line from the panels A through D to family violence). This model should not be regarded as suggesting that telecommuting will universally produce negative results, rather it should be viewed as a model for predicting those who may be at the greatest risk for the increased likelihood of family violence among telecommuters. Furthermore, this model points out those factors that may be most responsible for such outcomes, should telecommuting be determined to be a mediating factor in the formation of violent behavior. By identifying these factors

4.1 Ecological Levels of Interaction

4.1.1 Individual Characteristics (represented by panel B):

As indicated in the correlates discussion section, individual characteristics have been identified as likely contributing factors to incidences of violence in the family. Such factors include psychological pathologies, distorted expectations, frustration, personality abnormalities, abusive history, and conceptualization of family member/child/spouse, to name a few. However, as noted earlier, there is little evidence to demonstrate that perpetrators of family violence are more psychologically disturbed than non-perpetrators (National Research Council, 1993). Nevertheless it has been suggested that those with psychological disorders, or those who are distressed, are less likely to seek out assistance, effectively isolating themselves. As a result, such individuals deprive themselves of social resources that would allow them to cope with stress (Tzeng et al., 1991; National Research Council, 1993).

As this model is a stress model, it is important that we remain cognizant that individual factors do play an important role in stress management and hence could conceivably play a significant role in producing violent outcomes in families. That said however, since research has not indicated a pattern of psychological pathology among violent perpetrators of family violence, we shall concentrate on factors at the macro-social level.

4.1.2 Societal Level (represented by panel A):

According to the ecological model, the societal level represents cultural norms and beliefs that characterize a society. This particular level encompasses a number of possible factors that may influence the incidence of violence. One such factor includes the society's parental punishment norms during child rearing. In those societies where physical punishments are accepted, a greater degree of physical punishment (which may be considered to be a severe beating in another culture) may be expected. Farrington (1980) describes the United States as a culture where violence is considered an accepted way to respond to frustration or stress. At this particular level, I identify gender as an important variable, which may influence the incidence of family violence in telecommuting families.

There is a general perception that males are the more aggressive sex, and as a result it is often expected that males will be more responsible for incidents of violence. This is in part supported by the greater number of assaults (outside that family) attributed to males, compared to females. But within the family the dynamic is somewhat different. A study of family violence by Straus and Gelles (1995) determined that the rate of violence between spouses is actually more balanced than would be expected, and in fact, violence is initiated between the sexes at nearly equal rates. Perhaps the key to this interpretation is the degree of severity of injury, where the consequences are greater for woman than men (Straus and Gelles, 1995). In terms of the telecommuting model presented here, we can therefore expect that a roughly equal chance of violence erupting among women and men due to telecommuting.

In the case of violence against children the picture is a bit different. Straus and Gelles (1995) found in their 1975 study of families, using the National Family Violence Surveys, that there is a higher rate of violence by mothers against children than for fathers. Though the data do not point to a particular rationale for the finding, the researchers are skeptical about attributing the higher rate of violence by women, to any unique attribute or characteristic possessed by woman. Rather, they suggest that perhaps it was the frequency of contact between child and parent which accounts for the differential in abuse rates since mothers have been given the responsibility of primary caregiver. When Straus and Gelles conducted the same survey again in 1985, they found that the levels of violence perpetrated among children had leveled off between mothers and fathers. Straus and Gelles suggested that the balance might be attributed to the influx of woman (mothers) into the workforce during the 1970s and 80s, thus giving some credence to their hypothesis regarding frequency of contact.

Hargrave and Gelles (1995), examination of the data as it pertained specifically to mothers, find that mothers who do not work, or report working part-time, have a higher rate of incidence of violence against their children, than did mothers who work fulltime. While the authors conclude that employment itself was not a significant factor in the incidence of violence, they do find that the amount of domestic duties a mother has in addition to her work responsibilities does have an influence. Mothers with a substantial amount of domestic responsibilities hit their children more than do working mothers with fewer domestic responsibilities (Hargrave & Gelles, 1995). In short, this suggests that added stress posed by domestic duties may result in violence. Thorton et al. (1983)

report that working woman continue to be more responsible for domestic duties than do males living with them, even if they work as many hours (or more) than do the males.

Thus, in consideration of the telecommuting model, we can expect that the rate of spousal violence should be nearly equal. Again however, we must remember of to consider the severity of violence; and here we can expect women to be victims of more severe violence. In terms of violence against children we can expect one of two possible outcomes. If the Straus & Gelles hypothesis concerning frequency of contact holds true, we can expect that the rates of violence against children should occur at roughly the same rates. When the telecommuters are male, and that they are spending more time at home (as much as mothers had previously), presumably they would have the opportunity or rather the exposure to stressors that would precipitate violence. Of households where the mother works out of the home and the father telecommutes, we also might expect that the fathers would have higher rate of violence.

On the other hand, if what Hargraves and Gelles (1995) suggest to be the case is correct (that mothers continue to be more responsible of domestic tasks in addition to work duties), we expect mothers who telecommute and are responsible for a greater degree of domestic duties, to have a higher rate of violence than fathers. Presumably the added stress of fulfilling two roles which require a great amount of time, contribute to the violent responses of mothers.

As concerns incidents of elder abuse, most researchers have indicated that sons are most likely to be the abusing caretaker, followed closely by daughters (Schlesinger & Schlesinger, 1988). I propose that this relationship should present results similar to those

predicted by the frequency of contact model. That is, we should expect that rate of violence against elders are approximately equal among males and females.

In summary, I propose that gender is indeed a factor in mediating the incidence of violence in the family, though with some caveats. The real link to gender in this situation is more apparent in the child abuse paradigm, since women have been given the role of primary caregiver and also have been ascribed domestic responsibilities due to gender roles. Hence, they have been placed in greater risk of exposure to stressors generated by roles competing for their time. In the stress model, they are therefore more likely to be the abuser. In a more egalitarian household where domestic duties are balanced, we might expect there to be a more equal rate of violence (or rather a lack thereof).

4.1.3 Family Level (represented by panel C):

Much like the individual characteristics level, family level of interaction is largely included for completeness sake. Under this level of interaction the following factors are considered to be important: the parent-child interaction, characteristics of the child, bonding styles, and family size. For the purposes of the model proposed in this thesis, these factors are not considered to be as important as other variables. The exception is of course family size, which plays an important role in the consideration of crowding issues, found under the telecommuting panel. None-the-less, we should remain mindful of the role that family interaction plays in the incidence of violence, in future research.

4.1.4 Community Level (represented by panel D):

The community level of interaction includes those elements that sociologists regard as part of the economy and socioeconomic status. Such factors, considered in this model, are: social class and occupational type, which are highly related to one another. A considerable body of research conducted across the three forms of violence considered by this model (child abuse, spousal abuse, and elder abuse), finds that there is a higher incidence of violence in the form of abuse among the lower socioeconomic classes than among other classes (Straus, 1995; Straus & Smith, 1995; Wauchope & Straus, 1995; Milner & Chilamkurti, 1991; Hampton et al., 1993; Finkehor, Hotaling, and Yllo, 1988). Straus and Gelles (1995) found in the 1975 and 1985 National Family Violence Surveys, that those families earning under \$20,000 had the highest rates of family violence. Cazenave and Straus (1995) found that spousal abuse rates were consistently higher for lower status families.

According to the research on occupational status, which is related to SES (occupational status may be best understood as a component of SES), blue-collar workers consistently have many times more incidences of abuse when compared to white-collar workers. Wauchope & Straus, (1995) found that there are approximately twice as many incidence of child abuse in blue-collar families, than there are in white-collar families. Straus (1995) indicates that within blue-collar families spousal abuse occurs at a rate 70 percent greater than in white-collar families. Research thus indicates that low-income families are at much greater risk for the incidence of family violence.

According to a survey by Cyber Dialogue, approximately 74 percent of telecommuters are considered to be white-collar workers (Langhoff, 2000). ITAC

estimates that the average annual income of teleworkers is \$44,000, with approximately 9 percent earning more than \$100,000 and 15 percent earning less than \$20,000 (Telecommute.ORG, 2000). At the moment, as it was when it started, telecommuting is utilized primarily by those in white-collar professions. However, as the expense costs of telecommuting fall, telecommunication technology advances, and employers seek to gain the benefits of a telecommuting work force, telecommuting will become more wide spread as a work system across all strata. Some even consider telecommuting as possibly creating the new “sweatshops” of the modern era (Dangler, 1986). With approximately 24 percent of teleworkers (which would translate to almost 5 million workers) considered to be blue-collar workers already, there already is a definite population at risk.

What little research that has been conducted on telecommuting, has focused on white-collar telecommuters. For the most part research has indicated that teleworkers gain many benefits, and in large part are very positive about their telecommuting experiences (Hill et al., 1996). Such telecommuters frequently cite increased autonomy and time spent with family among the benefits of telecommuting. However, even such advantaged workers admit that they have some difficulties adjusting to this new work form (Hill et al., 1996). Low-income teleworkers and blue-collar teleworkers, not possessing the advantages inherent in having a high income, should theoretically be even less prepared to deal with the stressors and difficulties telecommuting may engender. In summary, given existing research on family violence, the model being proposed in this thesis posits that low-income teleworking families or blue-collar telecommuters will have significantly higher rate of risk, for the incidence of family violence, than more affluent, white-collar telecommuters.

4.2 Telecommuting (Represented by panel E)

The purpose of this thesis and the theoretical model being proposed is to examine the possible negative consequences that telecommuting may have on the family. Obviously, in this context the significant mediating factor in this model is telecommuting. Three specific factors have been targeted by this model, and are proposed to have the most significant effects on telecommuting families, as concerns the incidence of family violence. Each of these factors is considered to be direct consequences of telecommuting, and without proper preparation will add to the perceived stress experienced by teleworkers.

4.2.1 Crowding: (Represented in Panel E as e1)

Within the model of telecommuting, the teleworker, in most cases, now works in the home instead of a centralized workplace. Hence the home *becomes* the workplace, as well as, a domicile. As a direct consequence of this situation, workers may now feel more crowded, as their space of operation is now effectively restricted. Once they could divide space to live (the home), and space to work (the workplace). Now there is only one principal location of activity, the home.

There are appreciable differences in the homes in which the telecommuter live. Those with higher incomes can afford larger domiciles where it will be easier to make room for work purposes and distance themselves from distractions. Low-income

telecommuters and blue-collar telecommuters have less latitude in the amount of room and space they have in which to operate. “People with less education and income are notoriously disadvantaged in housing markets, being disproportionately restricted to more cramped dwellings and housing with fewer amenities (lower livability)” (Edwards et al., 1994). As such, they will likely be more susceptible to the effects of crowding.

As pointed out earlier, according to research by Gove and Hughes (1983) and Edwards et al. (1994) there is significant evidence that crowding can have a negative impact on family life; particularly when examining subjective measures of crowding. That is, when defining crowding in terms of “amount of felt demands” and “lack of privacy”. Operationally, these factors when perceived in excess, increase one’s level of stress.

“Theoretically, congested conditions are viewed as creating the necessity to interact with others present. As the sources and frequency of interaction multiply, stress or the expressed demands on an individual intensifies. As stress escalates, it becomes manifested in a person’s behavior and possible aberrant responses to others present.” (Edwards et al., 1994)

An individual seeks telework for a multitude of reasons, among which is the ability to care for a loved one (children, or parent) and still be able to work. While this serves as a great advantage, the teleworker is now placed in close and regular contact with the cared for individual(s). Using the subjective measures of crowding this may constitute either “increased demands” or result in a “lack of privacy”. Thus, the teleworker, feeling crowded, may engage in violent behavior.

This is not say, as may have been implied initially, that only low-income families are at risk. As subjective measures of crowding have been demonstrated to be more efficacious than objective measures (as determined by persons per room) in determining

negative outcomes, it is possible that even within high income families, family members may feel crowded because of telework. So this model suggests that depending on a number of factors, including objective crowding (measured as persons per room), and subjective crowding (measured as felt or perceived demands and lack of privacy) teleworkers may feel crowded and that the resulting stress will contribute to family violence. In particular we must remain especially cognizant that low-income families may be more vulnerable than high-income families.

4.2.2 Social Isolation: (represented in Panel E as e2)

Isolation has long been identified as a negative consequence of telecommuting (Snizek, 1995; Kugelmass, 1995; Hill et al., 1996). Work serves as one of the most important social networks we can form. As telecommuters work at home they distance themselves from their fellow workers; they no longer have anyone with whom to share common experiences to relate to or sympathize with. As social networks serve to help one deal with daily stresses, this lack of support may exacerbate one's degree of perceived stress (Tseng, Jackson, & Karlson, 1991). Even more problematic for the telecommuter is the fact that social isolation is considered a component of family violence etiology.

To reiterate, the social isolation of a family and family members increases abuse potential because the isolated family is less likely to seek outside help (Tzeng et al., 1991). According to research by Garbarino (1977) isolation was the most important necessary condition for child maltreatment to occur, and Cazenave and Straus (1995) found that those families that were well integrated in their social networks had fewer

incidents of family violence. This model hypothesizes that those families that demonstrate a high degree of social isolation will have a greater rate of family violence. As teleworking families are exposed to situation that makes social isolation likely, they should receive special attention.

4.2.3 Boundary Control: (represented in Panel E as e3).

Boundary control involves one's ability to compartmentalize work roles and family roles. This factor has also been identified as a direct negative consequence of telecommuting (Hill et al., 1996). To some degree everyone has to learn to balance their work life and their home life. In most cases this boundary is easy to determine because these activities often occur in separate locations. A telecommuter however no longer has that distinct boundary, since the workplace and home are one and the same. As the boundary between home and work begin to blur, role conflict is often the result. The research of Hill et al. (1996) on telecommuters, reports that role conflict between work and home roles is a common concern among all members of their survey.

In this model I hypothesize that boundary control is a crucial factor in determining the amount of stress a telecommuter will experience, for telecommuting puts two roles in direct conflict with one another. This becomes particularly important if the teleworker has gone into telecommuting for the explicit purpose of satisfying some kind of care-giving role. Teleworkers may find that in trying to satisfy two tasks (caregiver versus worker), they may not be able to do either very well. Or rather, they might find that satisfying two roles generates an enormous amount of stress.

In addition, research indicates that workingwomen, despite their work roles outside the home are still expected to perform most of the domestic duties in their household; often resulting in a great deal of stress (Gelles & Hargreave, 1995). Thus, if a woman chooses to telecommute it is possible that her status of “worker” will be ignored and she will retain many domestic responsibilities. In addition, those workers who worked away from the home initially may find that upon telecommuting, they add to their domestic duties. This “new addition” of domestic duties, along with normal work responsibilities may add greatly to their stress levels. In summary it appears reasonable to conclude that those teleworkers that do not have adequate boundary control will experience the largest amount of stress, which may in turn result in violent outcomes. As women are particularly responsible for domestic duties, they may be at the greatest risk of the negative consequences of telecommuting.

4.2.4 Negative Feedback about Work

As telecommuting factors become more salient on the telecommuters work performance, it is conceivable that negative feedback may act as sufficient stress to compel many telecommuters to be abusive to their families in response to their frustration. This element ties in closely to boundary control issues, particularly if the teleworker is finding it difficult to perform work task because of intruding home or domestic tasks.

It bears mentioning that these three factors are themselves predicated on many of the factors indicated in the initial ecological model (the four levels represented in panel A

through D). Not all families will experience the same degree of stress that may be derived from telecommuting. Also, those who experience similar degrees of stress will not necessarily react the same way to that stress.

4.3 Abuse (represented as Panel F)

This last panel represents family violence, which in this case is defined as the persistent physical assault upon children, spouse, or elderly. (Also known as child abuse, spousal abuse, and elderly abuse.) These are persistent social problems that are of great concern to society. Researchers still grapple with understanding the reasons underlying why such behavior persists, and what precipitates it in the first place. This model proposes that telecommuting may under certain circumstances, contribute to the incidence of family violence.

CHAPTER FIVE: CONCLUSION

5.1 Summary

As we enter the Twenty First century we can expect a number of technological changes to transform the way we live. According to many, we are currently going through the “digitizing” of our lives, as represented by the proliferation of computer technology into every aspect of our society, from leisure to work. In particular, as computer and telecommunications technology advance and an information-based economy takes hold, we have seen the development of telecommuting. Telecommuting describes a type of working “model” wherein the employee, through the use of some form of telecommunications device (most often a computer with some form of modem), works at a location other than a centralized office (Hill, Hawkings & Miller, 1996). Although telework began primarily as a work option for managers at some corporations, it quickly became popular and by 1995, telecommuting employees surged to numbers as high as 8 million by some estimates (Braus, 1993; Snizek, 1995; Hill et al., 1996). Today it is estimated that there are as many as 19.6 million telecommuters in the United States (of which 900,000 are estimated to be full-time) and growing all the time (Swoboda & Grimsley, 2000).

Telecommuters today continue to espouse the benefits of telecommuting, including such things as increased autonomy, flexibility, more time to spend with, and care for, loved ones, and avoidance of commuting to work. Business corporations as well are discovering such benefits as decreased real estate costs, decreased absenteeism, and increased productivity. Telecommuting is by all appearances a win-win situation. However, as with most situations, there are a number of latent negative consequences to

telecommuting. Among these latent negative consequences are boundary control issues, social isolation, and the potential alienation from work (Snizek, 1995; Hill et al., 1996).

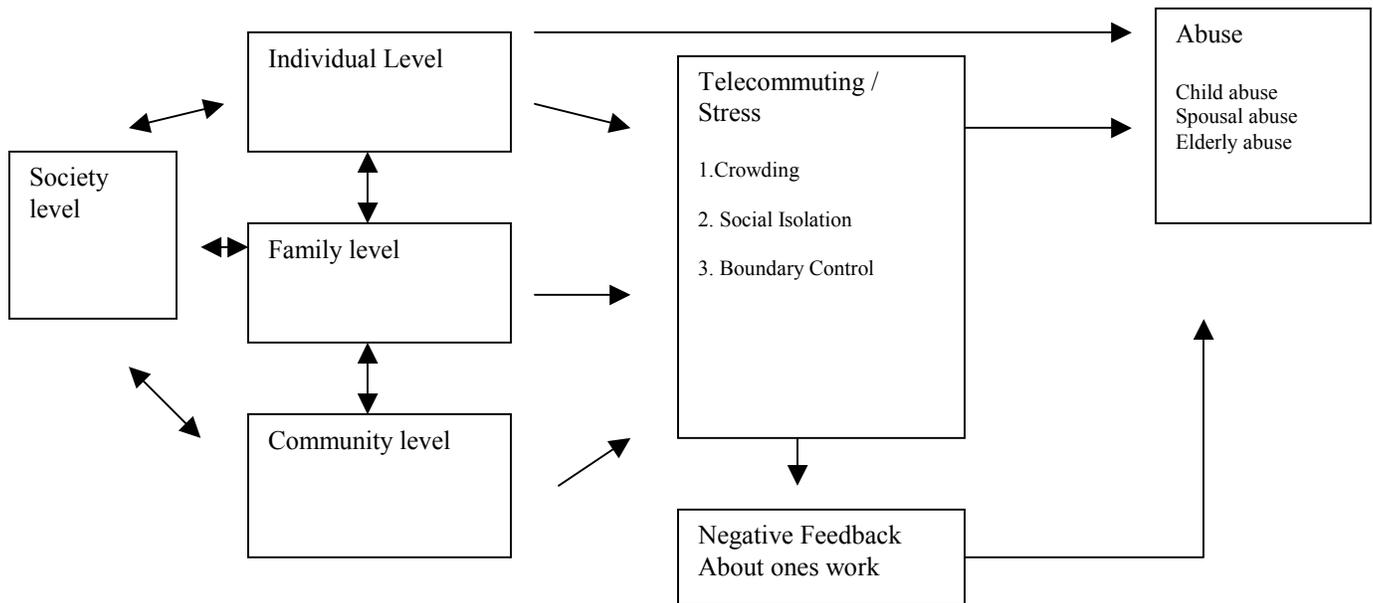
It is the purpose of this work to highlight what this author considers to be another yet-to-be identified latent negative consequence: telecommuting as contributing to the incidence of family violence. Informed by family violence research, teleworkers may be at risk of increasing the incidence of violence in the home, because of the context of telework. To that end, a theory integrating telecommuting and family violence is put forth in this thesis.

An initial analysis of family violence research indicates that there were a number of factors that would likely be associated with telecommuting:

1. Based on findings by Straus and Gelles (1995), women tend to abuse children more than men. This finding is generally attributed to a mother's frequency of contact with her children in their roll as primary caregiver.
2. Child abusers tend to be single, young, and poorly educated. (Hampton et al., 1993)
3. Abusers also tend to be economically underprivileged or unemployed, and they have a tendency to be socially isolated and have little social support. (Ammerman & Hersen, 1990)
4. Crowding, particularly the notion of subjective crowding can have detrimental effects on the family. (Gove and Hughes, 1983; Edwards et al., 1994)
5. Level of stress and stress management skills are clearly an important mediating factor in incidences of abuse. (Farrington, 1986; Hampton et al., 1993; Straus, 1995)

Based on the literature a theoretical model was proposed:

(Figure 2) Summary Model of Telecommuting and Family Violence



Based on the theoretical model proposed in this thesis we may draw the following propositions:

1. Telecommuting, as mediated through crowding, social isolation, boundary control will, and subject to gender and socioeconomic class differences, will contribute to the degree of perceived stress experienced by the telecommuter. As telecommuter perceptions of crowding increases, social isolation increases, and boundary control decreases, they will experience great increasing degrees of stress. It is highly likely that such stress may manifest itself in violent behavior and that the families of telecommuters may become the victims of such behaviors.

2. Research indicates that white-collar telecommuters (upper-income telecommuters) benefit greatly from the flexibility offered by telecommuting (Hill et al., 1996). Furthermore, incidences of family violence are much less likely to occur in upper-income families (Straus, 1995; Straus & Smith, 1995; Wauchope & Straus, 1995; Milner & Chilamkurti, 1991; Hampton et al., 1993; Finkelhor, Hotaling, and Yllo, 1988). This model then proposes that low-income families/blue-collar telecommuters are at a much greater risk for incidence of family violence.
3. As women telecommuters are likely to retain the bulk of domestic duties as well as their work duties, they would appear to be likely candidates for experiencing boundary control issues and isolation. Therefore, this model proposes that women telecommuters may be at special risk for perpetrating violence against those they care for. Single parents as a general category may be at risk, since they would be solely responsible for both domestic and work tasks.
4. Despite evidence for particular groups being highly susceptible to family violence, any telecommuter is vulnerable to the negative consequences of telecommuting. Crowding, social isolation, and boundary control issues can influence any strata negatively, and thus all teleworkers should be monitored for their own welfare.

5.2 Conclusion

In conclusion, I would like to take this opportunity to address a few points that the theoretical model put forth in this thesis illicit. First, there are some who might ask why race was not considered in this model. Based on research by Cazenave and Straus (1995), many of the differences in the frequency and nature of violent behavior between white and black families disappeared, when controlling for social class. Thus, socioeconomic status of families is more efficacious in predicting family violence. Second, I believe that it is important to reiterate that the theory developed in this thesis is primarily informed by a stress model. Thus, it is important to remember that stress is considered to be a sufficient, but not a necessary component in determining violent outcomes. Not all individuals will respond the same way to stressors, so I am not suggesting that violence will erupt in all cases of telecommuting or that violence is more likely to occur in telecommuting families rather than non-telecommuting families. It will be the place of future research to investigate such a relationship. Finally it is also important that we remain cognizant of the fact that family violence research is still being conducted and that there is no final theory or solution to this serious social problem. We must remain ever vigilant for new information to help improve our understanding. The model developed in this thesis draws on current research and, as such, is subject to all the flaws inherent in current abuse theory.

This work serves two primary purposes. One to illuminate and draw attention to the latent consequences of telecommuting; and second, to produce a theory to will help us

to deduce which telecommuters are at greatest risk and explain how violence may erupt within telecommuting families. The ultimate intent of this thesis is to identify those factors that may contribute to violence, so that they may be addressed and violence within the family stopped. As the rate of telecommuting is likely to increase as we move into the future, it becomes increasingly important that we are able to maximize the advantages of telework, and mitigate the latent negative consequences.

5.3 Future Research

As telecommuting is a relatively new phenomenon, researchers are just beginning to grasp its implications. As such, there has been relatively little research conducted on telecommuters. Thus in relation to this work, future research would be well advised to focus on two primary goals. First, there is very little reliable and valid demographic information regarding the telecommuters themselves. An effort should be made to understand and learn about the telecommuters themselves. Second, in direct relation with this proposed theory, before we can actually begin to consider the role telecommuting plays in the incidence of family violence, we must establish baseline information regarding the phenomenon. Do telecommuters and their families experience more violence than families with telecommuters? At this point, family violence is merely a theoretical supposition; we need to conduct a comprehensive survey to determine if telecommuters are in fact actually at “risk”. Based on the conclusions of these initial research forays into telecommuting, we can then proceed to examine specific factors and explanations that may be associated with any family violence that is observed. As the

number of telecommuters increase over the coming years (currently 19 million and growing) it will become increasingly important that we understand the impact of telecommuting, positive or negative, manifest and latent.

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