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Transition from mixed-gender residential wards to single-gender wards in a Nebraska regional psychiatric hospital

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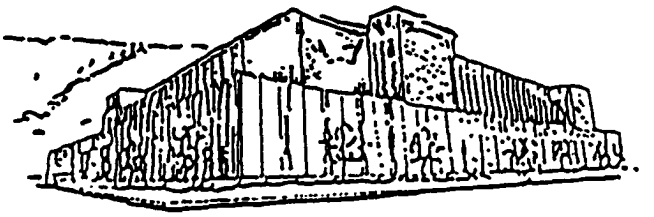

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Transition from Mixed Gender Residential Wards to Single Gender Wards in a Nebraska Regional Psychiatric Hospital

by

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Presented as partial fulfillment of the requirements for the

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G. Christopher Nadasi, M.A. 1996 Clinical Psychology

Transition from mixed gender residential wards to single gender wards in a Nebraska regional psychiatric hospital (pp. 82)

Director: James Walsh, Ph.D.

The mixed-gender ward is the most common residential arrangement in contemporary American psychiatric facilities. Very little literature accompanied the shift from single-gender treatment wards to mixed gender wards that occurred in the 1960s and 1970s, leading some authors to refer to this transition as a "silent" movement. Sparse literature and retrospective accounts by contemporary hospital employees suggest several possible motivating factors for the change, although no empirical support can be found for supposed reasons.

The literature, however, is replete with support for a strong relationship between verbal, physical and sexual abuse and psychiatric illness. In light of the high incidence of sexual abuse histories in psychiatric patient populations and growing concern that psychiatric facilities may at times present environments that are difficult to monitor and may harbor special concerns for safety, a state psychiatric facility has transitioned two residential admission wards to single-gender units.

The focus of the proposed study was to address the question of whether a more therapeutic environment could be created through policy change transitioning from mixed- to single-gender housing. The present study consisted of five components: 1) the analysis of behavioral incident reports comparing assaultive, sexual, and other behaviors during the unit separation with data obtained from an equivalent period the previous year, 2) consumer preference surveys regarding housing and staffing policy completed by patients upon admission, 3) a description of Nebraska patient histories of prior sexual abuse, allowing the comparison of this rural population to national and international studies of abuse history prevalence, 4) staff interviews regarding ward atmosphere, safety, and manageability of single versus mixed-sex wards following transition to single-gender units, and 5) specific incident qualitative analysis. Pilot data from an earlier separation of another residential unit within the hospital provided support for the primary hypotheses in the proposed study.

The study found no statistically significant difference between single and mixed-gender wards for frequency of sexual incidents, an increase in other behavioral incidents, a majority of women indicating preference for same-sex wards consistent with findings in the UK, significant trauma history (particularly for women) consistent with published findings from other locales, and strong staff support for changes. Qualitative analysis of incidents yielded specific suggestions for improved safety.

Table of contents

Transition from Mixed Gender Residential Wards to Single Gender Wards in a Nebraska Regional Psychiatric Hospital

The 1950s and 1960s witnessed rapid and sweeping changes in the way psychiatric hospitals viewed and served their patients. Deinstitutionalization was a primary goal of psychiatric health care – more effective pharmacological and psychological treatments, a growing concern with patients' civil rights, the beginnings of community supports and education of the public regarding mental illness, all leading to a primary goal of moving patients from what was once the stopping place for the "incurably insane" back into the community.

During this time period, other, intra-institutional changes were being made as well. Among other changes, many facilities began integrating formerly separated men's and women's wards. The policy of integrated psychiatric units was first introduced on long-term rehabilitation units, as it was felt that long-term separation of patients was not therapeutic and "undermined their rehabilitation' (Thomas, Liness, and Vearneals, 1992). Gradually, this policy was extended to shorter-stay units.

Three decades later, in 1993, the BBC aired a program entitled "Sex on the Ward," which detailed several accounts of female patients being sexually assaulted while committed to a residential psychiatric facility. One particular patient was placed in the hospital to aid in recovery from a previous sexual assault, only to be assaulted again by a male patient who had voluntarily admitted himself for issues related to a history of assaultive behavior toward women. While hospital environments in other nations may be dissimilar to those

in the US, the high incidence of abuse histories in psychiatric patients, research support for a sizable percentage of female patients indicating preference for a same-sex ward environment, a sizable percentage of women indicating that they do not feel safe in a residential environment with men, the disproportional prevalence of abuse of women, and the substantial support for a strong relationship between abuse and mental health and illness all support a reevaluation of the rationale for providing inpatient treatment using a mixed-ward approach to housing.

This study begins with a review of the rationale, retrospectively offered, for complete integration of what were formerly separate residential facilities for men and women. Findings from studies of patient preference for housing arrangements in the UK will be discussed as will findings that suggest the high incidence of a history of prior sexual trauma in psychiatric populations mark inpatient populations as particularly vulnerable. Both anecdotal and limited research data that support unwanted and/or assaultive sexual behaviors occurring with some frequency within psychiatric facilities will be reviewed. Finally, a typology of sexual contact in psychiatric inpatient facilities will be presented.

Why mixed wards?

There appears to be no published research accompanying or empirical support for the change from segregated to integrated wards that occurred in the 1960s. Although inpatient treatment had involved separate units, often separate facilities, for men and women since the 1800s, the transition from segregated to

integrated housing for psychiatric inpatients seems to have been a "silent" change (Batcup and Dawn, 1994). Batcup (1997) observes that, in a general sense, integration was an attempt toward "modernity" and a move away from institutionalization.

In attempting to reconstruct the rationale for mixed-sex institutional housing, the rational for mixed wards generally is reduced to five themes: the principles of normalization, the "calming" argument, consumer views, the nature and the quality of the social environment, and the efficiency perspective.

Normalization. Normalization, as proposed by Wolfensberger (1972), reflects the ideal that patients live in a world inhabited by both men and women, and that the psychiatric hospital should be "equivalent to living in a hotel or the household of an extended family" (Hingley and Goodwin, 1994). While it is certainly true that all people live in a world of both men and women, a 'normal' environment is not characterized by forced cohabitation with strangers of the opposite sex and/or loss of privacy. An arrangement more typical of a usual environment would involve daytime socialization and opportunity for privacy during nighttime and periods of the day. As will be discussed below, psychiatric populations, particularly women, may be especially sensitive to issues of privacy and safety due to histories of abuse.

The calming effect. The "calming effect" that female patients are suggested to have on their male counterparts is an oft-mentioned retrospective rationale for mixing men and women on psychiatric wards. This supposed effect involves improved behavior in male patients in order to gain the positive attention

of their female neighbors. This effect has not been supported by literature, and there are anecdotal reports that the actual effect of mixing men and women may be an increase in attention-getting competitive behaviors. Moreover, at its foundation, an argument for integrating men and women that relies on a supposed calming function of women is at its heart unethical, as it constitutes the use of a patient for institutional purposes.

Consumer preferences. The consumer viewpoint focuses on patients' perceptions of their quality of life when receiving services. Studies in this area (Thomas, Liness, and Vearneals, 1992; Batcup and Dawn, 1997; Myers et al., 1990) have typically relied on questionnaire formats (with Hingley and Goodwin, 1994, being a notable exception). Apparently, preference data to support the argument that patients prefer mixed sex wards must have been interpreted by collapsing data across sex. As discussed below, while results from men and women combined may have suggested a preference for mixed units, analysis by gender (Myers et al., 1990) clearly finds an appreciable percentage of female residents who would prefer to be housed with women only.

Nature and quality of the social environment. The nature/quality rationale represents a rejection of institutionalization of the 1950s and 1960s, and is a reflection of the therapeutic community concept as put forth by Clark (1977), requiring the presence of both men and women living together to provide a stimulating social environment.

Convenience. Finally, Nazer (1979) suggested that convenience may have played an important role in initially integrating psychiatric wards. She

relates the obvious problems inherent in having a full male unit and a partially empty female unit (because of the difference in base rates of serious mental illness requiring inpatient treatment among men and women), and having to turn away men requiring services. Through integration, facilities could provide services for men or women if they had any beds available. With ever shrinking budgets and a large number of consumers, perhaps this is the most understandable of the rationales provide in the literature.

Whatever the literature's retrospective cited reasons, conversations with staff at Norfolk Regional Center (NRC) and Hastings Regional Center (HRC) regarding changes from single- to mixed-gender units prompted recollections that changes were originally made for much the same reasons reflected in the literature from England: financial/efficiency, normalization, and a behavioral control strategy for male patients.

Six long-time staff members employed at Norfolk Regional Center (NRC) and Hastings Regional Center (HRC) who experienced the earlier segregated arrangement spontaneously offered the following observations of why housing units were integrated: the principles of normalization (n = 5), the "calming" argument (n = 4), efficiency perspective (n = 3), consumer views (n = 1), and had no idea (n = 1). One person suggested that these changes were primarily financially driven, and occurred when the state system was trying to reduce its number of active wards as a process of downsizing related to deinstitutionalization. By combining residents onto mixed wards, one hospital

was able to effectively close several wards located in buildings other than the main hospital building.

A search of medical staff minutes at Norfolk Regional Center suggests that staff at the time perceived pressure from families of patients to integrate wards as the families felt that "combining of the sexes is a much more normal way of life" (medical staff minutes, June 1, 1977).

Review of related literature from the UK: Preference studies:

Much of the literature concerning gender issues in housing has come out of England. In 1992 the English Parliament passed a bill resulting in changes in National Health and Social Policy designed to improve services for women. The bill stated that individuals receiving treatment in hospital settings would be given a choice pertaining to mixed- or same-gender housing. This bill was apparently preceded by much media attention concerning sexual assault and personal privacy issues in both psychiatric and general hospital settings occurring when persons of opposite genders were housed together. Of the English literature preceding and stemming from these policy changes, nearly all studies used a survey format and focused on either patient expressions of preference (often with narrative explanations) for housing arrangement, or staff/physician opinions regarding gender-mixing.

Although they did not cite specific studies, Batcup and Dawn (1997) commented that what little research appeared in the literature in the 1960s and 1970s concerning the move from segregated to integrated services in England suggested females' reservations regarding living with male patients on

psychiatric wards. Literature, albeit sparse, appearing in 1969 following the then recent integration of many psychiatric wards in the US referred to both negative and positive attitudes toward integration of the sexes into mixed wards. One article (Kotin and Shur, 1969) considered attitudes of recently discharged patients toward their hospital experience and found that women had more concerns regarding lack of privacy on mixed units The authors noted, however, that some patients observed improvements in other patients' hygiene as a result of trying to keep a desirable appearance for members of the opposite sex.

One of the most thorough studies concerning patient preferences occurred at Bethlem and Maudsley Hospitals during the early 1990s (Batcup and Dawn, 1997; Thomas, Liness, and Vearneals, 1992). Thomas, Liness, and Vearneals (1992) reported the results of interviews conducted with 79 men and 71 women, from a variety of cultural and religious backgrounds and with a mean age of 39 years, who were currently patients in an acute psychiatric ward at the Maudsley Hospital in England. When asked about preferences for mixed or single sex wards, 57% preferred a mixed-ward environment, 24% had no preference, and 19% indicated that they would prefer being housed with others of the same sex. While the authors did not report separate preference data for men and women , they did report that, of those women who preferred single sex wards, 27% indicated that they would feel safer on a single-gender unit, and many related that feelings of being vulnerable were related to issues of prior victimization.

Many women in this study reported being sexually harassed by male patients while in the hospital, and several women reported, among other privacy

concerns, unwanted male visitors in their rooms at night. Men in the study indicated they felt women had a "calming effect" on the ward, although they said they would feel more vulnerable if they were women.

Regarding caretakers, 55% of the patients (men and women combined) indicated they preferred caretakers of both sexes, as they felt men and women had different and complementary roles and styles and 36% had no preference. Of the women respondents, 11% indicated they preferred to be cared for by only female nurses.

Other important findings in the Batcup and Dawn (1997) and Thomas et al (1992) studies related to feelings of discomfort during the night among female residents. In response to the above finding, Maudsley hospital agreed to make appropriate housing and programming changes, and carry out a study examining the effects of the changes.[1]

Myers, Leahy, Shoeb, and Ryder (1990) conducted a survey of the "Patients' View of Life in a Psychiatric Hospital" with 258 patients, 56.4% female, in four English psychiatric hospitals. The survey consisted of 45 true-false items asking for information about staff attitudes (e.g., staff as sympathetic and caring, ability to ask questions), material standards (e.g., frequency and quality of meals, baths), effects of other patients (e.g., pestering, poor hygiene), and aspects of the hospital as an institution (e.g., privacy, feeling "cooped up"). Opportunity for free form written expression of concerns also was provided. Among other

[1] A request for more detailed information from these studies was sent directly to the Bethlem and Maudsley Trust without reply.

effects, preference for same sex housing was expressed by 63% of the residents overall, with 72% of the female patients and 49% of the male patients expressing a preference for same-gender housing. Preference for same-sex housing was associated with prior experience of having been served previously on such a ward, being over the age of 41 and of the female sex.

More recently, Hingley and Goodwin (1994) directly addressed the issue of patient preference for living conditions by using a six-item structured interview with 71 patients living on single-sex continuing care wards in a British hospital. They reported that 57% of patients who voiced a preference stated a preference for same-sex living with mixed sex social opportunities. Unlike the Myers et al. (1990) study, no difference was found between male and female respondents. The majority of both female (63%) and male (82%) patients also demonstrated clear preference for mixed sex company during hospital social events.

Of particular interest to the proposed study are Batcup's (1997) observations regarding earlier preference study outcomes. Given the results from the studies mentioned above, it appears that patients demonstrated a preference for the type of housing arrangement that they had experienced. The author suggested that the majority of patients in the Bethlem and Maudsley Trust studies who indicated preference for mixed-sex wards had the expectation that mixed-sex housing would continue, and may have had difficulty considering other alternatives. As the authors pointed out, however, having even a small percentage of patients, mostly women, indicate a preference for same-sex housing is significant.

Sexual victimization trauma history

The incidence of a history of physical or sexual abuse in psychiatric inpatients, particularly women, appears to vary considerably, with studies using chart review reporting incidences of at least 43% (Carmen, Reiker, and Mills, 1984), and those using semi-structured interview techniques reporting incidences as high as 80% (Jacobson and Richardson, 1987; Bryer et al, 1987). Carmen, Reiker, and Mills (1984) cited numerous studies supporting a strong relationship between sexual and physical abuse and psychiatric illness, particularly in women.

Mullen and Walton (1988) reported results from a random community sample of 2000 women in New Zealand. They found that nearly 63% of women who identified themselves as having been sexually abused as children were identified as having psychiatric disorders, compared with only 20% of those who identified themselves as non-abused. Similarly, those women who identified themselves as sexually abused in adult life were significantly more likely to possess psychiatric difficulties, most often in the form of depressive symptoms (75%) or anxiety disorders.

Bryer et al. (1987) reported that nearly 75% of 66 female psychiatric inpatients reported histories of physical and sexual abuse as children, and that the severity of adult psychiatric illness appeared to be related to the presence of a history that included sexual and/or physical abuse, with the most severe effects in functioning occurring in those patients with a history of *both* sexual and physical abuse. In this study, patients with a history of abuse differed from their

non-abused counterparts in exhibiting more severe and more psychotic or psychotic-like symptoms, more Axis II (particularly Borderline) features, more suicidal symptoms, and in being given pharmacological interventions more frequently.

Jacobson and Richardson (1987) conducted semi-structured interviews with 50 male and 50 female inpatients of a US university-affiliated hospital in order to assess presence of physical or sexual victimization. Their findings are summarized in Table 1 below.

Table 1. Incidence of prior assault history in 100 inpatients

	Women (N=50)	Men (N=50)	All (N=100)
Physical assault as child	22	27	49
Physical assault as adult	32	31	63
Sexual assault as child	11	8	19
Sexual assault as adult	19	2	21

Across assault types, 49% of respondents reported having experienced more than 20 assaultive incidents each, and that 96% of those involved a male assailant. Often, respondents indicated that they had experienced multiple forms of assault from the same perpetrator (i.e., physical and sexual). Forty-nine percent reported that the prior assaults continued to have a major impact on their life.

Jacobson (1989) suggested that the typical intake procedure for psychiatric services in 1989 may have resulted in an underestimate of, or lack of, identification of patients with a history of sexual abuse. Using a semi-structured interview with 31 outpatients, Jacobson discovered that 68% of them had experienced major physical or sexual assaults. However, only 51% of these patients had shared this information with a therapist.

In summary, several studies suggest that many patients admitted to psychiatric facilities have a history of being victimized. That revictimization might occur in the very place that is intended to offer a therapeutic environment promoting recovery is a special concern.

Victimization while under care

As noted above, psychiatric inpatients as a group are likely to have a history that includes incidents of sexual and physical abuse. "Wards of Fear" for example (Hart, 1998) recounts in a graphic way the story of a woman with a history of being sexually assaulted being assaulted yet again within the confines of a facility intended to treat the psychological trauma and effects of her earlier assaults. The vulnerability of patients for being sexually victimized thus may be compounded when they enter an inpatient residential facility (Nibert, Cooper, and Crossmaker, 1989). In a study of 58 residents of a Midwestern state hospital, 38% reported they had been assaulted within a psychiatric institution, with 55% of those respondents reporting they had been assaulted more frequently by other residents and 27% reporting they had been assaulted more frequently by staff. While the authors do not provide data regarding the differential victimization of men and women while in the residential facility, 36% of the men and 60% of the women related that their personal histories included being raped at some point.

Burgess (1994) reported data from the "Nursing Times," a UK publication, survey of 967 people selected as a representative sample of the English public suggested that 58% of female respondents indicated they "would not like" to be on a mixed-sex hospital ward, as opposed to 23% of the male respondents.

Thomas, Bartlett, and Mezey (1995) estimated the problem of women's safety to be even more prevalent, with instances of abuse, harassment, and insensitive response to allegations approaching the commonplace in British psychiatric facilities. They reported that survey results from 59 inpatients yielded a figure of 27% of female patients expressing concern regarding their safety on mixed sex units. In studies by Thomas, Bartlett, and Mezey (1995) and Copperman and Burrowes (1992), up to 75% of the female inpatients reported unwanted physical and/or sexual contact, with the majority of instances going unreported or inadequately handled by staff. Feinmann (1988) goes so far as to say that in some institutions, harassment and rape are "daily occurrences."

In the United States, a 1989 study by Crossmaker reported 22 of 51 patients in an inpatient psychiatric facility in Ohio had been sexually assaulted by other patients or staff. Over half of those assaulted had been assaulted by other patients, while 27% had been assaulted by staff. Those women reporting sexual assault experienced incidents ranging from harassment to rape.

Musick's (1988) dissertation regarding sexual assaults in inpatient settings suggests several factors inherent in most current inpatient settings create an environment conducive to victimization of some of its residents. Specifically, the author noted the following factors: often poor supervision of incapacitated or restrained patients, circumstances and practices which promote objectification of patients by staff and often lead to discrediting of patient accounts of abuse, gender-integration of wards, absence of proactive prevention strategies and

training, and reduced capacity and likelihood of filing criminal complaints against assailants.

The author focused primarily on sexual assaults of female residents by male ward staff, although she also commented on difficulties between patients and difficulties stemming from gender-integration of units. Musick noted the following specific difficulties are commonplace in many inpatient residential psychiatric facilities:

- often poor supervision of incapacitated, heavily medicated, isolated, or restrained patients
- circumstances and practices which promote objectification of patients by staff and often lead to discrediting of patient accounts of abuse
- gender-integration of wards, with men outnumbering women
- male patients were more likely to have criminal histories including violence toward women
- absence of proactive prevention strategies and training
- tolerance of unsupervised locations for presumably "consensual" sexual activities
- absence of security/policies regarding isolated internal spaces (closets, bathrooms, offices)
- reduced capacity and likelihood of filing criminal complaints against assailants.

The author presented sparse results from an analysis of 65 respondents, including 26 former patients and 39 facility staff who knew of specific abuses.

The study focused on 91 assault sets, with 36 provided by patients (involving 80 incidents) and 55 sets provided by staff (involving 100+ incidents). Of the victim-reported assault sets, in 57 the victims indicated they had been incapacitated by chemical restraints at the time if the assault, and in 80 incidents the victims indicated they had been physically restrained while assaulted. In 29 incidents, the victim was heavily medicated; 13 incidents occurred while the victim was in restraints or in seclusion, 14 occurred while the victim was experiencing post-ECT disorientation, and 1 incident occurred while the victim was recovering from the effects of a sedative OD.

The author noted other factors may contribute to special vulnerability in this population, including socially legitimated powerlessness, a potential inability to fully understand what is happening as a result of acute psychiatric disturbance, isolation from the outside support, bleak and understimulating conditions, the potential for objectification by staff, and the assumption that patients in acute distress may be considered incapable of noticing or caring that they are molested. When patients do report abuse they may be viewed as not credible or as confused.

Types of sexual contact – consensual and assaultive

Some mention of international perspectives regarding expressed sexuality in inpatient psychiatric patients is in order. The Journal of Forensic Psychology, a UK publication, published a series of articles concerning attitudes toward sexuality in psychiatric populations as a function of nationality that highlighted a

spectrum of attitudes and institutional practice with regards to "consensual" sexual activity between patients.

Greenberg (as included in Payne, 1993) pointed out many religions prohibit adherents from living with members of the opposite sex to whom they are not married (Orthodox Judaism, for example). Such concerns have prompted, in part, active consideration of offering services in sexually segregated psychiatric units in Israel and Middle Eastern countries.

Perlin (as included in Payne, 1993) writing from a civil rights perspective, argued that the issue of sexual freedom/restriction has been grossly overlooked in the United States in the belief that institutional prohibition of sexual activity between psychiatric inpatients is not supported by civil rights law. He suggested the "enlightened" approach recognizes the fact that patients are and wish to be sexually active, even while in an institution, and wish to be provided with accommodations for "sexual freedom" and education regarding family planning for women. The author commented hospitals lack clear research-based guidance on developing policies regarding sexual contact between patients, ranging from "tranquilized if necessary" to stop sexual behavior, to staff determination and guidance regarding whether a sexual relationship is "beneficial or detrimental."

While Perlin (as included in Payne, 1993) referred to embarrassing historical precedent in case-law such as Buck vs. Bell, the case in which the Supreme Court ruled in favor of involuntary sterilization of "imbeciles," the author failed to comment on the most oft cited reason for hospital policy prohibiting

sexual contact involving patients suffering from severe conditions: the conditions affect their ability to act with ample consideration and to make decisions not affected by the nature of their illness.

Many hospitals in the United States have policies that forbid sexual contact between patients in acute psychiatric wards. These prohibitions are generally based on two premises: 1) patients in acute psychiatric states are unable to form consent, and 2) a psychiatric hospital's primary purpose as one of providing its residents with a safe environment. Patients on acute wards, by definition, exhibit unstable psychological functioning. Such patients are likely to suffer from psychotic or affective conditions that are severe and in a state of flux pending medication stabilization. Although the argument has been made that not all patients are incapable of making decisions regarding their sexual expression, many are ,and the conservative approach to provide a safe environment requires prohibition of sexual activity between patients. Regarding protective issues, many severe psychiatric illnesses involve difficulties with impulse control, judgment, and a reality-based awareness of the environment. As these difficulties may leave individuals potentially unable to make well-considered decisions regarding sexual intimacies, the possibility of making serious mistakes later to be regretted is substantial.

At present, HRC is developing a formal policy regarding sexual contact related to sexual contact between patients while at the hospital. Administrative staff indicate that such contact, particularly for patients on acute wards, is prohibited, although there is not a formal written policy at this time.

Inherent in the discussion of sexual restrictiveness in a psychiatric rehabilitation program is a paradox. One of the primary goals of most if not all treatment programs is to promote more positive social interactions in their clientele. To varying degrees, the promotion of positive and satisfying interpersonal and/or intimate relationships is a goal. Due to concerns that individuals in acute states of psychological distress are unable to provide consent for sexual activity by virtue of their illnesses, overtly sexual intimate relationships are usually actively discouraged in US treatment facilities as they generally are considered to have potential for harm to vulnerable residents in acute states of psychiatric distress. For these patients, a dual message arises in which patients are subtly or directly encouraged to develop positive ways of relating to others, but are also told they are incapable of developing positive sexual relationships while under inpatient care. While certainly pervasive, this paradox is rarely mentioned.

A pilot study

Serendipitously, building construction at Hastings Regional Center during the months spanning from November 1993 through June 1994 provided an opportunity to consider a number of the issues raised in the preceding review of the literature concerning gender-based housing. Construction required the separation of adult chemical dependency (CD) patients into same-gender groups for a period of seven months. While the data collected during this time are subject to some lack of experimental control, information routinely collected from patients allows for a post hoc analysis along several dimensions considered in

the proposed study. Specifically, the issues of whether separation lends itself to a decrease in sexually inappropriate and/or assaultive behavior, and whether women have a "calming effect" on their male counterparts may be considered by looking at behavioral incident forms completed during the time of the separation and compared with data collected during the same time period occurring exactly one year later (11/94-6/95), after the re-integration of the separated units.

The data from the CD construction span two time periods, a 224 day time period during which patients were housed in same-gender wards, and a 224 day period occurring exactly one year after the initial data were collected, and approximately 4 months following the reintegration of the separated wards into mixed-gender wards. Complete data for the 7 months preceding the transition from mixed- to segregated gender wards are unavailable, as routine data collection was initiated in June, 1993.

Table 2 below represents numbers of incidents in a variety of categories (sexual inappropriateness, verbal altercations, patient abuse, other behavioral incidents, absent without authorization, property damage or theft), and although the data are too sparse for formal statistical analysis, they appear to provide support for a decrease in all undesirable behaviors recorded on incident forms. This provides some support for the hypothesis of decreased sexual behavior through partial segregation (segregation during non-treatment times), while not supporting historical assertions of calming effects provided by presence of female patients in mixed-gender ward environments. Interpretation of these results is limited by the lack of experimental control in this post hoc study, as well

as by possible difficulties extending results from a chemically dependent population to a population characterized by more severe, chronic, and possibly debilitating psychiatric difficulties.

Table 2. Behavioral Incidents by Housing Arrangement, Ward, and Gender

			type of incident						
			sex	verbal	abuse	Other b.	AWA	prop	sum
Single-sex units	73	male	0	0	0	1	3	0	4
	76	female	0	0	0	3	0	0	3
sum			0	0	0	4	3	0	7
Mixed-sex units	73	male	0	0	5	0	4	0	9
		female	0	0	3	0	2	1	6
	76	male	1	0	1	3	3	1	9
		female	1	0	3	2	0	1	7
sum			2	0	12	5	9	3	31

Anecdotally, many staff indicated they preferred the segregated gender arrangement. Staff observed that when housing was mixed, patients would regularly engage in competitive behaviors for the attention of their other-sex counterparts. This competition would reportedly often result in conflict and arguments.

Hypotheses

The following hypotheses were offered with respect to behavior to be observed following the establishment of separate wards for male and female psychiatric patients in comparison to behavior on the same wards when serving an integrated population. These hypotheses were stated in terms of "behavioral incidents" which were defined with the following categories: verbal

aggression/threats, physically assaultive behaviors, self-injurious behaviors, sexually inappropriate/assaultive behaviors, property damage/theft, non-compliance with rules/requests, absent without authorization, and miscellaneous other behavioral challenges. These behaviors are recorded by staff and become a part of the patient's chart as well as the hospital database. Specifically, the hypotheses in the proposed study were:

1. The number of sexual incidents reported would decrease following the establishment of separate wards for men and women.
2. The earlier contention that female patients have a calming effect on male patients would not be supported. That is, the reported number of behavioral incidents of all kinds was not expected to increase, following separation of wards into separated areas for men and women.
3. Differences would exist between male and female patients' preferences for housing arrangement, with women showing greater preference for single-gender housing. A significant percentage of patients, particularly women, were expected to indicate a preference for same-gender housing arrangements.
4. Nebraska patients' report of prior sexual victimization would be consistent with those reported in previously published studies.
5. Staff interviews would support a more manageable ward environment following the establishment of separate wards for men and women.

Methods

Setting

Hastings Regional Center (HRC), set in rural pastoral Southeast Nebraska, began as "Hospital for the Uncurably Insane" in 1887, and was established as a "state asylum for the incurably insane" in response to increasing mental health problems, a growing state population, and the need for longer-term services than her sister facilities in Lincoln and Norfolk could provide.

The hospital has undergone many changes in name and service orientation. In 1895, the facility's name was changed to "Asylum for the Chronic Insane;" in 1905 it became "Nebraska State Hospital;' in 1915 "Ingelside Hospital of the Insane;" at some point "Hastings State Hospital;" and finally in 1971, the facility became known as "Hastings Regional Center" (Einsel, 1988).

Prior to 1920, the facility was primarily a containment facility for the "incurably insane." "Treatments" began in 1920. The next major change was in the 1950s, when effective pharmacotherapy advances were made, allowing many wards to become unlocked units, and psychiatric rehabilitation programs were introduced. In 1963, the hospital was reorganized into two unit hospitals, one for treatment of alcohol dependency and the other focused on psychiatric issues.

Presently, HRC is a 24-hour-a-day psychiatric hospital divided into two components, an adult general psychiatric program, and a residential chemical-dependency program. The general psychiatric services (GPS) program typically serves those residents of Nebraska living in the western two-thirds of the state,

plus the other regions of the state when other facilities require overflow relief. Currently, the GPS program includes several levels of care: inpatient, residential, day treatment, outpatient, and two different types of mobile outreach teams. Admission criteria for the general psychiatric inpatient admissions units include commitments, psychotic disorders, affective disorders, and other Axis I major mental illnesses.

The present study was composed of five components designed to provide data with which to test the above hypotheses.

- Part 1: The primary experimental piece considering reduction in sexual incidents. This addressed the proposition that the frequency of inappropriate and/or assaultive sexual behavior between patients can be reduced through segregated housing as well as the supposed "calming effect" female residents have been posited to exert.
- Part 2: Patient completed preference surveys. This portion assessed male and female patients' preferences regarding housing and staffing arrangements, and allowed comparison to studies conducted and published in the UK. This portion also allowed for patient commentary on issues related to housing arrangement.
- Part 3: Analysis of prevalence of prior sexual abuse histories among patients. Information derived from routinely administered interviews addressed prevalence of prior sexual victimization allowing for comparison to other US and international prevalence studies.

- Part 4: Staff interviews. Interviews provided staff observations related to ward atmosphere and patient manageability. Many staff provided additional elaborative support for their responses allowing for qualitative analysis of their expectancies and experiences.
- Part 5: Specific incident qualitative analysis. Incidents of sexual contact between patients are discussed with an eye to providing suggestions for patient safety improvements and greater ward manageability

Part 1: Behavioral incident report comparison

This portion of the study tested the hypothesis that sexual incidents would decrease with segregation of men and women patients onto separate wards. Additionally, the long-assumed "calming" function of female patients on mixed units was tested by comparison of frequency of behavioral problems on mixed- and single-gender units.

Archived incident forms comprised the principal data for this portion of the study. Incident forms are routinely completed for a variety of reasons. For the purpose of this study, only forms completed for the following reasons were included in the analysis: verbal aggression/threats, physically assaultive behaviors, self-injurious behaviors, sexually inappropriate/assaultive behaviors, property damage/theft, non-compliance with rules/requests, absence without authorization, and other miscellaneous behavioral challenges. Staff complete reports as a result of witnessing an event, being told that an event has transpired, or observing evidence that an event has transpired.

While reviewing behavioral incident reports, it became clear that staff frequently coded similar circumstances under different categories. For example, an incident in which a patient has become physically aggressive toward another patient may be coded as a "behavioral incident" or alternatively as an "abuse by other member." Additionally, events may be coded as "behavioral incidents" when more specificity was possible in their designation. For each incident report analyzed, a brief description of the incident allowed for recoding of events into the designations listed above. Thus review and recoding was done by the author, and by another trained individual using the decision tree found in Appendix A. Interrater reliability for recoding of behavioral incidents into data used in this analysis ranged from 80% to 100%. Exact values for interrater agreement for each category of incident may be found in Appendix B, table 3. For Part 1 of this study, the frequency of the recoded reports were compared for men and women combined across mixed and segregated conditions to assess changes both in sexual incidents and other behaviors.

Units 33 and 34, designated "Acute Inpatient/Secure Residential" wards were the primary focus of the study. The "Written Plan for the Hastings Regional Center" (revised July 15, 1998) describes the patient population as follows: "Individuals admitted to the acute level of care on these units are experiencing a psychiatric crisis exemplified by severe psychiatric symptoms and a high degree of dangerousness to themselves or others. Individuals receiving the secure residential level of care are those for whom psychiatric symptoms have stabilized, but require ongoing management, and who continue to exhibit a level

of dangerous behavior that necessitates a locked door and access to restraint and seclusion"(p.46). The Plan lists the capacity of these two units at 180 admissions per year, per unit, with an average length of stay of 7-21 days at the acute inpatient level and 30-90 days at the secure residential level. Daily capacity on each unit is 18 acute and 10 secure/residential with the capability to provide 9,198 bed days per year at 90% capacity on each of the two units.

Subjects consisted of both male and female patients assigned to wards 33 and 34 of Hastings Regional Center during either of two 3-month periods of time, extending from 1/01/98 to 4/01/98(baseline-mixed), and 1/01/99 to 4/01/99 (experimental-segregated), respectively. Two hundred fifty six patients (159 males and 97 females) were admitted to HRC during the two three month study periods, with 138 patients (86 males, 52 females) admitted during the 1998 period, and 118 admitted (73 males, 45 females) during the 1999 period. The average age of patients admitted to HRC during the study period was 36.6 years (SD = 12.87), with males averaging 33.9 years (SD = 11.23) and females averaging 40.87 years (SD = 14.22).

A review of census statistics from 1/01/99-4/01/99 yielded that the patient population during this period dropped substantially from past years. Patients admitted to either of these wards typically stay for a mean time of fourteen days. To avoid possible confounding effects that might occur from transitioning a particular patient from one environment to the other, new admissions were assigned to a ward according to gender beginning 10/13/98. Those patients housed on the ward intended for the opposite sex were transferred to the

appropriate unit, with Ward 33 becoming all male on 10/24/98, and Ward 34 becoming all female on 11/25/98. While units were segregated by 11/25/98, approaching overcrowding on the men's unit (Ward 33) necessitated shifting of some female patients from Ward 36, a rehabilitation unit, to the women's unit (Ward 34), with transfers occurring from 1/25/99 through 2/8/99. Less acute men were transferred to Ward 36 during the same period, creating an additional all-male unit with a mixed acute/rehabilitation treatment population. Only data occurring following 1/01/99 comprised the experimental comparison data set. Disinclusion of data from 10/13/98-12/31/98 was intended to limit those patients exposed to both environments during their present stay to a minimum, resulting in two relatively "pure" sets of participants. Of course, some patients on the "new" single-gender units were readmissions, and had experienced housing under the prior mixed-gender arrangement. Additionally, the 7 female patients transferred from 1/25 – 2/8 were transferred from a mixed-gender (primarily male) unit to the single gender environment on Ward 34. Very small numbers of patients on initial admission did not allow separate analysis of only those patients who were initial admissions.

The patient populations were analyzed in order to provide a better understanding of possible changes in demographics and diagnoses that could affect the comparison of behavioral incident data from 1998 to 1999. In order to assess similarities and differences between patients living on wards 33 and 34 during 1998 and 1999, chi-square analyses by year were undertaken for incidence of affective disorders (i.e., depression, bipolar, dysthymia, etc.),

psychotic disorders (i.e., schizophrenia, delusional disorder, psychotic disorder NOS, etc.), diagnosis of PTSD, other Axis I disorders (i.e., other anxiety disorders, eating disorders, etc.), Antisocial Personality Disorder, Borderline Personality Disorder, other Axis II disorders, and identified substance abuse issues. Data used for comparisons were derived from reviews of medical records for all patients treated at HRC on wards 33 and 34 during January through March in 1998 and 1999. Many patients presented with more than one diagnosis – for the purposes of this analysis, no judgment was made regarding primacy of diagnosis. Detailed crosstabulated demographic data may be found in tables 4 - 11 in Appendix C.

Chi-square analyses yielded no significant differences as a function of study period in the patient population on any of the diagnostic variables listed above, suggesting that patients could be considered as having been drawn from the same population with respect to the variables sampled.

Part 2: Patient preferences

Earlier studies have found that a substantial number of patients, often mostly female patients, indicate a preference to be housed on a same-sex ward. Preference studies have not been undertaken in the United States, and international cultural and norm differences suggest danger in assuming without empirical support similarities in preference extend to US patients.

To this end, all hospital inpatients served by HRC on Wards 33 and 34 during 1/01/99 – 4/01/99 were asked to complete a brief housing preference survey (see Appendix D). Patients entering the hospital during this time

completed the questionnaire upon admission. Patients admitted prior to 1/01/99 were also asked to complete the survey. Patients generally completed the survey either on admission or within 10 days thereof. Nursing and technical staff assisted patients in the completion of the surveys as needed.

One hundred eighteen patients participated in the survey, with 5 patients eliminated due to incomplete questionnaires. Four additional patients present during the study period were unable or unwilling to complete questionnaires. Patients ranged from 18 to 72 years of age (mean = 38.23, SD = 13.17) Participant demographics are represented in the table below:

Table 12. Patient demographics for those completing preference surveys

	Frequency	Percent
male	66	60.6
female	43	39.4
Total	109	100.0

It was expected that a sizable proportion of patients would favor same-sex wards, and that differences between males and females in their preference for single-sex housing would exist, with a greater proportion of women indicating a preference for housing arrangements with other women only. It was expected that many patients would elaborate on their responses when asked, and that their elaborations would allow for a qualitative discussion of their perceptions.

Part 3: Prevalence of abuse history

Information regarding patients' psychosocial history, including incidents of sexual abuse, are routinely collected by social work staff (see Appendix E for relevant portion of interview protocol) using a semi-structured format. In the

present study, social histories from patients living on wards 33 and 34 during 1/01/98-4/01/98 and 1/01/99-4/01/99 were analyzed for indication of prior sexual abuse history. While patient demographics were similar to those discussed in Part 1, 11 patients were readmitted during one or both sample periods. After removing these additional data sets, the adjusted sample included data from 245 patients allowing accurate estimation of prevalence of the clinical issues of concern. Frequency of a positive history for sexual abuse was expected to approximate national norms.

Part 4: Staff Interviews

Staff members from each ward were briefly interviewed by two research assistants not employed by HRC regarding their perceptions of the effect of the transition to single-gender units using a semi-structured interview format (see Appendix F).

Employees providing direct patient services, including nurses, psychological technicians (techs), social workers, psychological service assistants (PSAs), occupational therapists, recreational therapists, secretaries, and psychologists, were invited to participate in a brief semi-structured interview regarding recent changes at HRC. Interviewers successfully contacted and interviewed 61 of 70 employees. One employee was contacted but declined participation in the study. Employees from all shifts participated in the study.

Demographic information was collected from employees interviewed. The breakdown by ward, employee gender, shift, professional designation, years in position, and age is represented in Appendix G, tables 13 - 18.

Generally, an equal number of employees were interviewed from wards 33 and 34, interviewees were primarily from 1st shift and female, primarily psychological technicians, and most employees had been working in their present positions for more than three years. Interviews began with an open-ended question regarding employee perceptions of the changes, and then progressed to include more specific questions regarding expectations, ward safety, and patient manageability. The employees were each asked the following questions and encouraged to elaborate:

1. Have you noticed any changes following the transition from mixed to separate wards? Tell me about the changes you have observed. Has the change been generally positive or negative?
2. What were your expectations prior to the transition? Were your expectations generally positive or negative?
3. Which arrangement do you feel is safer for patients? Why?
4. Which arrangement results in a more manageable patient population? Why?

Based on anecdotal observations by staff regarding interactions between women and men on the wards, it was expected staff would report a safer and more manageable living environment following gender separation of the patient population.

Part 5: Specific Incident Analyses

Individual incidents of inappropriate or assaultive sexual behavior occurring during the months of January, February, and March in 1998 and 1999

were qualitatively analyzed. During the 6 months included in the control and experimental conditions involved with Part 1, 14 behavioral incidents occurred that involved sexual contact between patients.

Dimensions analyzed included: where, when, who was involved (staff, visitor, patient; sex orientation, assaultive/unwanted), and outcome (how situation was handled or resolved). Results were expected to yield suggestions regarding changes directed at environmental improvements, identification of patients with offending characteristics or vulnerabilities and tracking, and ward manageability.

Analyses and Results

Part 1: Behavioral incident report comparison

Unweighted frequencies for behavioral incidents occurring on Wards 33 and 34 during time periods spanning 1/01/98-4/01/98 and 1/01/99 – 4/01/99 are represented below.

Table 19. Behavioral incidents by sample period

	sample period		Total
	1998	1999	
Absent without authorization	.00	2	2
Verbal aggression/threats	16	26	42
Physically assaultive towards others	27	27	54
Self-injurious behavior	11	13	24
Sexual behavior toward others	10	4	14
Misc. behavioral incidents	2	4	6
Property damage/theft	3	1	4
Non-compliance with requests	2	.00	2
Total	71	77	148

As evident in the above table, some incident categories had frequencies too small to permit accurate estimation of outcome probability by means of chi-

square tests. For this reason, the incident categories of absence without authorization, self-injurious behavior, miscellaneous incidents, property damage or theft, and non-compliance with requests were combined into "other incidents." The categories of primary interest, sexual behavior toward others, physically assaultive behaviors, and verbal aggression or threatening behavior yielded sufficient frequencies to remain as individual categories for analysis. The collapsed data categories are represented in the table below:

Table 20. Collapsed behavioral incidents by sample period

	sample period		
	1998	1999	Total
sexual incidents	10	4	14
physically assaultive incidents	27	27	54
verbally assaultive/threatening behavior	11	13	24
other incidents	23	33	56
Total	71	77	148

Finally, unequal numbers of patients residing on Wards 33 and 34 from 1998 to 1999 required weighting of data to permit analysis. To this end, frequency data for 1999 was weighted by a value of 1.52, based on the change from the 1998 average bed day value of 25.4 to 16.7 in 1999. The weighted frequencies for behavioral incidents are represented below:

Table 21. Weighted collapsed behavioral incidents by period

	sample period		
	1998	1999	Total
sexual incidents	10	6	16
physically assaultive incidents	27	41	68
verbally assaultive/threatening behavior	11	20	31
other incidents	23	50	73
Total	71	117	188

Chi-squared analyses using Yate's correction for continuity in order to provide a one sample goodness of fit test of rectangularity were performed for each incident category in the crosstabulation table listed above. With respect to sexual incidents, no significant difference was found ($X^2 = 0.53$, df = 1, $p > .05$), suggesting that no changes were evident across sample periods. With respect to physically assaultive incidents, analyses also suggested no significant difference between sampling periods ($X^2 = 1.38$, df = 1, $p > .05$). Significant differences were found, however, for incidents involving verbal aggression/threats and threatening behavior ($X^2 = 9.13$, df = 1, $p < .05$), other combined incidents (combined AWA, SIB, Misc., Prop, and Non-compliance; $X^2 = 4.8$, df = 1, $p < .05$), and for total combined incidents for each period ($X^2 = 10.75$, df = 1, $p < .05$). In each case, differences were such that proportionately more incidents occurred during the 1999 sample period.

Although not a focus of the present study, data collected for comparison of 1998 and 1999 patient population demographics and diagnoses allowed for comparison of diagnoses by gender. Although chi-square analyses yielded no gender effects for diagnoses of affective disorders, psychotic disorders, antisocial personality disorder, and other personality disorders, significant differences were found for diagnoses of PTSD, other Axis I disorders ($X^2 = 38.178$, df = 1, $p < .0005$), Borderline personality disorder ($X^2 = 23.418$, df = 1, $p < .0005$), and substance abuse issues ($X^2 = 31.394$, df = 1, $p < .0005$). Gender differences were generally predictable, with men showing higher incidence of diagnoses of other Axis I disorders and substance abuse issues, and women showing higher

incidence of diagnoses of PTSD and Borderline Personality Disorder. For the breakdown of these data, see Appendix H, tables 22 - 29.

Part 2: Patient preferences

Across patient age and gender, 43.1% of patients indicated preference for a single-gender housing arrangement with mixed-gender therapeutic activities; 48.6% indicated preference for mixed gender housing, 8.3 % had no opinion or did not know.

A crosstabulation of preferences by gender is represented in the following table:

Table 30. Preference for housing by gender

		preference for housing			
		same sex	mixed gender	no opinion/don't know	Total
gender	male	22	41	3	66
	female	25	12	6	43
Total		47	53	9	109

A chi-squared analysis of gender by preference was performed. Due to small frequencies in "no opinion" cells, these cell were dropped from the analysis. Chi-squared analysis (X^2 = 10.936, df = 1, p = .001) yielded significant differences between men and women with respect to preference for housing arrangement, with twice as many women as men (67.6% vs. 34.9% of adjusted sample) indicating a preference for a single-gender housing arrangement. With 58.1% of the women surveyed indicating preference for single-gender housing, results are consistent with earlier findings in the United Kingdom reported by Myers et al (1990) and Hingley and Goodwin (1994).

A chi-squared analysis for age effects on preference was also undertaken. Participants were categorized into 3 age groups, 18-30 years, 31-45 years, and 46-72 years. Preferences according to age category are represented below.

Table 31. Preference for housing by age

		preference for housing			
		same sex	mixed gender	no opinion/don't know	Total
Age Categories	18-30 year olds	14	21	1	36
	31-45 year olds	16	22	4	42
	46 years or older	16	10	3	29
Total		46	53	8	107

As with the above analysis for gender effects, small frequency in cells created by "no opinion" responses necessitated dropping these cells from the analyses. The resulting analysis yielded no significant differences between age categories for housing arrangement preference ($X^2 = 3.253$, df = 2, p = .197). Although not statistically significant, a trend was apparent for older patients to indicate preference for single-gender housing while younger patients indicated preference for mixed-gender housing.

Regarding elaboration of responses, 37.6% of all patients surveyed elaborated on their responses while 62.4% provided no elaboration. Fifty percent of men elaborated on their reasons for preferring a housing arrangement, while only 18.6 % of women provided elaboration.

Table 32. Elaboration of response by gender

		elaboration		
		did elaborate	no elaboration	Total
gender	male	33	33	66
	female	8	35	43
Total		41	68	109

A chi square analysis yielded significant effects for gender on elaboration (X^2 = 10.936, df = 1, p = .001), with men elaborating much more frequently than women.

Similarly, a chi-square analysis for elaboration differences by age was performed, with no significant differences being found (X^2 = .436, df = 2, p = .804). Patient responses are represented below:

Table 33. Elaboration of response by age

		elaboration		
		did elaborate	no elaboration	Total
Age Categories	18-30 year olds	15	21	36
	31-45 year olds	15	27	42
	46 years or older	10	19	29
Total		40	67	107

A chi-square analysis to assess differences in elaboration in relation to housing arrangement preference was performed. No significant differences were found between those indicating preference for single-gender housing from those preferring mixed gender housing with regard to elaboration. Data for the analysis is represented below.

Table 34. Elaboration of response by housing preference

		elaboration		
		did elaborate	no elaboration	Total
preference for housing arrangment	single gender	20	27	47
	mixed gender	21	32	53
Total		41	59	100

A complete, verbatim list of all patient elaborative responses may be found in Appendix I.

The variables related to number of prior hospitalizations and housing arrangements during prior hospitalizations were dropped from the study as a cross-check with patient records demonstrated widespread patient reporting errors such that their responses were usually not congruent with information in their records. Unfortunately, many patient records do not contain reliable information regarding numbers of previous hospitalizations outside of HRC, and no information regarding housing arrangements for hospitalizations other than at HRC; thus, substitution with information obtained in patient medical records for information provided by patients would likely not provide a reliable understanding of previous hospitalization history.

Part 3: Prevalence of abuse history

The analyses included 245 patients, 154 men (62.9 percent) and 91 women (37.1 percent), aged 18-82 years (mean = 36.27, SD = 12.77). Men in the sample averaged 33.6 years old (SD = 11.31) and women averaged 40.5 years old (SD = 13.98). Eighty-three patients reported earlier abuse for a prevalence of prior sexual abuse of 33.9% for the overall population. Thirty-

three men (20% of male sample) reported prior sexual abuse, compared with 50 women reporting prior sexual abuse (55% of females in sample). A chi-squared analysis yielded that women in this sample reported prior sexual abuse more frequently ($X^2 = 29.23$, df = 2, $p < .0005$), with the reported rate of abuse being over twice that reported by men.

Table 35. History of sexual abuse by gender

		history of sexual abuse			
		yes	no	no information	Total
gender	male	33	96	25	154
	female	50	30	11	91
Total		83	126	36	245

Although not an identified area of the study, interesting patterns of results suggested need for analyses of details of abuse histories. Records allowed for collection of data related to when earlier sexual abuse occurred, and allowed classification of abuse as occurring during childhood, adolescence, adulthood, or combinations of these three periods. The occurrence of abuse incidents is represented by gender in the table below.

Table 36. Time of occurrence of sexual abuse by gender

	gender		
	male	female	Total
child	14	9	23
adolescent	6	5	11
adult	6	11	17
child and adolescent	6	7	13
child and adult	.00	9	9
adolescent and adult	.00	6	6
child, adolescent, and adult	1	3	4
Total	33	50	83

Small frequencies in some cells required collapsing data into the following periods of prior abuse: childhood, adolescence, adulthood, and multiple periods of abuse. Collapsed data related to time of abuse is represented below.

Table 37. Collapsed time of occurrence of sexual abuse by gender

		collapsed time of abuse				
		childhood	adolescence	adulthood	abuse occurred during more than one period	Total
gender	male	14	6	6	7	33
	female	11	4	10	25	50
Total		25	10	16	32	83

A Pearson chi-square analysis of gender by period (X^2=8.77, df = 3, p = .019) yields significant differences in terms period during which reported prior sexual abuse occurred. Women were more likely to report abuse as occurring during more than one time period or spanning across several time periods. Men were more likely to report abuse as occurring during childhood.

Again, while not a focus of this study, records allowed for analysis of prevalence of physical abuse history in the patient population. Most (91%) of the records reviewed for the 245 patients included in this portion of the study contained information relevant to determining the presence of a history of prior physical abuse, although information was not as detailed as sexual abuse history information and did not permit analysis of life period during which abuse occurred. Twenty-two (9%) of the records contained no information regarding abuse. HRC staff suggested that these records likely represent patients without physical abuse histories. Data for histories of prior abuse are represented below:

Table 38. History of physical abuse by gender

		history of physical abuse			
		yes	no	no information	Total
gender	male	57	82	15	154
	female	54	30	7	91
Total		111	112	22	245

A Pearson Chi-square analysis (X^2 = 11.71, df = 2, p = .003) suggests that men and women differ significantly with respect to prior physical abuse history, with women being nearly twice as likely to report history of physical abuse.

The present study extends the results obtained by others (Carmen et al, 1984; Jacobs and Richardson, 1987; Bryer et al, 1987) to a Nebraska population of male and female psychiatric inpatients. Results suggest prevalence of prior sexual victimization within the population of Nebraska psychiatric inpatients served at Hastings Regional Center is consistent prevalence estimates published in Jacobson and Richardson (1987), a study using similar semi-structured interview techniques with psychiatric inpatients. Further, men and women differentially report prior histories of abuse, with women being twice as likely to report prior sexual trauma as men. Additional analyses suggested differences in type of prior sexual victimization and time of occurrence for men and women.

Part 4: Staff Interviews

Ninety-five percent of employees indicated they had noticed a change following transition from mixed- to single-gender units. Five percent (3 respondents) felt no change had occurred; 2 of these respondents were 3rd shift employees, working primarily during times when patients are sleeping.

Table 39. Staff noticing change

	Frequency	Percent
yes	58	95.1
no	3	4.9
Total	61	100.0

In response to whether changes have been positive or negative, 75.4% indicated changes had been positive, 13.1% indicated changes had been negative, 11.5% indicated changes had mixed positive and negative aspects or that they did not know.

Table 40. Staff perceptions of effect of change to single-gender housing

	Frequency	Percent
positive	46	75.4
negative	8	13.1
mixed/don't know	7	11.5
Total	61	100.0

Regarding expectations, 50.8% had expectations the change would result in a more positive and therapeutic ward atmosphere, 26.2% expected a negative change, and 23% had no expectations.

Table 41. Staff expectancies of effect of change to single-gender housing

	Frequency	Percent
positive	31	50.8
negative	16	26.2
don't know/no expectations	14	23.0
Total	61	100.0

Employee observations of issues of safety strongly support gender-segregated housing as an improvement for patient safety. Seventy-eight percent indicated single-gender housing was safer than mixed-gender housing, followed

by 8.2% observing mixed-gender was safer, 8.2% indicating both arrangements were equally safe, and 4.9% expressing that they did not know or had no opinion.

Table 42. Staff perceptions of relative safety of housing arrangements

	Frequency	Percent
mixed gender ward	5	8.2
single gender ward	48	78.7
equally safe / no difference	5	8.2
don't know / no opinion	3	4.9
Total	61	100.0

Responses regarding patient manageability were more mixed, yet still evidence strong support for segregated housing. Sixty-three percent of respondents indicated single-gender housing made for a more manageable housing arrangement, 19.7% saw mixed-gender housing as more manageable, 6.6% regarded the arrangements to be equally manageable, and 9.8% had no opinion or did not know.

Table 43. Staff perceptions of relative manageability of housing arrangements

	Frequency	Percent
mixed gender ward	12	19.7
single gender ward	39	63.9
equally manageable/ no difference	4	6.6
don't know/ no opinion	6	9.8
Total	61	100.0

A thorough and representative sample of employee responses may be found in Appendix J. Generally, employees showed strong support for the change to a single gender housing arrangement. Typical comments included:

- "It seems the females are safer. They are less vulnerable to males. Staff can't be there all the time. Females and males would prey on each other.

Females are not put into the situation where they are vulnerable to sex by males."

- "We do have a vulnerable population and patients run the risk of sexual predators."
- "Romances have stopped – not so many sexual issues."

For those employees who expressed support for the mixed-gender model, reasons cited were generally consistent with the retrospective rationales stated in the literature, mainly the "normalcy" rationale ("Mixed gender is a more natural arrangement. In the real world, men and women are together. It's more of an institution – they aren't learning anything"), and the "calming effect" ("Women have a calming effect").

Interestingly, several employees supporting a single-gender unit made comments about the wards being calmer when men and women were separated. Some typical comments included:

- "The ward is calmer. We don't have the macho attitudes from the guys. Women are not trying to impress guys. It stops jealousy between patients."
- "It has calmed down the males."
- "When it was a mixed ward, the tension was high. Males would show off for the females."

Such observations run contrary to the popularly held yet empirically unsupported notion that women act as a social control agent for men in institutional settings.

Part 5: Specific Incident Analyses

The standard hospital response to sexual victimization of a patient involves: 1) notification of the sexual abuse hotline; 2) notification of the patient's psychiatrist or OD; 3) completion of an incident report signed by RN or MD. If significant injury has occurred, others (Facility Administrator, Director of Nursing, Program Director) are notified. HRC staff reported that the standard protocol was employed in each of the following cases.

Incident 1

When: 1/98

Where: In hallway on Ward 33, standing in snack line

What happened: A female patient touched another female patient's breast.

How resolved: The offending patient counseled regarding inappropriate touching and invasion of personal space. The offending patient stated that she would "stay away from her." Observation of both patients was increased.

Incident 2

When: 2/98

Where: Ward 33 dayhall

What happened: A male patient kissed a female staff member on the neck.

How resolved: The offending patient was told by the offended employee immediately following the incident, "No, you are never to do that again." The

patient was counseled by a male, Spanish-speaking technician to never touch or kiss female patients or staff. The patient stated that he would "never do that again."

Incident 3

When: 2/98

Where: Ward 33 dayhall

What happened: A male patient grabbed another patient's penis through his pants.

How resolved: The incident resulted in restriction of privileges for the offending patient. Observation of the offending patient was increased, especially when around offended peer.

Incident 4

When: 2/98

Where: In the tunnel

What happened: A female patient made allegations against a peer that he touched her in the groin while she was walking. There were no witnesses

How resolved: The offending patient was interviewed and denied allegations. His level of observation was increased, and he ended up in seclusion for one hour due to escalation.

Incident 5

When: 2/98

Where: Outside the structured workshop while on break

What happened: A male patient was observed with his arms around a female patient, kissing her on the cheek.

How resolved: The offending patient was reminded to keep his hands to himself, and to not kiss, hug, or touch others. His privileges were restricted and observation was increased. The offended patient was "reminded about setting boundaries and to report anything like this in the future."

Incident 6

When: 2/98

Where: Ward 34 hallway

What happened: A male patient "patted a female patient on her bottom."

How resolved: The incident was investigated. The offending patient denied the allegations. Two other patients supported the allegations. The observation of the offending patient was increased.

Incident 7

When: 3/98

Where: Ward 33 dayhall

What happened: A male patient was observed stroking a female peer's arm.

How resolved: Both patients were counseled on sexual appropriateness. The offended patient was encouraged to keep away from offending peer. Observation was increased to prevent further inappropriate behavior. The privileges of the offending patient were restricted.

Incident 8

When: 3/98

Where: Recreation program

What happened: A male patient grabbed a female patient's buttocks.

How resolved: Both patients were instructed to stay away from each other.

Incident 9

When: 3/98

Where: Recreation program

What happened: The same male patient involved in incident 8 grabbed the same female patient's buttocks again.

How resolved: Both patients were instructed to stay away from each other.

Incident 10

When: 3/98

Where: Elevator

What happened: The same male patient involved in incidents 8 and 9 rubbed a female patient's breast with his arm.

How resolved: Both patients were instructed to stay away from each other. Rules regarding "no touching" were reiterated.

Incident 11

When: 1/99

Where: While walking outside, unescorted, between unit and sheltered workshop program located in a different building

What happened: A male patient grabbed a female patient by waist, and the female patient related that it was uncomfortable. The male patient was

verbally-abusive, using sexually-oriented language and "subtle pressure" for sexual activity

How resolved: The ward staff on the offending patient's ward were notified, and the offending patient was escorted to the sheltered workshop program starting that date.

Incident 12

When: 1/99

Where: At evening recreation program

What happened: The female patient involved in incident 11 reported a male patient touching her leg and feet with his.

How resolved: The unit of the offending male was notified, and observation was increased in program areas. Offended patient was escorted whenever off unit.

Incident 13

When: 1/99

Where: Sheltered workshop

What happened: The female patient involved in incidents 11 and 12 reported a different male patient pinched her buttocks.

How resolved: The unit of the offending male was notified, and observation was increased in program areas. Offended patient was escorted whenever off unit.

Incident 14

When: 1/99

Where: Program in Building 3

What happened: The female patient involved in incidents 11, 12 and 13 reported that a different male patient kissed her hand.

How resolved: The unit of the offending male was notified, and observation was increased in program areas. Offended patient was escorted whenever off unit.

In summary, for the fourteen incidents occurring during the study periods, 10 occurred during 1998 (with mixed-gender wards), 5 occurred while on the ward, 13 involved a male offender, 13 involved a female patient victim and 1 involved a female staff member. During the 1998 study period, 5 incidents occurred on ward, while during the 1999 period no incidents were reported to occur on the ward. Three incidents involved that same offender, and another four, all those occurring in 1999, involved the same offended patient. (see Appendix K, tables 44 - 48 for more detailed information.)

Discussion

The present study sought to address a number of questions related to transition from the mixed-gender housing arrangement typically found in most US psychiatric hospitals to a model that uses same-sex housing with mixed-gender therapeutic activities. Specifically, the primary issues addressed in the present study included the relative safety of single-gender housing, the "calming effect" offered as retrospective rationale for combining housing units in the 1970s, the

prevalence of abuse history in Nebraska inpatients, and employee expectations and perspectives on the changes in housing style.

The primary hypothesis that transition to a single-gender unit style of housing would result in a decrease in behavioral incidents involving sexual contact between patients was not supported in the present study. While there was reduction in sexual incidents from 10 in the 1998 study period to 4 in the 1999 study period, this reduction was not statistically significant. The small frequencies in inappropriate and/or unwanted sexual behavioral incidents that made statistical significance difficult to achieve may also be interpreted along a more practical dimension that has clinical significance. It is hard to dispute the benefit of reducing physical incidents from 10 during one three month period to 4 incidents during the same amount of time a year later. Each incident has the potential for subsequent psychiatric sequelae, both in terms of making decisions one regrets while in an acute state of psychiatric distress, and in the realization that one could be victimized, or revictimized, in a place intended to provide relief from psychological distress. Results do support moving from a mixed to a single gender unit has promoted a safer ward environment with respect to sexual issues, as no incidents of inappropriate sexual contact have occurred on the wards since division of genders. Anecdotally, conversations with staff suggest many staff members credit the recent change to a single-gender housing arrangement with a reduction in the frequency of sexual events on the ward and an improvement in general patient manageability.

Specific incident analyses suggested, prior to separation of patients into segregated wards, the bulk of incidents involving inappropriate or unwanted sexual contact occurred on the wards. Following separation of men and women, the few incidents that have occurred have occurred off ward en route to activities and programs, and have involved the same offended patient. Likewise, clear from looking at the behavioral incident listings is the pattern exhibited by patients engaging in unwanted sexual activity. Generally such incidents did not occur in isolation, but rather coupled with other indicators of potential difficulty with the patient involved. Hastings Regional Center is in the process of defining potential for predatory behavior as well as potential vulnerability in their patients. Such efforts are well advised, given all incidents in 1999 involved the same victim, and three incidents in 1999 involved the same perpetrator.

Decreases in sexual incidents were accompanied by increases in other problematic behaviors. While increases in verbal aggression and other behavioral concerns may be seen as support for the posited "calming effect" that women have on their male peers, other interpretations are possible. The present study sought to minimize the effects of transition by allowing a 30 day period to elapse, following completed establishment of single-gender wards, before beginning data collection. The presence of patients formerly housed in the mixed gender arrangement either during the present or a previous hospitalization highlight that the time period sampled could still be viewed as largely transitional. The extent to which the transitional nature of the new mixed gender environment

impacted the ward milieu cannot be determined at this time. Future data collection over time will provide additional insight into this possibility.

If the supposed calming effect women have on men was supported, ethical considerations would argue against combining women and men together to this end, as the advantages are few and the risks are many for female patients in the mixed-gender environment. Increasing the risk for some patients based on their utility as social control agents for other patients is an argument that few would defend.

Data used for comparison of 1998 and 1999 patient population samples provided an opportunity to look at prevalence of a variety of general psychiatric presentations in the Nebraska psychiatric inpatient population. Not suprisingly, men had a higher incidence of substance abuse disorders while women had a higher incidence of Borderline Personality disorder and Post Traumatic Stress Disorder. While the incidence of substance abuse and Borderline Personality Disorders was consistent with published prevalence rates, the relatively low incidence of PTSD in a population of women with a reported sexual and physical abuse history of greater than 50% was surprising.

The present study provides strong support for earlier studies in the UK suggesting a large percentage of patients, particularly female patients, would prefer to live on a single gender unit while receiving inpatient psychiatric services. Indeed, the proportion of patients overall preferring a single-gender unit was higher than was expected. While it was not surprising given earlier findings that more males would prefer the company of their female peers, more

males indicated single-gender housing preferences than was anticipated. Their statements of preferences, combined with the majority of women indicating a preference for single-gender housing, certainly suggest patient views must be considered in this climate of patient involvement in structuring their own care. Patient comments related themes of improved feelings of security, particularly at night, freedom from distraction, and better ability to focus on treatment.

While the relationship between trauma history and psychiatric illness is widely accepted, relatively little research has been done considering incidence of prior trauma history in psychiatric inpatient populations, the most incapacitated of those with mental illnesses. The present study supports that the majority of Nebraska female inpatients have a history of sexual abuse and physical abuse, and nearly a quarter of male inpatients have a history of sexual abuse and greater than a third had a history of physical abuse. These findings are consistent with those published in Jacobson & Richardson (1987). Jacobson (1989) highlights the importance of appropriate information gathering techniques in the estimation of prevalence of abuse history. Information used for this study was derived from semi-structured interview techniques in accordance with the best practices suggested by Jacobson (1989) and others (i.e., Bryer et al., 1987), and thus likely represents the best estimate of prior abuse possible at this time. The high proportion of patients, particularly women, with history of prior trauma suggests this population can reasonably be regarded as a vulnerable population. Issues related to safety and privacy may be especially salient to the approximately one half of female patients, and one quarter of male patients who

have been victimized. The importance of providing a safe environment sensitive to issues of potential revictimization is underscored by the present findings.

Several interesting patterns came out of the analyses of sexual trauma history, suggesting the need for future clarification. Despite a majority of women and a quarter of the men sampled reporting a history positive for sexual abuse, only 6 of 245 patients (adjusted for repeat hospitalizations) were diagnosed as suffering from Post Traumatic Stress Disorder. The DSM-IV suggests community prevalence rates from 1-14%, and is likely higher in populations with major mental illnesses (Mueser et al., 1998; Brady, 1997). Mueser et al (1998) shared similar findings from a study of 275 patients with severe mental illness receiving mental health services at one of several New England clinics. Despite obtaining a rate of 43% of patients meeting PTSD criteria based on a structured diagnostic interview, only 2% had this diagnosis in their charts. The authors' conclusions, that PTSD is a common comorbid psychiatric disorder that is frequently overlooked, may apply to the present study. Brady (1997) suggests that, due to the frequency of traumatic events and comorbidity of PTSD with other major psychiatric disorders, PTSD assessment should be a standard practice when performing psychiatric diagnostic assessment. The possibility that symptoms were unrecognized or misidentified as part of another syndrome while formulating diagnoses should be considered.

Employee interviews provided additional support for viability of single-gender units as a safe and manageable housing arrangement. The perspective of the employees who spend time in direct contact with patients on a daily basis

provides an invaluable insight into the effects the recent changes in housing has had for the patients involved. Feedback from employees was very positive, indicating the change in single gender units has created a safer environment, particularly for female residents, and a more manageable and monitorable patient population. A number of employees commented on other advantages to single-gender housing arrangements, including decreased distractibility, reducing competition between patients for the attention of their opposite gender peers, and a more comfortable environment for patients with special vulnerabilities. While some staff indicated negative or unsure expectations prior to the changes, the vast majority of employees indicated the changes had been for the better.

While the present study has contributed to better understanding in a variety of dimensions, several limitations exist. Changes occurring in the composition of patients residing on wards 33 and 34 from 1998 to 1999 pose a potential problem for comparison of the two patient groups. While significant attempts were made to compare the two groups along demographic and diagnostic dimensions, other differences may exist which could affect comparisons in some unknown way.

Secondly, despite efforts to keep to a minimum patients with past experience on mixed-gender wards, the majority of patients had been hospitalized before, almost exclusively in a mixed-gender housing environment. Likewise, a small percentage of patients suffering from more chronic difficulties made the transition from single- to mixed-gender housing and remained throughout the study period. While these difficulties are reflective of a real-life

situation, they do raise the question of whether behavioral measures and preference responses could potentially have been impacted by patient expectancies acquired during these prior experiences.

Results from the portion of the study considering prior trauma history suggested the possibility of differences in the developmental periods during which prior sexual abuse may have occurred. It is unclear whether the significant difference between men and women is a product of reporting differences or a product of a different pattern of victimization. Further study of this effect may prove valuable in understanding differential process and impact in sexual victimization of men and women.

Conversations with staff at HRC have suggested the need for further consideration of gender issues in staffing arrangements. Particularly, it has been suggested that nighttime staffing on the female ward might most appropriately consist of mainly female staff members. Likewise, current daytime staffing on the male unit includes only one male staff member. Staff have discussed the need for a greater male presence on the male ward as an inhibiting factor for problematic verbal and physical aggression.

Additionally, treatment staff have begun to discuss special opportunities for components of treatment involving single-gender participants, such as trauma interventions. The effects of a combined single-gender housing arrangement as well as single-gender components of treatment could inform a more directed intervention effort for individuals suffering from trauma-related psychiatric issues.

In conclusion, the present study suggests the need for further inquiry into the histories and needs of psychiatric inpatients, as well as the utility of single-gender units for meeting those needs. Given the high prevalence of abuse histories in the patient population, a significant portion of the patient population expressing a desire for gender-segregated living conditions, and the potential for retraumatization found in many institutions, it seems that sensitivity to such issues is timely. Further exploration into different treatment opportunities made possible by gender-segregation, alternative staffing policies, and effective identification of patients likely to offend or be offended against could prove helpful in structuring a safer and more therapeutic living environment while receiving inpatient psychiatric services.

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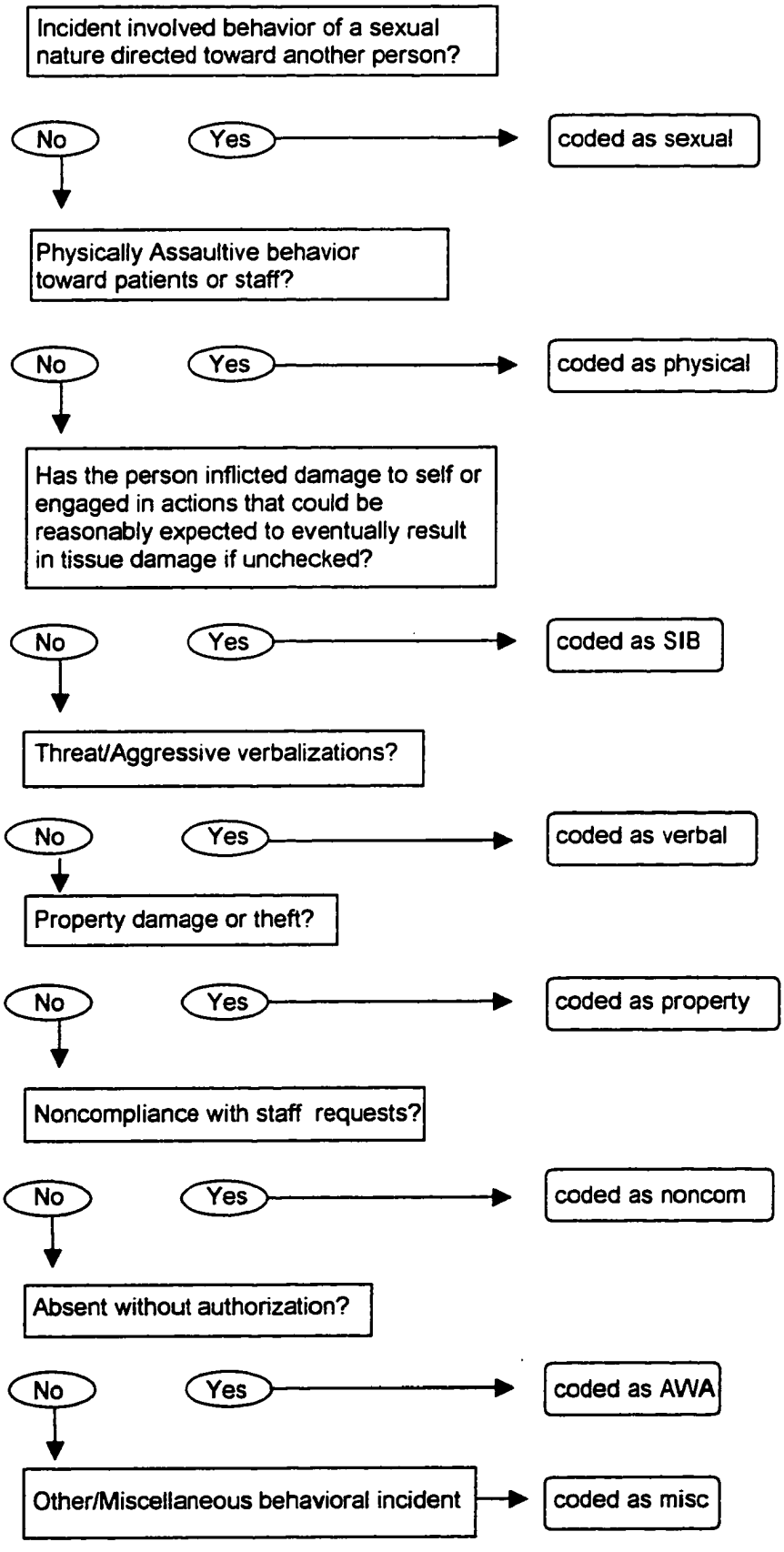
Appendix A



Appendix B

Table 3. Interrater agreement for behavioral incident frequency recoding

Type of Incident	Rater 1	Rater 2	Agreement
Verbal aggression/threats	39	42	93%
Physical aggression	52	54	96%
Self-injurious behavior	28	24	86%
Sexual behavior	13	14	92.9%
Property damage/theft	5	4	80%
Noncompliance	2	2	100%
Absence without authorization	2	2	100%
Miscellaneous behavioral incidents	7	6	85%

Appendix C

Table 4. Incidence of Affective Disorder by Study Period

		affective disorder		
		yes	no	Total
study period	1998	82	56	138
	1999	64	54	118
Total		146	110	256

Table 5. Incidence of Psychotic Disorder by Study Period

		psychotic disorder		
		yes	no	Total
study period	1998	46	92	138
	1999	48	70	118
Total		94	162	256

Table 6. Incidence of Diagnosis of Post-Traumatic Stress Disorder by Study Period

		ptsd diagnosis		
		yes	no	Total
study period	1998	3	135	138
	1999	3	115	118
Total		6	250	256

Table 7. Incidence of Other Axis I Disorders by Study Period

		other Axis I diagnosis		
		yes	no	Total
study period	1998	94	44	138
	1999	72	46	118
Total		166	90	256

Table 8. Incidence of Antisocial Personality Disorder by Study Period

		antisocial PD Dx		
		yes	no	Total
study period	1998	6	132	138
	1999	1	117	118
Total		7	249	256

Table 9. Incidence of Borderline Personality Disorder by Study Period

		borderline PD Dx		
		yes	no	Total
study period	1998	20	118	138
	1999	11	107	118
Total		31	225	256

Table 10. Incidence of Other Personality Disorders by Study Period

		Other PD Dx		
		yes	no	Total
study period	1998	59	79	138
	1999	42	76	118
Total		101	155	256

Table 11. Incidence of Substance Abuse/Dependency Issues by Study Period

		substance abuse/dep. history		
		yes	no	Total
study period	1998	63	75	138
	1999	63	55	118
Total		126	130	256

Appendix D

Today's date: _____ Date of Admission: _____

Your Age: _____ Your Sex: female male

Have you been a patient in a psychiatric hospital before? yes no

How many times: _____

Where: _____

If this is not your first hospitalization, have you previously been housed with only patients of the same sex, or were you housed with both men and women? (please check one)

_____ Same sex only

_____ Mixed-sex only

_____ I have been housed with both arrangements

_____ This is my first hospitalization

We are considering some new arrangements for the future that may or may not affect you personally. Which would you prefer?

_____ To be housed on a ward with only patients of the same sex, but participate in therapeutic activities with both men and women

_____ To be housed on a ward with both men and women, and to participate in therapeutic activities with both men and women

Using the back of this page, please explain why you would prefer the arrangements you indicated above.

Appendix E

(Excerpted from social work psychosocial history and assessment structured interview, page 6):

Have you ever been physically, sexually, or verbally abused?_____

_____

Have you ever been the perpetrator of physical, sexual, or verbal abuse? Yes No

Type of Abuse	Perpetrator	When	Duration

What type of treatment have you received for this past abuse? _____

_____

_____

What was the outcome? _____

Appendix F

Staff on both acute wards were individually interviewed and asked the following questions. Respondents were encouraged to elaborate on their responses.

1. Have you noticed any changes following the transition from mixed to separate wards?
2. What were your expectations prior to the transition?
3. Which arrangement do you feel is safer for patients?
4. Which arrangement results in a more manageable patient population?

For each staff member interviewed, the following demographic information was collected:

1. Gender
2. Age (category)
3. Position (tech, nurse, or other)
4. Shift
5. Ward assignment
6. Years in present position (category)

Appendix G

Table 13. Employee age

	Frequency	Percent
18-25 years old	3	4.9
26-35 years old	14	23.0
26-45 years old	23	37.7
46-55 years old	10	16.4
56+ years old	10	16.4
not reported	1	1.6
Total	61	100.0

Table 14. Employee gender

	Frequency	Percent
male	10	16.4
female	51	83.6
Total	61	100.0

Table 15. Employee job description

	Frequency	Percent
tech	31	50.8
nurse	15	24.6
other professional	15	24.6
Total	61	100.0

Table 16. Employee Ward Assignment

	Frequency	Percent
ward 33	30	49.2
ward 34	28	45.9
both	3	4.9
Total	61	100.0

Table 17. Employee Shift Assignment

	Frequency	Percent
1st shift	39	63.9
2nd shift	11	18.0
3rd shift	10	16.4
multiple shifts	1	1.6
Total	61	100.0

Table 18. Employee experience in current job category

	Frequency	Percent
0-1 years	13	21.3
1-3 years	8	13.1
3-10 years	16	26.2
10+ years	23	37.7
not reported	1	1.6
Total	61	100.0

Appendix H

Table 22. Incidence of Affective Disorder by Gender

		affective disorder		
		yes	no	Total
gender	male	89	70	159
	female	57	40	97
Total		146	110	256

Table 23. Incidence of Psychotic Disorder by Gender

		psychotic disorder		
		yes	no	Total
gender	male	56	103	159
	female	38	59	97
Total		94	162	256

Table 24. Incidence of Diagnosis of Post-Traumatic Stress Disorder by Gender

		PTSD diagnosis		
		yes	no	Total
gender	male	1	158	159
	female	5	92	97
Total		6	250	256

Table 25. Incidence of Other Axis I Disorders by Gender

		other Axis I diagnosis		
		yes	no	Total
gender	male	126	33	159
	female	40	57	97
Total		166	90	256

Table 26. Incidence of Antisocial Personality Disorder by Gender

		antisocial PD Dx		
		yes	no	Total
gender	male	6	153	159
	female	1	96	97
Total		7	249	256

Table 27. Incidence of Borderline Personality Disorder by Gender

		borderline PD Dx		
		yes	no	Total
gender	male	7	152	159
	female	24	73	97
Total		31	225	256

Table 28. Incidence of Other Personality Disorders by Gender

		Other PD Dx		
		yes	no	Total
gender	male	67	92	159
	female	34	63	97
Total		101	155	256

Table 29. Incidence of Substance Abuse/Dependence by Gender

		substance abuse/dep. history		
		yes	no	Total
gender	male	100	59	159
	female	26	71	97
Total		126	130	256

Appendix I

Verbatim responses from patient preference surveys

From patients indicating a preference for single-gender housing

"I feel more comfortable around women than men. If men was on the same ward, it make me uncomfortable to think men could come in my room at night or shower or bathroom."

"its just better"

"I would need the privacy and would not be comfortable at all with males on the same ward"

"because I can concentrate on the programs instead of the men"

"don't trust women"

"for staff reasons and to keep down on sexual temptations

"because I would have less problems living on an all male ward"

"more respect towards the women and elderly men and yourself"

"their better to get along with"

"so there isn't as many fights"

"just because" (3 responses)

"I can work on my own problems that way"

"women are to much trouble"

"because I wouldn't be messing around with girls and getting into trouble"

"then I get my meds correct"

"but I like women, too - and I look older than I am."

"I don't know"

"less problems with sexual harassment"

"easier to get along"

"in order to have proper treatment"

From patients indicating a preference for mixed-gender housing

"I like wimin" "I like to flirt"

"its more like life"

"men seem to act more appropriate when a women is present. Building 7 is that way and I think I can benefit better by learning from both men and womens problems."

"at times can talk with men better than women - was pretty much raised around men - 4 brothers. Got married at age 16 and was around husbands friends a lot."

"feels better"

"help each other communicate better"

"its more natural"

"I feel that in order to rehabilitate you need to be able to coincide with both male and female patients to better understand your own illness and also learn to communicate with both sexes. Do to the fact some if not all can or may have the same problem, and that in return will and can better help you understand your own problems."

"people are people no matter what sex they are and share many of the same problems."

"I like females"

"to feel more like I am living in a real community. I would like to receive drug treatment as soon as possible."

"it seems more natural in a familial sense."

"sex"

"more variety of patients"

"I like the girls"

"because I like a wide range of people."

Appendix J

Representative sample of employee comments regarding change to single-gender units

Positive

- The ward is calmer. We don't have the macho attitudes from the guys. Women are not trying to impress guys. It stops jealousy between patients.
- We don't have to deal with the male/female relationships – we can deal strictly with the patients.
- We do have a vulnerable population and patients run the risk of sexual predators.
- Romances have stopped – not so many sexual issues.
- Less game-playing between men and women.
- Patients probably pimped less – most nights they slept anyway.
- Women are more free. Before they were discrete about how they dressed – now they walk down the hall more freely.
- Less problems with relationships and a decrease in inappropriate sexual behavior
- There is just less problems.
- Patients say they like it a lot better – feel like they have more privacy.
- Patients are more happier.
- With mixed wards it was harder to keep males from the young women – it is a lot better having it split.
- Sexual relations have decreased – the gals would egg the guys on too.

- It has calmed down the males.
- The patients are easier to manage – not trying to impress anyone.
- It seems the females are safer. They are less vulnerable to males. Staff can't be there all the time. Females and males would prey on each other. Females are not put into the situation where they are vulnerable to sex by males.
- When it was a mixed ward, the tension was high. Males would show off for the females.
- The friction is reduced. We should concentrate on getting them better, not relationships. They will do that when they're out.
- Less opportunity for sneaking into rooms.
- I feel they are more able to communicate and they get along better when it's all one sex.
- Calming effect – young guys used to get in fights over women. We had to keep a closed watch over the men.
- They focus more on their own problems and treatment.
- All males are easier and more manageable. Males don't show off and violence decreases.
- More manageable because they aren't playing and fighting for the girls.
- Males are less distracted when women are off the ward.

<u>Negative</u>

- When the male ward was booming, it was hard to control all the patients.
- At first there were more behavior problems.
- Change is hard.

- It is a lot louder.
- Guys are rowdier without the women
- Physically, mixed wards are safer environment, but a higher threat of sexual abuse – I don't know...
- There is a big segment of the population that needs socialization towards the environment they will live in. Staff can be more influential on their behavior.
- Mixed gender is a more natural arrangement. In the real world, men and women are together. It's more of an institution – they aren't learning anything.
- Homosexual encounters have increased
- Men have worse hygiene – it is a prison atmosphere
- Women have a calming effect.
- When the women were on the ward, males would bathe themselves and watch their language. More violent now – males focus on who is the boss.

Neutral

- Doesn't really make a difference
- Depends on the patients
- Do about the same whether it's all female, all male, or mixed gender.
- It's safe both ways equally.

Appendix K

Table 44. Incident Location

		Frequency	Percent
Site of incident	on ward	5	35.7
	off ward	9	64.3
Total		14	100.0

Table 45. Incident Year of Occurrence

		Frequency	Percent
Study period	1998	10	71.4
	1999	4	28.6
Total		14	100.0

Table 46. Gender of Offending Patient

		Frequency	Percent
Offending patient	male	13	92.9
	female	1	7.1
Total		14	100.0

Table 47. Gender/Position of Offended Person

		Frequency	Percent
Offended person	male	1	7.1
	female	12	85.7
	staff	1	7.1
Total		14	100.0

Table 48. Location of Incident by Year of Occurrence

		Location of Incident		
		on ward	off ward	Total
study period	1998	5	5	10
	1999		4	4
Total		5	9	14