PSYCHOLOGICAL VARIABLES AND PERSONAL MEANINGS FOR WOMEN WHO ARE TATTOOED

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BY

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To the Dean of Graduate Studies and Research:

I am submitting herewith a dissertation written by Kathleen O'Malley Reyntjens, entitled "Psychological Variables and Personal Meanings for Women Who Are Tattooed." I have examined this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Counseling Psychology.

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Psychological Variables and Personal Meanings for Women who are Tattooed.

Kathleen O. Reyntjens

ABSTRACT

This study investigated factors that moved women to adorn their bodies with tattoos, and described the personal meaning they attributed to this ornamentation. It also investigated the levels of distress, self-harm behavior, self and body esteem, and family satisfaction in women with and without tattoos. One hundred fifty women returned questionnaires about their tattoos and their perceived levels of distress, self-harm behaviors, self and body esteem, and family satisfaction. Dependent measures included the Family Satisfaction Scale (Carver & Jones, 1992), the Body Esteem Scale (Franzoi & Shields, 1984), the Rosenberg Self-Esteem Scale (Rosenberg, 1965), the Self-Harm Inventory (Sansone, Wiederman, & Sansone, 1998), and the Behavior Symptom and Identification Scale (Eisen, Dill, & Grob, 1994). Results revealed that women tattooed for a variety of reasons including self-expression, as ornamental body art, and to symbolize important experiences. Meanings derived from tattoos were both political and personal with

themes of empowerment, transformation, and freedom as well as memorials of love, loss, and achievement. Most women tattooed thoughtfully and few voiced regret. Discrimination was integral to their experiences and perceptions.

Quantitative results revealed that tattooed women were not significantly different from the control group on measures of body-esteem, self-harm, or psychological distress. Women with many tattoos had significantly higher self-esteem than nontattooed women and women with less tattoos, and the greater the body surface area tattooed the stronger the association with positive self-esteem. Women with a history of abuse (44%) had significantly more tattoos, less self-esteem, less family satisfaction, more self-harm, and more distress than women without a history of abuse. Abused women with many tattoos demonstrated a body esteem substantially equal to that of nonabused women, which, in combination with the positive association with self-esteem, may reflect the use of tattoos as a healthy attempt at resolving trauma. Nonabused women with many tattoos were more dissatisfied with their family of origin than nonabused women with less tattoos or without tattoos. Intentional self-harm was endorsed by 112 women, and high

levels of self-harm were found in 51 women, 75% of whom were tattooed. History of abuse, body piercings, and younger age were statistical predictors for the amount of tattoos.

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CHAPTER I

INTRODUCTION

Inserting pigments under the skin to render a design has been practiced by most cultures around the world for thousands of years. Often performed as part of a ritual, these designs have had religious, superstitious, or ornamental purposes (Hambly, 1925; Sanders, 1989; Steward, 1990). In the competitive Western culture of mass media, mass production, fast food, changing gender roles, MTV, virtual reality, and increasing violence, formal rituals have become scarce. According to Juno and Vale (1989) and Mifflin (1997), the post modern world's emphasis on mass-produced images has a deindividualizing effect, resulting in a culture where tattooing has begun to move into mainstream culture as a popular form of rebellion art, self-expression, and spiritual practice. Articles proliferate in the popular literature, and tattoos appear frequently on television, in film, and in art galleries. On the internet, chats, tattoos sites, and tattoo stories are

abundant. Art critics are including tattooing in the history of art (Sanders, 1989), tattoo studios are doing a brisk business, and there are even tattooed dolls for children (Pierce, 1995). In short, tattooing is a trend.

In an effort to better understand this trend, inquiries have begun to examine the popularity, meaning, and significance of this form of body adornment. Tattooing may be a self-empowering reaction to contemporary society, a symbolic rejection of mainstream culture and simultaneous affiliation with another part of that same culture (Hewitt, 1997). Tattoos may reflect an affirmation and acceptance of self (Campbell, 1993; Shapiro, 1995), a rite of passage, or may symbolize identity, lifestyle or beliefs (Grumet, 1983; Mifflin, 1997; Milligan, 1998). They are a form of nonverbal communication (Brower, 1998; Vicary, 1988) and a source of pride, giving expression to desires and feelings from within. Tattoos are an unconventional art form that reassert the value of body ornamentation and design (Juno & Vale, 1989).

Tattoos, however are not simply ornamentation. They pierce and penetrate the skin, the body's first line of defense. Furthermore, acquiring a tattoo is painful.

Descriptions range from "didn't hurt too much," to "pain was so completely unbearable…very intense…sweating profusely…shaking uncontrollably…there were points where I would scream…" (http://bme.freeq.com/tattoo). Pain is an integral part of the process, according to researchers and tattooees, and adds meaning to the experience (Coe, Harmon, Verner, & Tonn, 1993; Favazza, 1996; Hewitt, 1997; Sanders, 1989; Steward, 1990). This is consistent with the social psychology hypothesis, severity-of-initiation effect, which suggests that the greater one suffers in order to obtain something, the greater the tendency to evaluate it positively (Aronson & Mills, 1959; Gerard & Mathewson, 1966). None-the-less, a century of empirical research in Western cultures has demonstrated, with few exceptions, that those with tattoos have more psychological symptomatology (Bourgeois & Campagne, 1971; Bromberg, 1935; Ceniceros, 1998; Ferguson-Rayport, Griffith, & Strauss, 1955; Haines & Huffman, 1958; Lander & Kohn, 1943; Loimer & Werner, 1992; Newman, 1982; Popplestone, 1963; Raspa & Cusack, 1990; Yamamoto, Seeman, & Lester, 1963).

Tattooing has been placed on a continuum of self-harm as a form of self-mutilation, with tattooing as a form of

body alteration much less extreme than cutting or burning. (Connors, 1996; Favazza, 1996; Hewitt, 1997). These authors purport that self-harm behavior, formerly a transgression, is now becoming a trendy means of expression, one method of which is tattooing. This may seem a far-fetched conceptualization for the benign (sweet roses, birds, dragonflies daintily placed on ankles or shoulders) tattooing of the 1990's, yet it was this benign tattooing, voraciously sought by a very troubled population of self-harming individuals (observed in clinical settings), that inspired the present inquiry.

There is consistent significant association with self-harm behavior and those who have a history of abuse, those with eating disorders, family neglect or dysfunction, and psychological distress (Dubo, Zanarini, Lewis, & Williams, 1997; Favazza, 1989; Greenspan & Samuel, 1989; Kernberg, 1987; Mitchell, Bowtacoff, & Hatsukami, 1986; Pattison & Kahan, 1983; Ross, 1989; Shapiro, 1992; van der Kolk, Perry, & Herman, 1991; Walsh & Rosen, 1988; Welsh & Fairburn, 1996; Young, 1992; Zweig-Frank & Paris, 1997). Self-injury, including tattooing, has been hypothesized to have addictive properties, as the article entitled,

"Tattoos are like potato chips…you can't just have one…" illustrates (Vail, 1999; van der Kolk, 1996). Self-harm behavior has been an underreported and hidden behavior, similar to eating disorder behavior prior to the 1970's (Farber, 1997; Greenspan & Samuel, 1989; Walsh & Rosen, 1988).

Self-harm behaviors are increasing in Western society especially among the urban adolescent and young adult populations (Diekstra & Ganefski, 1995). Is the socially accepted tattooing behavior (Mifflin, 1997), so prevalent among women today (Armstrong, 1991; Mifflin, 1997; National Women's Health Report, 1996), a less private, less concealed form of self-harm behavior, an outlet for expression of tension, anger, frightening feelings of lack of self-identity from a deindividualizing society? If enough people engage in a behavior is it no longer harmful? Or is tattooing simply an expression of self, an ornamentation or work of art with minimal negative, or even positive, psychological implications?

In addition to examining the meaning and significance of tattoos and tattooing for the contemporary woman, an objective of this research was to examine the relationship

between tattoos in women and self-harm ideation as well as their level of psychological distress. Due to the significant associations reported in the literature between self-harm behaviors and eating disorders/childhood sexual and physical abuse and neglect, perceptions of body image and satisfaction with family were also examined. Further, since lowered self-esteem has been associated with those who have tattoos in a recent study (Kuniansky, 1997), the relationship between women who are tattooed and self-esteem was examined.

CHAPTER II

LITERATURE REVIEW

History of Tattooing

Inserting dye or pigments under the skin and creating representational design has been practiced by many cultures around the world for thousands of years. Evidence of tattooing goes back to 12,000 BCE (Before the Common Era) when the body was slashed as evidence of grief, and ashes were rubbed into the cuts (Grumet, 1983). Archeological findings strongly suggest that facial and body puncture tattooing, where particles of insoluble pigment are punctured through the skin and lodge in the epidermis, existed as early as 8,000 BCE. Hambly (1925) hypothesized that some of the first body markings used red ochre to symbolize the vitality of blood. In ancient Egypt, tattooing was mostly confined to women, especially dancers, priestesses, and concubines. Mummies dating from 4,000 to 2,000 BCE have shown evidence of tattoo markings; for example, the priestess of Hathor from 2,000 BCE had

tattooed parallel line markings on her abdomen, thought to serve a fertility function (Sanders, 1989).

In 1992, a 5,000 year old "Iceman" was found buried under a glacier in the European Alps, and tattoos (dots and lines) along his spine, ankles and behind one knee were easily seen. On autopsy, all these tattooed areas suffered joint degeneration, leading to speculation that he had tattooed as a magical medicinal therapy (Hewitt, 1997; www.tattoo.dk/engelske/history.htm).

Sanders (1989) reported that tattooing was a well-established decorative art form by 1,000 BCE. A 2,500-year-old Skythian mummy was discovered in 1948, the body of a Southern Siberian Chief with sophisticated animal design tattoos on his arms, legs, chest, and back. Egyptian mummies from 1,450 years ago were discovered to have their hands and wrists completely tattooed. Six hundred-year-old mummified bodies from West Greenland had picture tattooed foreheads, and women were found with classic Inuit tattoos of lines down the chin and across the forehead.

According to Hambly (1925) and Sanders (1989), based on archeological evidence, it is certain that tattooing was a feature of Aztec, Inca, Toltec, and Mayan cultures, as it

was with the Northern Native Americans, but there are few records. In tribal societies, the Maoris of New Zealand practiced decorative and sophisticated tattooing of both women and men. These designs, called moko, were so individual the nobility often used them as signatures on legal documents. Those heavily tattooed assumed considerable status and social identity (Riria & Simmons, 1989). Women of rank in New Zealand were tattooed on the lips, and women who outranked men were tattooed with part of a male moko (Simmons, 1986). These designs were chiseled $1/8^{th}$ of an inch into the skin by serrated shells or bone. The process was extremely painful and often surrounded by ritual including the singing of prayers as a distraction to the pain (Cox, 1994; Sanders, 1989).

Tattoos carried religious and magical connotations in some cultures and were significant components of spiritual beliefs. The Kayan women of Borneo were given ornate arm and leg tattoos and were perceived as cowards if not tattooed. Similarly, the untattooed Shan man of the Society Islands was considered immature. In death, the most heavily tattooed Kayan women were perceived to have the most important roles in the afterlife. Eskimo women whose faces

and breasts were tattooed were guaranteed a happy afterlife. On Fiji, women who died without tattoos were believed to be beaten by spirits and served as food for the gods. For the Fiji woman, tattoos helped charm members of the opposite sex, brought good luck, protection, preservation and good health. Likewise, the Cree Indians of the Great Plains tattooed for beauty, luck, health, and to communicate with the spirits. In Yemen, women's facial and hand tattoos served preventive and therapeutic functions and were symbolic of rebirth (Hambly, 1925; Hewitt, 1997; Sanders, 1989; Steward, 1990).

As a decorative art, the tattoos from Japan were intricate and beautiful and the artists skillful. Though prevalent in 500 BCE, their popularity waned until a 13th century revival in which the tattoo became a means of marking a criminal. By the 17th and 18th centuries, ornate, decorative tattooing returned, inspired by a Chinese novel, and skilled artists called "hori" (to engrave) decorated the bodies of Western visitors. Though in public disfavor now, tattooing is still practiced in Japan and Japanese tattoo artists work in the western world.

History of Contemporary Western Tattooing

Ancient tribal groups of the British Isles heavily decorated themselves with tattooed animal designs to enhance their fearsome appearance to invading Romans. The Anglo Saxon King Harold's body was identified at the battle of Hastings in 1066 by his tattoo markings (Sanders, 1989). In July 1796, Captain Cook of the British ship *Endeavor* arrived in Tahiti, where tattooing was part of the culture. The English word tattoo stems from the Tahitian word "tatau," to mark. Also, the Polynesian tattoo technique involved needles attached to the end of a long stick. When the needles were dipped into the ink and tapped with another short stick, the sound "tat-tat-tattoo" was heard. Cook returned to England accompanied by a heavily tattooed Tahitian Prince whose decorations piqued the public interest, as did a British man's tattoos who had returned to England after being captured by the Maoris and tattooed.

Early tattoo consumers were sailors who tattooed as a badge of courage and adventure, craftsmen, military men, and later, members of the aristocracy who were lauded by newspapers. In 1880, the first electric tattoo machine was designed by an American in New York, Samuel O'Reilly, and

by 1897 the newspapers in Britain enticed tattooing by suggesting that without a tattoo one cannot be *au courant* with society's very latest fad (Sanders, 1989). Tattooing soon lost favor with the elite and was seen as a deviant practice of the socially marginal subculture, while women with tattoos were relegated to the circus as freak attractions. Mifflin (1997) recounted the history of Nora Hildebrandt who had 365 tattoos and made a successful living in the circus, as did other women including Betty Broadbent, who stayed with Ringling Brothers for 40 years.

The attraction of women to tattooing and the timing of the movements of feminism is no coincidence, according to Mifflin (1997). Crazes for tattooing among women occurred in the late 18th century, the 1920's, and again from the 1970's to the present. She reported that in the late 19th century approximately 7.5% of women were tattooed, especially the fashionable, wealthy Londoners. In the 1920's, following the exhumation of a tattooed Egyptian princess mummy, and concurrent with the women's movement, there was a 15-year run of popularity in tattooing, which diminished with the advent of World War II.

Western Tattoo Renaissance

The 1970's revival began with the sexual revolution, women tattoo artists, and bikers. From an artistic standpoint, since the mid-1960's there has been some dissatisfaction with the substance of conventional art forms and career limitations. The last artistic territory, purport Juno and Vale (1989), is the human body, and this emerging interest in the body as a canvas was evident in the performance art that was born in the 1960's (Hewitt, 1997). Ruth Marten tried to build a bridge between tattooing and fine arts with body artists who had degrees in Fine Arts (Mifflin, 1997). As tattoo practitioners have defined themselves as artists and their work as art, tattooing has become legitimized with new imagery, new modes of practice, and new audiences, though Mifflin said this new legitimacy is slippery.

According to Juno and Vale (1989), tattoos today are considered magic, art, and a revival of ancient human decorative practices. The tattoo cannot be comprehended without knowledge of the history and motivations of the bearer. Because the tattoo is on the skin of a living, moving human, the design is perpetually distorted and deformed and cannot be read flat or apart from the body

which bears it. The tattoo boom of the 1980's included female students, professional women, celebrities, women discovering or rediscovering self, and tattoos became "emblems of self-validation" sometimes ritualized with drums, chanting, and smudging (Mifflin, 1997, p. 103). Tattooed women defied conventional standards of beauty, and, with the tattoo, they "force recognition of new, self-certified ones" (p. 117). Hewitt (1997) described this as a fight against the standardized "contained" female body and a rebellion against prescribed gender roles.

Mifflin (1997) further considered contemporary tattoos as "stabs at permanence in an age of transience" and "marks of individuation in a culture of mass production" (p. 178). Similarly, Juno and Vale (1989) viewed the postmodern world as a mass-mediated western culture, a wholesale deindividuation of humans and society. This is partly accomplished, they said, by an inundation of millions of mass-produced images, which collapse the distinction between cultures. Likewise, Massey (1999) suggested that the tattoo itself counters the duplicating tendencies of postmodern world's global image culture.

Mifflin (1997) suggested that the advance of AIDS and the focus on being forever young was reflected in anxiety about the body, and that the tattoo helped to refract or relieve such anxieties. Similarly, Gollwitzer (1986), in a study with 120 adolescents, reported the increased likelihood to tattoo during times of identity related anxiety. Also, Hewitt (1997) interviewed women who described their tattoos as a coping reaction to stress, one which controls some aspect of the event or helps control emotions. Likewise, Juno and Vale (1989) suggested the body is the remaining source of authentic experience, and tattooing is a way to counteract feelings of powerlessness to change the world. Change what one has power over, they reasoned, the body. They hypothesized that by giving visible expression to desires from within, individuals can provoke change in the external social world.

The Western culture is obsessed with feeling alive, with sensations, perpetually seeking satisfaction for desires, and tattoos tantalize the body for its experiential capacity (Massey, 1997). Feelings of aliveness accompany the pain of tattooing -- the sense of existing, of feeling and enjoying life emerge at the touch of the

needle (Steward, 1990). Many of these exact sentiments, as well as the rebellion, response to stress, anxiety, or feelings of powerlessness, are echoed in the psychological literature of tattooing and self-harm, which will be explored later in this paper.

In summary, tattooing has been practiced by many cultures around the world for thousands of years, most often for religious, superstitious, or aesthetic reasons. The crude and simplistic early tattoos evolved into ornate, decorative, skillfully crafted designs etched into the skin by artists. The popularity and acceptance of tattooing has waxed and waned over the centuries, moving through a haute couture of the wealthy, including queens, kings, and czars, to a scorned or forbidden practice undertaken by a marginalized populace such as prisoners, or slaves. Tattooing in Western women seems to be coincident with the waves of feminist influence as more women tattooed in the late 19th century, in the 1920's, and again from the 1960's to the present. Today greater than 50% of all tattoo clientele and 15% of tattoo artists are women (Mifflin, 1997). The popularity of tattooing with women today may be a self-empowering reaction to the mass-media, mass-

production, deindividualizing contemporary society, or an assuaging of inner discomfort which may exist, in part, as a consequence of this society.

Meaning

Tattooing as a way to counteract feelings of anxiety or powerlessness, to give expression to desires from within, and as a statement of identity can be seen in the history of tattooing, and these meanings have been suggested by researchers and verified by tattooees since the early research on tattooing. The contemporary literature on meaning reflects salient themes of tattooing in defiance of socially accepted standards, as expressions of autonomy and identity, and as a method of controlling feelings of anxiety and powerlessness.

Hewitt (1997) asserted that tattooees are showing defiance for cultural standards and are rejecting mainstream norms of adornment. She argued that in addition to establishing a social identity with autonomy from parents there is also a gender rebellion element. A tattooed woman blurs the assumptions about gender roles by implicitly rendering a statement of independence from societal messages that demand a woman's body to be pristine

and pure for the enjoyment of others. In contrast, Mifflin (1997) referred to the tattoo's ability to degrade as well as enhance, to "invoke the sacred *and* the inane," and illustrated this with an example of the common female biker's choice "property of…" (p. 111).

Similarly, Sanders (1988) analyzed questionnaires, interview data, and six years of participant observation in a variety of tattoo settings. His findings explicated the importance of the tattoo as an affirmation of personal identity and association and as a symbol of disaffiliation from conventional society.

Tattoos are reported to be a form of self-definition and self-celebration symbolizing lifestyles, sexual identity, decisions about career choice, and relinquishing or taking on of roles. Tattooing as such a rite of passage is common in many cultures (Hambly, 1925). Basquin (1983) referred to some tattooing in the Western culture, however, as an adolescent rite of passage and source of familial conflict, with coincident intimate involvement of parent and adolescent. The parent, she suggested, experienced anxiety when reminded of his/her own adolescent

ambivalence, which then contributed to the parent-adolescent conflict surrounding the tattoo.

Tattoos have been quite popular and public with identity in the lesbian/gay/bisexual community (Gifford, 1994; Jeffreys, 1996). Likewise, Ruttenberg (1998) described heavy tattooing in the San Francisco Gay/Lesbian community. A variety of reasons and meaning for tattoos were offered which reflected both attachment and autonomy. These included: reclaiming one's body, rite of passage, nobility of enduring pain for beauty/ornamentation rather than ugliness/scarring, sexual release, catharsis, aesthetic radicalism, "the rush," personal aesthetic preference, nonconformity, commitment to partner, phase of rape trauma therapy, and cultural norms (Jeffreys, 1996). Shapiro (1995) reported her own experience of tattooing as a mark of self-acceptance, a second coming out, an impulsive act which unexpectedly allowed her to claim her identity and her right of self-expression.

Tattoos may be efforts to construct identity, to seek new ways to declare autonomy and may replace socially structured forms of religious or spiritual values (Hewitt, 1997). To illustrate, George (1995) sought to increase

understanding of feminine images through experiential fieldwork with the Barok in Papua, New Guinea, where she was tattooed and studied the meaning of women's facial tattoos. She discussed the value that the Barok place in destroying social meaning (tattooing simply as a cultural imperative) and creating spiritual meaning (through the experiencing and ritual surrounding tattooing). Likewise, Sowell (1999) discussed tattooing in the Hawaiian culture as a critical component of the social system. Tattoos visually proclaimed rank and genealogical position and linked the bearer to the spiritual realm, to ancestors, to the past, and to the future.

Tattoos represent the relationship between the body and identity, according to Milligan (1998). She argues that tattoos are politically and theoretically useful rather than reactionary or a retreat from political questions, as some suggest. In occupying the boundary between body and not-body, tattoos represent a body that is constructed and socially linked to others. Tattoos reassert the value of the ornament, and in her discussion of contemporary novels and films, Milligan showed how the tattoo aestheticizes the body and the body politicizes the tattoo. In that the

tattoo represents pain and the limits of the human, the tattoo functions politically. The boundary between body and not-body is a theme that will return when reviewing the empirical work on tattoos.

Milligan is not alone in her political interpretation. Olguin (1997) studied how a male Chicano convict used body tattooing as a discourse of political resistance and demonstrated how tattooing can reflect the Chicano political unconscious. Mifflin (1997) considered tattoos to be layered with meaning -- transgressive acts that are emblems of empowerment, rebellion, identity, and self-transformation (tattooing over a mastectomy scar, after a divorce or sexual trauma). Tattooed women, she suggested, are a subculture with political implications of resistance, transformation, sexual politics, and offense of the silent majority. Specifically, the statements are about a "difference" mentality, sex as positive, women's self-help, and commitment about breast cancer. As Mifflin reported, women have tattoos representing diary entries, protective shields, conversation pieces, counterculture totems, valentines to lovers, memorials to dead, ethnic pride, family unity, coming out, coming of age, marriage, divorce,

pregnancy, menopause, angry independence, and fierce commitment. On the other hand, Hewitt (1997) reports that tattoos can be acquired simply to be different or to copy others seen on TV or in film.

In her anthropology thesis, Campbell (1993), in an attempt to understand the modern meaning, evolution, and acceptance of tattooing, studied the factors in the urban world which have influenced this evolution and acceptance. She observed a change from affiliative to individuative tattoos in recent years, and suggested this reflected the affirmation of self and positive body image in a world which often lacks personal meaning for the individual. Hewitt (1997) looked at this with a slightly different lens, claiming that the tattoo is a symbolic rejection of mainstream culture that simultaneously individuates and affiliates.

Grumet (1983) examined psychological motives for obtaining tattoos and suggested that they are often overlooked as a source of psychodiagnostic information. He suggested that of all motives for tattooing, the quest for personal identity is the most salient. He described the tattoo as an "artificial embellishment of the body

boundary", an attempt to strengthen a sense of self, a quest for self- definition (p. 184). Belonging, in the form of allegiance and fidelity is seen in many tattoo designs (lovers, parents, God, country, emblems, mottos, crests). Tattoos may have antisocial features as well, and may be perceived by the tattooee as protection from danger. Sexuality and exhibitionism are salient antisocial themes in tattoos, sometimes disguised (snakes and dragons curling on the arms or legs), and sometimes blatantly displayed. Grumet expressed the belief that tattoos are a form of nonverbal communication and offer opportunities for psychological understanding. He suggested using the tattoo as a springboard for discussing feelings, and that the tattooee's emotional reactions to the design can give information about self-esteem and identity. He further suggested taking a tattoo history, including locations of the tattoos, which can often trigger recollections and associations and provide more psychological information. The content of tattoos and their personal meaning can provide information about thoughts and impulses. For example, determining the proportion of violent aggressive themes as compared with friendly motifs can trace someone's

history of behavioral response. He gave the example of a writer who belonged to a gang in his youth, and whose tattoos evolved from panthers dripping blood to butterflies and a unicorn. Grumet likened the tattoo to a psychic crutch working in conjunction with a defense mechanism to allay anxiety and protect the ego, a way of condensing and symbolizing psychic energy to a meaningful image.

Others are in agreement with Grumet that tattoos are a form of nonverbal communication and identity. In an essay on nonverbal communication research, Vicary (1988) described "Clothing" as garments, ornaments, treatments (tattoos), cosmetics, devices (wigs, padding), equipment (eyeglasses, backpacks), and tools (combs, fans, knives). She proposed that tattoos are a part of the social identity of humans which one needs to learn, consciously or unconsciously, so that we can respond to other humans and anticipate their response to us. She also implied that tattooing is but a small part of a complex communication system, which can be as precise as most verbal language.

Likewise, Brouwer, (1998) reported that some HIV+ individuals have chosen to disclose their status by nonverbal rather than verbal means through the acquisition

of an HIV+/AIDS tattoo. The surface of the skin communicated the interior status of the blood, tissues, and organs. Asymptomatic HIV tattoo wearers thus rendered the invisible visible.

Also, Nateras-Dominguez (1998) considered tattoos in urban youth in Mexico City as a practice of cultural identity that was non-verbal and required deconstruction to understand the language of the youth culture. He studied social and temporal identity concepts of youths and youth culture and reconstructed signs and meanings for the cultural identity of the young in their own speech.

In summary, designs permanently rendered on the skin are constructions of, statements of, and affirmations of self and group identity. Symbolic of rebellion, resistance, autonomy, and independence, tattoos disaffiliate one from a part of society and simultaneously express affiliation with another part of that same society. They are a form of nonverbal communication and empowerment, giving expression to desires and feelings from within, including anxiety and powerlessness as well as pride and self-acceptance. The meaning of the tattoo depends on a great number of sociocultural factors, which contribute to the difficulty

in defining tattoos as either deviant or simply body ornamentation (Wright, 1995).

Prevalence, Process and Risks of Tattooing

As of 1996, ten million people in the U.S. have at least one tattoo (National Women's Health Report, 1996). There are varying reports of prevalence of tattooing from the 1960's to present. In 1963, 5-15% of the general population had tattoos (Yamamoto, Seeman, & Lester, 1963). Similarly, McKerracher and Watson (1969) reported tattoos in 8% of the general population and 15% in the clinical population, including prevalence as high as 31% in those who abuse substances (Baden, 1973; Buhrich, 1983). Figures have consistently been higher in the prison population with reports of up to 60% (Taylor, 1970). Wright (1995) reported tattooing in only 3% of the general population of Ireland. In contrast, 44% of high school students in West Virginia either had tattoos or planned to get one (Perkins, 1997).

Today the tattoo artist works with electric needles which inject dye into the skin to a depth of approximately $1/16^{th}$ to $1/64^{th}$ inch at a rate of 30 to 50,000 injections per minute (Armstrong, 1991; Hewitt, 1997; Steward, 1990). A pointed needle is used for outlining the design and a

"shader," a broader tipped needle, is used to fill in the larger areas of the design.

According to National Women's Health Report (1996), as many as half of all people with tattoos wished they didn't have one. Ambivalence regarding the tattoo has been expressed by many tattooees (Gittleson, Wallen, & Dawson-Butterworth, 1969; Yamamoto et al., 1963). Though not easily reversible, most tattoos can be at least partially removed with ruby laser treatments. This may require eight or nine laser treatments with 6-8 weeks between treatments to allow for healing, is costly (approximately $1500.00 for a small tattoo), and may be only partially effective, especially with professional body art (Armstrong, 1991), new tattoo pigments, and bright colors (The National Women's Health Report, 1996).

Tattooing is not without medical risks. It is a purposeful violation of the integumentary system, one of the body's major protectors against disease. Aside from being painful, tattoos can be sources of infection, viral transmission (hepatitis and HIV), tissue damage, venereal disease, tuberculosis, skin diseases, allergic reactions, and warts (Houghton, Durkin, & Carroll, 1995; Myers, 1992;

National Women's Health Report, 1996). Present day professional tattooing does not present the same danger of infection that often accompanied the scarification process of primitive tattooing. However, viral hepatitis was traced directly to tattoos establishments in New York forcing the health department to close all tattoo salons in 1961, and in Philadelphia, an episode of syphilis was attributed to one particular tattoo artist (Post, 1986).

Inflammations, infections, and allergic reactions are the most commonly reported adverse reactions to tattooing. Complications following tattooing may include skin cancers (melanomas, carcinomas), as well as the aforementioned transmission of syphilis, hepatitis, tuberculosis and HIV. Other reported risks include toxic shock, subacute bacterial endocarditis, and adverse reactions to Magnetic Resonance Imaging for those with tattooed eyeliner (Perkins, 1997). According to Perkins, the American Medical Association has suggested restriction of tattooing, which they perceive as a risky body modification for adolescents seeking to develop a satisfactory identity. Though some states have legislative controls over tattooing, and some have banned tattoos (Arkansas and Oklahoma), many cities

and states either do not have or do not enforce health regulations for tattoo studios, even though many reputable tattooists support these regulations (Sanders, 1989).

In an Australian qualitative study of children's and adolescent's awareness of the physical and mental health risks associated with tattooing, Houghton et al. (1995) utilized focus groups of primary and high school students. Participants were aware that viral transmission and possible disfigurement could be a result of the process and were knowledgeable about tattoos and the process of acquisition. In general, attitudes about tattoos were negative, with almost all participants associating them with illicit-type activity. Female adolescents had a more positive attitude toward small tattoos. Participants suggested tattoos might be embarrassing, and some may regret getting tattooed. Some participants had removed tattoos using crude instruments. These authors highlighted the urgent need for research on unsafe methods of tattooing.

Following up on the previous study, Houghton, Durkin, Parry, Turbett, and Odgers (1996) investigated the reasons, experiences, methods, and perceived health consequences of

obtaining tattoos by sampling 232 boys and 232 girls in high school, with an age range of 13-18 years. Their findings showed that over 13% had tattoos and the majority had been self-administered with crude instruments. Additionally, some had attempted removal, again with crude implements. Boys with tattoos had a higher health awareness than tattooed girls, which caused the researchers to speculate about self-injury motivation in tattooed girls. Girl and boy students with tattoos demonstrated more problem behaviors in school than non-tattooed students.

Alternately, in a national U.S. study which investigated career-oriented women with tattoos, Armstrong (1991) examined characteristics of working women having a tattoo for at least six months, the risks associated with the tattoo, and the experienced or projected health problems resulting from the tattooing procedure. She reported that tattoos were an expression of individuality and the women experienced very minimal health problems or personal dissatisfaction. Women were more often single or divorced. Significant others and friends expressed support for the tattoos, while families expressed mild or negative reactions. Physicians and the general public displayed a

lack of support or had negative responses. The author concluded that, along with a misunderstanding of what a tattoo means to the individual, the stereotyping of women with tattoos continues.

To summarize, as of 1996, five to 15% of the general population and greater than 10 million people in the U.S. have tattoos. The percentage in adolescents may be as high as 45%, while in the clinical and prison populations the prevalency rates range from 15% to 60%. Many people express ambivalence about having been tattooed, and seek removal, which is costly and tedious. Though a relatively safe procedure in legitimate tattoo studios, tattooing has medical risks such as dermatitis, allergic reactions, viral transmission (hepatitis and HIV), tissue damage, scarring, infection, skin cancers, and adverse reactions. Legislative controls and regulations over tattooing are rare yet supported by reputable tattooists. There is an awareness of some risk factors and a generally negative attitude toward those who tattoo among some adolescents and adults, which may contribute to stereotyping.

Tattooing and Self-Injury

Tattoos are not simply ornaments--they are a

penetration of the flesh causing injury to the body. Tattooing is a "tedious, painful process" followed by a transition period in which the wound heals and the redesigned body emerges (Hewitt, 1997, p.58). Humans have inflicted pain and suffering on themselves for religious or aesthetic reasons throughout history. Pain was, and still is, often considered the pathway to spiritual and social identity. In the experience of pain, some believe, one loses rational cognition and becomes closer to the spiritual realm (Favazza, 1996; Hewitt, 1997), connecting with something outside the boundary of the body and losing awareness of the everyday self. The ability to endure pain to accomplish a greater good has been seen in many cultures. The history of Christianity alone is replete with stories of self-sacrifice and torture, including this author's "name saint", who flagrantly self-harmed in the form of starvation, vomiting, and self-beatings with iron chains. Rather than receiving help, she was canonized a saint shortly after her inevitable death.

Indeed, in contemporary American and other cultures, this painful process of tattooing and its permanence are an integral part of its significance (Coe, Harmon, Verner, &

Tonn, 1993; Favazza, 1996; Hewitt, 1997; Sanders, 1989; Steward, 1990). There is the macho implication, for men and women, of demonstrating toughness, being able to bear the pain. Also, according to Hewitt (1997), pain lends meaning to the process of abolishing the old and creating the new. For some, like the punk rockers the Sex Pistols, the pain of self-injury and tattooing were acts of rebellion.

Juno and Vale (1989) argued that physical pain provides unique access to unmediated body sensation and is a uniquely personal experience, one which helps define the authenticity of the self. Further, they posited, tattoos bear witness to the personal pain endured by leaving permanent marks. These authors speculate that this painful experience inherent in the production of these markings is a statement of resistance to the globalization of images by those who tattoo. Similarly, Hewitt (1997) suggested that the act of tattooing is a marriage of body narcissism, ritualization, and pain in an attempt to resolve identity crises. Countless researchers and tatooees refer to the pain and its connection to the act of tattooing.

Some researchers have described tattooing as a form of self-mutilating behavior, placed on a continuum of self-

harm (Connors, 1996; Favazza, 1996; Hewitt, 1997; Walsh & Rosen, 1988; Waska, 1998) with tattooing as a form of body alteration much less extreme than cutting or head-banging. Favazza (1998) described self-mutilation as the deliberate, non-suicidal destruction of one's body tissue, occurring in such culturally sanctioned practices as tattooing, body piercing, and healing spirit and order preserving rituals. He reported that self-harm has begun to attract mainstream media attention and that those who suffer from it are expected to begin to seek treatment. He calls it "the coming of age of self-mutilation" (p. 259).

Hewitt (1997) proposed the theory that tattooing and other body modifications are an expression of self-marginalization and affiliation with the non-mainstream culture and parallel other forms of self-mutilation. They are acts of manipulating the body barrier. Like the self-cutter, anorectic, bulimic or other self-harmers, "the tattooed individual is attempting to rip herself from the homogeneous mass of people and establish an ego that communicates effectively with the environment. A stigmatized, emaciated, abraded, tattooed identity is

better than a fragmented ego and perhaps more attractive than other alternatives the society offers" (p.57).

Tattooing as a form of self-harm may seem a far-fetched, radical conceptualization for the benign (sweet roses, birds, dragonflies daintily placed on ankles or shoulders) tattooing of the 1990's, yet it was this benign tattooing, voraciously sought by a very troubled inpatient population of self-harming individuals (observed in clinical settings) that inspired the present study. These women reported that they tattooed for the pain and for the release of tension and their unbearable dysphoria, choosing to self-injure in a socially accepted manner. Identically, Favazza (1996), in describing the most common reason for self-injury, described the need to establish control over racing thoughts and unstable emotions, to calm, to prevent a perceived explosion of hurt and rage. Podvoll (1969) expressed concern about the prevalence of contemporary self-harm behaviors, which were defined as attempts to fend off anxiety, and wondered if their prevalence indicated approval by the surrounding culture. Waska (1998), in presenting four case studies regarding self-injurious behavior proposed that tattooing and piercing were forms of

self-harm to punish the self for "outlawed" feelings. Tattoos may be a form of self-harm which does not provoke an aversive response in others. However, because they are perceived as beauty enhancing, symbolic, and personally meaningful, they are not truly self-mutilative in the same sense that cutting and burning the self are, and are at the benign end of a continuum of self-harm behavior.

Walsh and Rosen (1988) have also proposed the benign nature of tattoos on a continuum of self-harm while at the same time suggesting that self-harm behavior is often kept private, and is underreported with people choosing to conceal this behavior. Similarly, Greenspan and Samuel (1989) suggest that self-harm behavior may be underreported, particularly in routine initial interview, and may be obscuring some symptoms of posttraumatic stress disorder that might otherwise be addressed.

Associations between self-harm and tattooing have been noted in the literature. Virkkunen (1976) studied Finnish prisoners who were court ordered to be examined psychiatrically. He found self-mutilators to be twice as likely to have tattoos as the control group drawn from the same population. Also, Britt, Panepento, and Wilson (1972)

found that among self-mutilating prisoners the prevalence of tattoos was 82%. In 1987, Harry compared measurements of body image boundaries and medically significant bodily experiences with 21 tattooed and 24 non-tattooed men incarcerated for violent crimes. He observed that the tattooed participants were the only ones with self-inflicted cuts. He suggested this supported the notion that tattoos, despite their ostensibly decorative quality, may be a form of self-mutilation.

Coincident with the renaissance in tattooing, since the early 1960's there has been a massive increase in the number of people who deliberately injure themselves (McCrae, 1996). The percentage of female suicide attemptors increased from 68% to 75% from 1970 to 1975 alone along with an increase in the use of psychotropic drugs as a method (Wexler, Weissman, Myrna, & Kosl, 1978). This rising tide in suicide and suicide attempts is a cause for concern (Diekstra, 1996) and some factors associated with this are family breakdown, drug abuse, AIDS (Hawton & Fagg, 1992), availability of methods (Ohberg, Lonnqvist, Sarna, & Vuori, 1996) and psychosocial stress (McClure, 1994). This trend includes women and men, and, on the basis of

internationally collected data and review of the literature, Diekstra and Ganefski (1995) concluded that the increase has occurred mostly among the urban adolescent and young adult populations of North America and Europe.

Self-harm behavior is behavior that does not involve an intent to commit suicide, but rather an intent to inflict self-injury without ending one's life. It is a way to feel better rather than end all feelings, and it is an attempt to reenter life rather than exit into death (Favazza, 1996). Similarly, Menninger (1938) reasoned that self-injury was an attempt at self-healing, a local destruction to avert total suicide. Kernberg (1987) described it as a catharsis, an outlet for anger, rage, resentment, and impotence. Self-harm behavior had been theorized to be a syndrome separate from suicide and most of the literature on self-harm behavior differentiates between the two. Pattison and Kahan (1983) proposed a concept of "deliberate self-harm syndrome," which is identified as self-injurious, repetitive acts of low lethality involving self-inflicted injury and with a typical onset in adolescence. Self-harm behavior is reported more commonly in women and often begins in

adolescence with peak incidence between ages 15 and 35 (Murray, 1993). Favazza and Conterio, (1989) have strongly asserted, however, that those who self-injure are at risk for suicide, citing social isolation, demoralization, depression, inabilty to control acts of self-harm, and helplessness in the face of its addictive nature as arguments.

Self-harm behavior such as tattooing may have addictive components. Self-harm and pain produce neurochemical changes of an addicting nature such as production of enkephalins which induce euphoria, regulate emotions, and eventually diminish the response to pain. van der Kolk (1989) postulated that endogenous opioids and other enkephalins are released in the act of self-injury. These chemicals diminish the perception of pain and produce both dependence and withdrawal effects, which reinforce the self-harm behavior. Additionally, low serotonin levels, which have been correlated with assaultive behavior, aggression, impulsivity and suicide attempts, may facilitate self-injurious behavior (Favazza, 1996). McGee (1997) reports a case of successful treatment of self-injurious behavior by using an opioid receptor antagonist,

in support of the hypotheses that self-injurious behavior may be due, in part, to dysregulation of the endorphin neurotransmitter system as a result of trauma.

Impulse and control problems have been associated with self-injury, and some researchers have argued for self-mutilation to be considered an impulse control disorder. Simeon, Stanley, Frances, Mann, Winchel, and Stanley (1992) in a study of self-mutilation in personality disordered patients reported a significant correlation between self-mutilation and impulsivity. Favazza (1989) and Pattison and Kahan (1983) have presented arguments to support considering self-injury as an impulse control disorder. Winchel and Stanley (1991) in their review of self-injurious behavior, have reported that impulsive traits are also frequent in the family of origins of patients who self-harm.

Self-harm behaviors have been known to occur as epidemics (Crabtree & Grossman, 1974; Favazza, 1996). Walsh and Rosen (1988), in their study of adolescents, found that self-harm behaviors were bunched or clustered in time across subjects suggesting that the adolescents were triggering the behavior in each other. A conflicting

finding in this study was that other behaviors, such as talking about suicide and angry reactions, did not have this contagion effect. Tattooing behaviors are also, at times, a response to social pressure. Vail (1999) in an ethnographic study entitled "Tattoos are like potato chips…You can't just have one: The process of becoming and being a collector," examines how one form of deviance, tattoo collecting, comes about. Vail discussed the considerable financial commitment, physical and stigmatic discomfort, and deviation required to become a collector. A collector is heavily tattooed, usually with several "body suits" (a collection that covers an entire part of the body), and is recruited into the world of collectors by other collectors or artists. For the collector, reports Vail, tattoos are not something one owns, nor are they simply ornamentation, but rather are a part of his/her beliefs, identity, and concerns.

Using a different lens, Scott, House, Yates, and Harrigan (1997) investigated individual factors associated with the repetition of deliberate self-harm. They reported that repeaters had significantly higher levels of depression and hopelessness, were less skilled at problem

solving, were less likely to report having someone they could trust and confide in, and reported that their behavior was a means of communicating their distress.

Similarly, in a study whose aim was to determine predictors of deliberate self-harm, Brittlebank, Cole, Hassanyeh, Kenny, Simpson, and Scott (1990) examined 61 persons diverse in age who presented following an incident of self-harm. Patients were followed for six months, and those who were known to have a further episode of self-harm had significantly increased levels of hopelessness and intrapunitive hostility.

Sakinofsky, Roberts, Brown, and Cumming (1990) examined psychological variables in those who report self-harm behavior. One hundred eighty-seven participants who self-harmed were followed for three months and these researchers reported more powerlessness and internally directed hostility in those participants who repeated self-harm behavior.

Finally, prevention and treatment of self-harm behavior has been a challenge (Favazza, 1989; Kernberg, 1987; Pattison & Kahan, 1983; Pitman, 1990; Sakinofsky, et al., 1990; Sansone, Wiederman, & Sansone, 1998; van der

Kolk, Perry, & Herman, 1991). Litman (1995) discussed the lack of techniques and tools for prevention of self-harm. He proposed that prevention in outpatient settings requires increased recognition and accurate identification of at-risk individuals, improved methods of assessment, training, continuity, consultation, and monitoring of risk behaviors over time.

Similarly, Rose (1991), in a study of 89 intensive care management clients, reported reluctance of mental health professionals to conduct routine inquiries about abuse backgrounds and the subsequent underreporting of trauma and self-harm behavior. He suggested that mental health professionals overlook or minimize self-harm, and proposed a change in the conventional delivery models to include more detailed, accurate assessment.

In summary, tattooing has been seen as a form of self-harm, a painful penetration of the flesh, inflicting injury to the body's integumentary system, its first line of defense. The painful process is an integral part of its significance, which the tattooee asserts lends meaning and provides a unique access to bodily sensations. Through manipulation of the body barrier, tattooing's production of

pain has been known to calm, soothe, bring one back in connection with the world, or release one from the present world into an alternative spiritual realm.

Self-harm behavior may be underreported. With the socially acceptable nature of contemporary tattooing, the increased prevalence may be the beginning of a "coming out" of those who quietly self-harm, similar to the increased reporting of eating disorders in the 1970's (Farber, 1997). Those who self-injure may be at risk for suicide, addictions, or other impulse control disorders, and self-injury may, in itself, have an addictive component. Those persons who injure themselves have been found to have more tattoos, as well as higher levels of depression, hostility, and hopelessness. They have less family and social support as well as more impulsive traits in their family of origin.

Self-harm behaviors are increasing in Western society especially among the urban adolescent and young adult populations. Is the socially accepted tattooing behavior, so prevalent among Western women today, a less private, less concealed form of self-harm behavior, an outlet for expression of tension, anger, frightening feelings of lack of self-identity? If enough people engage in a behavior is

it no longer deviant? Or is tattooing simply an expression of self, an ornamentation or work of art with minimal negative, or even positive, psychological implications? No empirical studies have been found addressing the self-injury components of contemporary tattooing.

Self-Harm and History of Trauma

In 1998, Briere and Gil, using a national survey, reported 4% of the general population and 21% of the clinical population engaged in self-mutilating behavior which would decrease emotional distress and posttraumatic symptoms. Childhood sexual abuse was significantly associated with self-harm behavior in both the clinical and non-clinical samples. They further suggested that self-mutilation is a private affair and that it is not known how much goes on in the non-clinical population.

The clinical literature about self-harm behavior consistently refers to childhood history of abuse or repeated surgeries or illnesses in childhood (Favazza, 1989; Favazza & Conterio, 1989; Pattison & Kahan, 1983; Rosenthal, Renzler, Walsh, & Klausner, 1972; Roy, 1978; Stone, 1987; Walsh & Rosen, 1988).

In one study, 74 persons with personality disorder or bipolar disorder were followed for four years and monitored for self-destructive behavior such as self-injury, eating disorders, and suicide attempts (van der Kolk, Perry, & Herman, 1991). History of childhood physical and sexual abuse were highly significant predictors of self-injury and suicide attempts. Participants with the most severe history of separation and neglect, and those with past sexual abuse, continued being self-destructive. The authors conclude that "childhood trauma contributes to the initiation of self-destructive behaviors, but lack of secure attachments help maintain it" (p. 1665). Likewise, in a study assessing the relationship between lifetime patterns of self-injurious behavior and parameters of child abuse and neglect, Dubo, Zanarini, Lewis, and Williams (1997) reported that both parental sexual abuse and emotional neglect were significantly related to self-injurious behavior.

In a study of 120 females suffering from personality disorder, Zweig-Frank, Paris, and Gizder, (1994) measured psychological risk factors and studied the relationship between self-harm behaviors and these risk factors. They

reported that subjects who harmed themselves had higher rates of child sexual abuse and dissociation. Favazza (1989) reported that 62% of females who self-harmed gave a history of childhood physical or sexual abuse. Also, Ross, Heber, Norton, and Anderson (1989) studied 236 cases of Dissociative Identity Disorder and reported self-inflicted injuries in 56.6% of cases. These behaviors were associated with prior physical or sexual abuse. In contrast, in a study exploring the relationship between self-injury and child abuse history, 60 female inpatients diagnosed with Borderline Personality Disorder (BPD) were studied (Brodsky, Cloitre, & Dulit, 1995). These investigators reported a strong correlation between dissociation and self-harm independent of a childhood abuse history.

Pettigrew and Burcham (1997) investigated the relationship of characteristics of childhood sexual abuse and subsequent psychopathology in 73 adult females. They reported single and repeated incidents of self-harm and incidents of self-mutilation with women who had multiple abusers. Feder (1996) examined the frequency and severity of self-injury and the history of childhood trauma in a sample of 86 women hospitalized with a diagnosis of BPD.

The major finding was that self-perceived trauma was significantly associated with an increase in the number of episodes of self-harm and more severe injury.

Zlotnick, Shea, Pearlstein, Simpson, Costello, and Begin (1996) studied female inpatients in a woman's psychiatric unit who reported a history of self-mutilation. Self-mutilators showed a greater number of self-injurious behaviors as well as higher rates of child abuse than non-mutilators.

Neumann, Housekamp, Pollock, and Briere (1996) conducted a meta-analysis of the studies that examined the relationship between childhood sexual abuse and psychological problems in adult women. A significant association was reported between history of childhood sexual abuse and adult symptoms. Self-injury, anxiety, anger, depression, revictimization, sexual problems, substance abuse, suicide, impairment of self-concept, identity problems, obsessive compulsive behavior, dissociation, post traumatic response, and somatization all yielded significant associations with child abuse.

In an attempt to understand and describe self-harm behavior, Shapiro (1992) discussed the sequelae of

childhood victimization and the sense of control over one's body that self-injury provides. She hypothesized that this behavior was an attempt to end intolerable feelings of shame, bringing a sense of comfort and release. In the same manner, one study examined the functions and meanings of self-injury in trauma survivors (Connors, 1996). Connors discussed body altering, body injury, and otherwise harmful-to-self behaviors within a cultural context, and proposed a continuum of self-harm with tattooing as a form of body alteration much less extreme than cutting or head-banging. She suggested that self-injury expresses feelings and needs, reorganizes the self, manages tension, and serves as a reenactment of a traumatic event.

Viewing this behavior within the context of Kohut's self-psychology theory, Feldmann (1990) discussed self-injurious behavior resulting from trauma as a visual reassurance that the self is intact, as a way of offsetting a sense of fragmentation, and a method of restoring a sense of cohesion. Benjamin (1987) proposed the theory that the abused child may learn that acknowledging pain will stop the abuse and nurturance will follow. They may later

inflict injury and pain on themselves with the expectation that problems will disappear and nurturance will follow.

Apart from childhood trauma, Greenspan and Samuel (1989) presented three cases in which self-injury after trauma (rape) was a predominant symptom and part of a PTSD pattern. Two of the cases had no history of previous trauma, psychopathology, drug abuse, or self-harm before the rape. Moreover, combat trauma has been shown to be associated with repetitive self-inflicted injury (Kim & Ainslie, 1990; Lyons, 1991; Pitman, 1990) as a method of tension relief in those who were previously healthy.

Zweig-Frank and Paris (1997) reported a significant relationship between child sexual abuse and self-injury and speculated that the self-injury may be accounted for by neurobiological factors such as trait impulsivity. In a study of 85 substance abuse or substance dependent inpatients, Zlotnick, Shea, Recupero, Bidaldi, Pearlstein, and Brown (1997) also found that those with a history of trauma reported more self-mutilating acts and more impulsive behavior than patients without a history of abuse.

To summarize, self-harm behavior has consistently and repeatedly been found in those who have a history of trauma, abuse, and/or familial neglect in both clinical and non-clinical populations. Self-harm behavior is frequently a reassurance that the self is intact, a way of offsetting a sense of self-fragmentation, and a method of managing overwhelming feelings and restoring a sense of control. Self-injury has been correlated with dissociative disorders and with those who have a history of family and relationship difficulty and parental or familial abuse and neglect. Although there is a clear relationship between self-harm behavior and abuse, few empirical studies have been found which directly investigated the association between tattoos and a history of abuse or family dysfunction (Buhrich, 1983; Buhrich & Morris, 1982; Perkins, 1997; Taylor, 1970).

Self-harm and Eating Disorders

As with those women who have a history of trauma, an association between eating disorders and self-harm behavior has been suggested and demonstrated. According to Rudofsky (1971), humankind is the only species that has a desire to alter the body. He asserted that humans have a need to

transcend nature's imperfections and support their egos with a picture perfect self. Those with eating disorders are attempting to transform themselves into a new state, seeking to create a new identity and feel a sense of control (Bruch, 1978; Brumberg, 1988). Eating disorders are also a self-infliction of pain -- starving hurts, bingeing and purging are painful and exhausting. The bulimic and anorectic are combating feelings of alienation and distress and attempting to instill feelings of calm. It is virtuous to abstain from food, it is empowering and the discomfort is seen as a challenge (Hewitt, 1997). In controlling their bodies they confirm their egos and identities (Chernin, 1985).

Young (1992) examined self-harm behavior, including self-mutilation and eating disorders, in terms of the problem of embodiment and the formation of personal identity and psychological integrity. She described embodiment as "the sense of living in his or her body and, by extension, living in the world" (p. 90). She hypothesized that following trauma, persons may perceive their bodies as a foreign container for all "bad" stuff with the resultant illogical conclusion that if you don't

have a body you can't be hurt (hence anorexic behavior). The body and all experiences inside the body are perceived as "not me," so they may abuse (self-harm) as they have been abused. Perversely, the self-inflicted pain leads them back into their bodies and a sense of aliveness.

A study examining the association between bulimia, self-harm, and drug or alcohol abuse was conducted by Welch and Fairburn (1996). One hundred and two women with bulimia nervosa were compared with 204 normal controls and 102 controls with other psychiatric disorders, all recruited from the same community sample. These investigators reported that women with bulimia nervosa had a higher rate of deliberate self-harm (defined as purposeful overdose of alcohol or drugs, cutting or burning) than the controls.

Favazza and DeRosear (1989) reported a variety of self-harm behaviors in 254 patients diagnosed with eating disorders. In another study, 50% of those who repeatedly self-injured developed or had a history of anorexia or bulimia (Favazza & Conterio, 1989).

Mitchell, Bowtacoff, and Hatsukami (1986) reported 41% of bulimic patients who used laxatives engaged in self-injurious behavior, as did 26% of bulimics who did not use

laxatives. Jacobs and Issacs (1986) reported 35% of patients with anorexia had a history of self-injury. In a study which interviewed 219 women who had received treatment for their alcohol and other drug problems, Swift, Copeland, and Hall (1996) reported that 72% of the sample had experienced physical or sexual abuse. Other characteristics reflected in this sample included recent psychological distress, eating disorders, low self-esteem, and self-injurious behavior.

Wonderlich, Donaldson, Carson, Staton, Gertz, Leach, and Johnson (1996) examined the relationship between reported history of incest and subsequent development of bulimic behaviors. Their results showed that abuse victims were significantly more likely to binge, vomit, experience a loss of control over eating, and report body dissatisfaction than were controls. Incest victims also showed more self-harm and maladjusted behaviors than the controls.

Farber (1997) compared binge-purging and self-mutilating behaviors. She found that both behaviors tend to be practiced by women who have a history of trauma. She suggested that both behaviors serve to regulate and

modulate emotions, moods, and tensions. She further submitted that these behaviors may serve as attempts to differentiate self and object, may define and differentiate body boundaries, and may be ways to express emotions or master trauma via reenactment. She defined self-mutilation as the "infliction of injury to one's body resulting in tissue damage or alteration" (p. 88). Body modification, such as tattooing, suggested Farber, is a variant of self-mutilation, a more passive form, inviting another to mutilate the body. She also postulated a similar contagious quality of both bulimia and self-harm behavior. She reported as well that more people are "coming out of the closet" (p. 91) about their self-mutilation behavior, similar to the increase in disclosure of eating disorders in the 1970's.

Wilson (1988, 1989) has noted the substituting of self-mutilating behavior for bulimic behavior and vice versa. Wilson explained this phenomenon by hypothesizing that the bulimic ego functioning may be replaced by equivalents such as self-injury if there has not been sufficient change in the underlying problem.

Similarly, Heller (1990) compared bulimics, self-mutilators, and bulimic self-mutilators with regard to their symptoms and level of object relations. She reported that the symptoms demonstrated by each group were different manifestations of a similar illness and described their functioning as being in the borderline range. Likewise, Cross (1993) compared bulimia and self-cutting behavior in relation to female body image and feminine development and suggested they were similar psychological problems and emotional experiences manifested in different ways.

In summary, it has been suggested that eating disorders are a form of self-harm, a self-infliction of pain, and a slow destruction of the body. Similar to the literature on self-harm, the self-inflicted pain of eating disorders has been reported to bring the person back into her/his body, instilling a sense of aliveness. Women with eating disorders have repeatedly been found to have higher rates of deliberate self-harm than controls. Furthermore, those with eating disorders also experience lower self-esteem, more psychological distress, and were more likely to have suffered abuse or trauma. In addition, there have been reports of substitution of self-harm behaviors for

bulimic behaviors. To date, the association of tattooing with eating disorders or body esteem has not been investigated.

Research on Tattooing

Tattoos have been interpreted as marks of deviance as well as marks of identity, spirituality, and ornamentation. Tattoos were banned by Constantine, and also the Puritans, who interpreted tattoos as a sign of witchcraft. Today, tattoos are forbidden in Judaism, the Koran, and construed as heathen by the Christians (Sanders, 1989). People in Brazil and America tattooed or branded their slaves, the French tattooed its prisoners, and the Nazis in Germany their prisoners of war. Tattooing has occurred in disreputable places and has been popular among the lower classes, the marginal, rootless, and unconventional social groups (Hambly, 1925; Hewitt, 1997; Sanders, 1989; Steward, 1990). In this context, the psychiatric and psychological significance of tattooing has been studied for greater than three-quarters of a century. Much of the early research is homophobic and contains a biased assumption of deviance, with many studies performed with men in prison populations, where tattooing was common. There is a dearth of research

with non-clinical populations. The existing body of research, which is itself small, will be reviewed.

The earliest known research was performed by Italian criminologist Lombroso (1896, as cited by Grumet, 1983) who examined 6,784 tattooed persons in a period of 13 years, 2,896 of which were criminals. He asserted that tattooing was a primitive ancestral trait that persisted among the lower class and criminal populations. In the 20th century, one of the earliest studies, as cited in Ferguson-Rayport, Griffith, and Strauss (1955), was done in 1925 by Coureaud. He examined 300 tattooed French sailors and concluded that among the men with tattoos could be found "a large number of 'black sheep' including homosexuals, pimps, and those diagnosed as having behavioral disorders" (p. 120).

Sudomir and Zeranskaia (1929, as cited by Ferguson-Rayport, et al, 1955) studied criminals in Eastern Europe who had tattoos. They reported that although these tattooees expressed wishes to be rid of their tattoos, fresh tattoos were found next to those attempted to be eradicated, leading the authors to conclude that there may be no discontent, or at least ambivalence about their tattoos. These authors suggested that the desire for

tattoos emerged from isolation and need for love objects. In a further attempt to categorize tattooees, Bromberg (1935) classified tattooed men as two types; the exhibitionist adding to his collection and the person trying to compensate for feelings of inferiority. The biased assumption of deviance continued in a study by Solowjewa (1930, as cited by Ferguson-Rayport, et al, 1955) who investigated tattoos among young criminals and found that tattooing was an indication that a child was going astray. Likewise, Parry, (1934) studied "prostitutes and perverts" who were tattooed and suggested the tattoos expressed masochistic-exhibitionistic drives and encouraged homosexual activity. He hypothesized that tattooing behavior is a compensatory behavior for individuals who are poorly adjusted.

Haines and Huffman (1958), who hypothesized tattoos to be a form of nonverbal communication, evaluated 482 men prisoners, 35% tattooed and 65% not tattooed. They classified the participants according to the type of offence for which they were incarcerated: primitive (crimes against persons such as murder, sex crimes, robbery) and non-primitive (burglary, breach of trust, larceny, etc.).

The highest proportion of men with tattoos was found among those convicted of non-primitive type crimes. Of the primitive criminals, 36% of those incarcerated for robbery were tattooed, while 21% imprisoned for murder and 14% for sex crimes were tattooed. They found no correlation between tattoo designs and type of offence. Haines and Huffman observed three categories of tattoo designs: mnemonic (numbers, etc), those perceived as decorative or erotic, and those perceived as philosophical (crosses, flags, etc). According to participants in this study, the tattoo represented the sexual act: an act requiring two people, the piercing of the skin, insertion of the needle, and depositing of fluid. These investigators further suggested that tattoos in this sample may represent stubbornness, rebellion, passive dependency, or aggression. Similarly, Levy (1955) asserted the process of tattooing was essentially sexual and at times masochistic, especially if the tattoo is located in sensitive areas such as the breast or genitals.

Likewise, Post (1968), a police scientist and administrator, hypothesized that the presence of body tattoos could indicate personality disorders which may

manifest themselves in criminal behavior. He suggested there was a high percentage of sexual abnormality connected with the practice of tattooing and put forth the theory that tattoo artists are latent or overt homosexuals who chose their occupation for its close proximity to the male body, where they could stroke and fondle without suspicion.

Mosher, Oliver, and Dolgan (1967) compared the performance of tattooed and non-tattooed prisoners on personality measures which were relevant to body image. These researchers reported that the tattooed prisoners had strong and more positive feelings about the various parts of their bodies than did the non-tattooed prisoners. They tended to give more body associations in a homonym association test. They further suggested that this finding is consonant with anecdotal interpretations of tattooing as exhibitionistic or related to body narcissism. On a positive note and contrary to previous reported studies, the barrier scores from the Holtzman Ink Blot Test suggested that those tattooed would display more integrated, adaptive, and socially acceptable patterns of behavior that the non-tattooed.

In the mid-twentieth century more research began outside the prison population with persons diagnosed with mental illness. Lander and Kohn (1943) studied men at an induction center for the U.S. army and found that the army rejection rate for men with tattoos, regardless of the design, was 50% greater than for men without tattoos. They further reported that 58% of all rejected tattooed men was done so on the basis of neuropsychiatric disability, in contrast to 38% neuropsychiatric disability among the non-tattooed men.

In a detailed, ambitious study, Ferguson-Rayport et al. (1955) investigated whether the behavior of tattooing and the circumstances surrounding the acquisition of a tattoo could be correlated with the personality type. They studied patients with diagnoses of Personality Disorder (PD) and Schizophrenic Reaction who had tattoos and who were admitted to the neuropsychiatric department of the Veterans Administration hospital. They used a comparison group of chronic hospitalized patients who were tattooed with diagnoses ranging from degenerative neurological diseases such as multiple sclerosis and Parkinson's disease to schizophrenia and bipolar disorder. The final sample

consisted of 123 persons who were tattooed out of a total of 1,175 evaluated (16% neuropsychiatric admissions and 9% chronic hospitalized patients). They used extensive standardized interviews, collecting information about psychiatric characteristics as well as the nature of the tattoos and the circumstances of acquisition. They reported "striking differences, well correlated with present day psychopathological concepts, distinguishing the tattoos of the Personality Disordered (PD) patient from those of the Schizophrenic" (p. 129). For example, the schizophrenic demonstrated primitive attitudes about the tattoo's magical significance while expressing estrangement from the world. For the PD patient, tattoos expressed inner conflicts and were attempts to satisfy inner needs. In addition, the majority of Rorschach (1921) records contained responses that correlated with the nature of the tattoos. These authors suggested that the tattoos may be considered "akin to a spontaneous projective test" (p. 123). They also reported that PD's were not sober when tattooed and brought a companion with them, whereas schizophrenics were tattooed alone.

Popplestone (1963), in a theoretical paper, defined tattoos as a form of "exoskeletal (like the hard shell of the lobster) defense" (p. 15), as contrasted to the classical defense mechanisms. Popplestone suggested that tattoos are body modifications or enhancements emphasizing the sexuality of the body or function as a protection or index of invulnerability. They are a defense consciously adopted to protect from external threats to the self, he purported, and have the advantage of being socially acceptable. For example, the tattoo of a ferocious animal may warn others that its bearer is dangerous and can ward off threat.

Yamamoto, Seeman, and Lester (1963) investigated 65 tattooed and 65 non-tattooed men patients from medical/surgical and psychiatric wards at a Veterans Administration hospital who were matched for age and hospital ward. Using a demographic questionnaire, clinical interview and history, and the Minnesota Multiphasic Personalty Inventory-MMPI (Hathaway & McKinley, 1940), they reported less stable heterosexual adjustment among tattooed men. Forty-two percent of the participants reported that they were "reasonably sober," and most reported that they

were with companions at the time of tattooing and tattooed on impulse or for affiliative reasons. The tattooed group had significantly higher scores on the psychopathic deviate (Pd) scale [which assesses "general social maladjustment and the absence of strongly pleasant experiences" (Greene, 1991, p. 151)], and lower scores on the masculinity-femininity (Mf) scale [which assesses "vocations...hobbies, aesthetic preferences, activity-passivity, and personal sensitivity" (Greene, 1991, P. 155)], of the MMPI. The percentage of deviant profiles of tattooed men was significant. These deviations included: increased acting out, impulsivity, difficulty with heterosexual adjustment, more likely to be a disciplinary problem, and more likely to obtain medical disability as a member of the armed forces.

McKerracher and Watson (1969) studied 210 (105 tattooees and 105 controls) mentally disordered men who were residents in a special security hospital and examined the relationship between tattoos and behavior disorders. All participants had an unstable social history and a history of physically violent offenses. Tattooees were found to be significantly more unstable, convicted more

frequently for drunken disorderliness, and had more suicide attempts prior to admission than those participants who were not tattooed. They also found that tattooed men committed more indictable aggressive acts, were younger, more intelligent, more unstable in the security environment, and less prone to have psychotic features.

Bourgeois and Campagne (1971) studied tattooed and non-tattooed men and women from psychiatric hospitals and clinics in France. They reported that first tattoo acquisition occurred between the ages of 7 and 13 years of age. Forty three percent tattooed alone, while 48% were accompanied by a friend or family member, and 64% regretted getting their tattoo. There was a greater proportion of tattoos in those with unstable psychopathology such as Personality Disorder than those with a psychosis, leading the authors to concur with Bromberg (1935) that the tattoo is a manifestation of neurotic conflict on the surface of the skin. They suggested that defensive power and aggression are common themes and reported their interpretation that a panther tattoo is often chosen by someone who is feeling paralyzed or afraid of conflict. They proposed creative questions regarding the tattoo in

the person with psychosis, asking if the tattoo was a way of establishing a body boundary, hence, a clearer, less chaotic sense of self and the world, or that it might be a protection from alienation.

In a study examining the relationship of tattoos and tattooing to type of crime and psychiatric diagnosis, Newman (1982) studied 256 Caucasian men prisoners in psychiatric evaluation for the criminal court. The antisocial behaviors were classified as personally assaultive or non-assaultive. Personally assaultive behavior included murder, manslaughter, rape, molestation, armed robbery, and kidnapping. He found that crimes involving personally assaultive behavior were strongly related to the possession of tattoos. Number of tattoos or themes did not correlate with psychiatric diagnosis. Newman viewed tattoos as a form of nonverbal communication and defined tattoos as, "a statement of identity made by a person to society at large, or to his inner group, or to himself" (p. 231). Newman suggested the propensity towards violence may be signaled by self-violence in the form of tattooing.

Ceniceros (1998) also investigated violence propensity when he studied 40 men and women who were Appalachian, white, psychiatric inpatients with suicidal ideation to examine the association between Russian roulette and tattooing and piercing. Ceniceros reported that as the severity of the tattooing and piercing increased (measured by number, theme, and location of tattoo), there was an increase in all forms of violent behavior. He also observed a very strong correlation between involvement in Russian roulette and the types and number of tattoos and body piercings. Goldstein (1979) in a U.S. Army study, found that the likelihood for motorcycle accidents correlated more closely with the number of tattoos than with the other variable studied, suggesting, as did Ceniceros (1998), increased risk-taking with those who have multiple tattoos.

Loimer and Werner (1992) investigated tattooing and high-risk behavior among tattooed women and men who were drug addicts in a Methadone treatment program in Austria. In Austria, tattooing is punishable as an act of "bodily harm" but is not covered by legislative regulations. Since tattooing is an invasive practice, the authors' purpose was to assess risk factors for HIV transmission in tattooing

procedures, to examine features of psychiatric disorders inherent to this group of tattooed participants, and to encourage the licensing of tattoo establishments controlled by public health. They reported that those tattooed had remarkably unstable relationships and engaged in more criminal behavior than those who were not tattooed. Tattooed participants tended to have more aggression toward self and others, more overdosage attempts, and were less interested in having medical attention for skin lesions or injuries. The HIV infection rate of those tattooed was 31.4% compared to 17.2% of those non-tattooed.

In a study examining the social background and social stability of 45 tattooed and 45 non-tattooed men psychiatric patients, Buhrich and Morris (1982) found that tattoos were significantly associated with a record of imprisonment. More tattooed participants left home early, spent more time in boys' institutions, and had significantly greater social instability during childhood than did those non-tattooed participants. A diagnosis of personality disorder was more frequent in the tattooed men, as was the use of alcohol, self-injurious behavior, and suicidal attempts. In contrast to other studies reported,

75% of the participants were not intoxicated when they underwent tattooing.

Following the finding in the above study reporting an association of tattoos with suicide attempts, Lester (1986) examined tattoos and suicide in white men ages 20-59. He examined 195 files from the Medical Examiner's office and reported that tattoos were equally common among those who died by suicide or by natural death, but that presence of a tattoo in those who committed suicide was related to the use of a gun as the method of choice.

Similarly, Buhrich (1983b) investigated the social aspects of 16 tattooed compared to 35 non-tattooed men and women who were narcotic addicts attending a methadone maintenance program. His findings revealed that that those with tattoos reported more current social instability and a more deprived background than those without tattoos. Women first tattooed at a mean age of 15. Two women were intoxicated at the time of first tattoo. The participants reported tattooing for affiliative reasons.

Arya (1993) suggested that tattoos, as an ornamental embellishment of the skin, bring attention to the body boundary and are an attempt to strengthen one's ego. In BPD

patients who have identity disturbances, Arya hypothesized that a need to affiliate to achieve stability and identity may be achieved by tattooing. Arya reported that the presence of a tattoo is associated with BPD. Likewise, Raspa & Cusack (1990) report that the strongest association between tattoos and diagnosis was found with patients suffering from cluster B personality disorder which includes Antisocial Personality Disorder, and BPD among others.

Schmidt (1986) examined personal characteristics common among tattooed county jail inmates and mental health clinic patients, as well as attitudes toward educators and the education system. She also studied biases formed regarding tattooees by educators, law enforcement personnel, and mental health professionals and reported negative perceptions of tattooees by members of the helping professions. She reported that all tattooed persons in her sample had Antisocial Personality Disorder with high energy levels and/or mental confusion. Reasons for tattooing were mainly affiliative. The youngest age for first tattoo was 11 years and 75% of participants regretted at least one tattoo. In a survey of public perceptions of tattooed

individuals, Hawkins and Popplestone (1964) polled 556 participants and reported that tattooees were perceived to have stereotypical masculine attributes of aggression and physical strength.

Several studies have been conducted with adolescents and young adults. In a study conducted with several thousand youthful offenders, Burma (1959) reported significantly more delinquent than non-delinquent youths were tattooed, tattoos were acquired impulsively and at an early age, and that tattoos in some peer groups are symbols of status.

In the first study to include women, Taylor (1970) sampled men and women, offenders and non-offenders, and welfare and delinquent institutionalized tattooed and non-tattooed youths. Tattooees began acquiring tattoos in adolescence and rarely continued beyond the early twenties. Delinquent boys and girls were the most active tattooers and had the greatest number of tattoos. Some incarcerated tattooees acquired tattoos within a relatively short time following their entry into the institution, suggesting, according to Taylor, that they tattooed as a reaction to the shock of detention, the change in pace in their lives,

boredom, submission to group pressure, an act of defiance, a form of personal protest, and a defensive symptom against neurotic or psychotic behavior.

Taylor (1970) reported a variety of type and content of tattoos with a high frequency of amateur tattoos. The themes for women were homosexual and gang related; the themes for men were more varied. Women tattooees expressed that they tattooed because they wanted to damage themselves when angry, satisfy masochistic feelings, enjoy the sight of blood, rebel, assert their own authority, assuage the boredom, or make a statement of love. Many girls attempted to erase the tattoos with bricks or other abrasive methods or tried to burn or cut them out. The tattooed women offenders were more tense, unstable, group dependent, suspicious, more ambivalent in sexual orientation, more criminal in attitude and had more serious offences and convictions than the non-tattooed women offenders. They showed less interest in families, had fewer leisure time activities or hobbies, poorer relationships with staff, and needed more supervision than controls. The tattooed welfare home girls and women prisoners had higher levels of anxiety than the controls or the general population. The tattooed

welfare and delinquent girls were weak in superego and were "troublesome," with poor relationships with the staff. The tattooed welfare girls were dependent and sensitive. The tattooed delinquent girls were more tense, group dependent, sexually ambivalent, and anxious. They had fewer letters and social exchanges or family visits, showed little interest in education, hobbies, and had frequent escape attempts. Older tattooed women became more dependent but could be trusted without supervision and had more frequent correspondence with family. Taylor observed that the older women had managed to accept their broken families and they were corresponding with them, while the younger women and girls remained enmeshed in family circumstances and had yet to create substitute groups for themselves. In a recent study, Perkins (1997) also investigated adolescents and trends in tattooing and reported more separations and/or divorces of parents and more reported nervousness in the family in those who had tattoos.

Martin (1997) described the complexity of the psychological underpinnings of tattooing in youth. Tattoos are subject to fad influence and peer pressure, and can be understood as an inner struggle toward identity

consolidation. Distinguishing body adornment from self-mutilation is challenging, according to Martin, particularly if a family does not agree with the motivations of the tattooee. In seeking individuation, a tattooee is singled out as unique and may experience a sense of control over an environment experienced as alien or over a rapidly changing physical body. Martin further proposed that the increase in popularity and acceptance of tattoos can be understood as a reaction to our urban and nomadic lifestyles, hence tattoos may be understood as a form of grounding. He concluded that clinicians may become sensitized through their patients' skin to another level of their patients' internal reality.

In a mixed design pilot study of tattoos and male alliances, Coe, Harmon, Verner, and Tonn (1993) studied young men in a military college who were tattooed. All tattoos were located in areas covered by the mandatory uniform: 70% were placed on the calf or back and incorporated three categories of designs: patriotic, cartoon characters, or dungeons and dragons. The participants reported that the pain was a source of pride. Their primary audiences were other men. Eighty three

percent indicated that women friends liked their tattoos, and all reported that their mothers either did not like them or did not know about them. The acquisition of the tattoo was a frequent topic of conversation, and the authors suggested that the process of acquiring a tattoo involved male cooperative behavior.

Copes and Forsyth (1993) examined 138 men in college and customers of tattoo salons to investigate the level of extraversion of the sample. They suggested that since extraverts require more social and physical stimulation, they are more likely to engage in behaviors which are automatically deemed socially unacceptable, and, as a result, they are labeled pathological. They reported results supporting a stimulation theory of tattooing, which purports that tattoos result from an extraverted personality type and are not representative of psychological disorder.

In a study to determine how self esteem differed between adolescents who engaged in body art, such as tattoos, and those who did not, Kuniansky (1997) studied 106 adolescents. Her results indicated that a significantly

lower self-esteem was characteristic of the body art participants.

There have been rare reports of families tattooing their children, which has been defined as child abuse. Johnson (1994) reported on incidences of child abuse in the form of tattooing which resulted in convictions for malicious wounding. There is a photograph in the Mifflin (1997) book of a tattooed mother holding her tattooed young toddler, giving implicit approval for this behavior.

To summarize, to date the empirical literature on tattooing has consistently shown, with few exceptions, that tattooed individuals, men and women, have shown significantly higher levels of psychological symptomatology than comparison groups. It must be kept in mind that the majority of studies have sampled clinical populations and incarcerated populations, though there are several studies that have used non-clinical and adolescent samples. Women were not included in the samples until 1970. However, there is consistency in the presence of psychopathological symptoms, regardless of the deviance, illness, or health of the sample, in those who had tattoos.

Most of the studies examined aspects or characteristics of the tattooee and how this related to behavior. The early studies, tainted by homophobia, tended to report sexual abnormalities, sexual deviance, and difficulty with heterosexual adjustment, reporting low scores (for males) on the masculinity-femininity (Mf) scale of the MMPI. Additionally, stereotyping and experimenter bias were evident in the use of such language as "low class," "black sheep" and the like. Many of the studies, however, did not show this bias and were good research.

Most tattoos were first acquired in early to mid-adolescence, with a companion, and were frequently placed by an amateur. Many persons tattooed impulsively and when intoxicated. Tattoos were acquired for affiliative reasons, in defiance, to establish identity, to release feelings, to hurt oneself, or to make a philosophical or political statement. Tattoos were hypothesized to be expressions of inner conflict, satisfaction of inner needs, defenses against feared conflict, compensation for inferior feelings or poor social adjustment, a sign of exhibitionism or narcissism, or simply an expression of extraversion. One study predicted that tattooees would display more adaptive,

socially accepted behavior than those without tattoos (see p. 66 - Mosher, Oliver, & Dolgan, 1967).

Tattooed individuals were more often impulsive, risk-taking, and aggressive, with hostility directed at themselves and at others. There was an increased amount of violent behavior in those with tattoos, including Russian roulette. Tattooees were found to have more instability, more self-harm, and more suicide attempts. There was a consistent correlation with tattoos and cluster B personality disorders such as Antisocial Personality Disorder and BPD, and less tattoos were seen among those with psychotic disorders. Tattooees were more often delinquent or had a history or delinquency and were passively dependent having poor relationships with family, friends, and authorities. They were more likely to have come from families of divorce or separation and were themselves more likely to be single or divorced. They were reported to have greater childhood instability, to have left home early, or to have come from deprived or abusive backgrounds. Young women with tattoos were reported to be enmeshed with their families of origin, and to report more nervousness in their families.

Summary

The empirical and theoretical literature has described the characteristics of tattooed individuals, their reasons for tattooing, and the personal meaning attached to their designs. Tattoos, as a type of permanent body adornment, may be a statement or affirmation of self or group identity. A form of nonverbal communication, tattoos may symbolize empowerment, rebellion, or autonomy, and may give expression to inner feelings, including anxiety and powerlessness as well as pride and self-acceptance. This research has suggested that tattooing may be reflective of the deindividualization in contemporary society. The literature has further described the associations between tattooing and self-harm which is consistently correlated with abuse or trauma, eating disorders, family dysfunction, and psychological distress. Furthermore, the empirical literature has consistently demonstrated, with few exceptions, that tattooed individuals, men and women, have shown significantly higher levels of psychological symptomatology and psychopathology than comparison groups. Since the body of psychological literature on tattooing, especially contemporary tattooing, is yet small, the

proposed study will be exploratory in nature. This study will be undertaken to identify factors associated with contemporary tattooing.

Purpose of the Study

The purpose of this study is twofold: (1) to identify factors which influence women to adorn their bodies with tattoos and determine the personal meaning they attribute to this ornamentation and (2) to determine the relationship between tattooing and women's self-harm ideation and behavior, women's self and body esteem, women's satisfaction with family, and women's level of distress.

Hypotheses

The following hypotheses are proposed:

1. Women with more than three tattoos (or greater than six square inches) will demonstrate a significantly more negative perception of body image than women with less tattoos (or less body surface area tattooed), and women with less tattoos will demonstrate a significantly more negative perception of body image than women without tattoos.

2. Women with more than three tattoos (or greater than six square inches) will demonstrate a significantly lower self-esteem than women with less tattoos (or less body surface area tattooed), and women with less tattoos will demonstrate significantly lower self-esteem than women without tattoos.
3. Women with more than three tattoos (or greater than six square inches) will demonstrate significantly more self-harm ideation or behavior than women with less tattoos (or less body surface area tattooed), and women with less tattoos will demonstrate significantly more self-harm ideation or behavior than women without tattoos.
4. Women with more than three tattoos (or greater than six square inches) will demonstrate significantly higher levels of psychological distress than women with less tattoos (or less body surface area tattooed), and women with less tattoos will demonstrate significantly higher levels of psychological distress than women without tattoos.
5. Women with more than three tattoos (or greater than six square inches will demonstrate significantly

lower levels of family satisfaction than women with less tattoos (or less body surface area tattooed), and women with less tattoos will demonstrate significantly lower levels of family satisfaction than women without tattoos.

CHAPTER III

METHOD

Participants

The sample consisted of 150 tattooed and nontattooed women, from a total of 900 surveyed, who volunteered to participate in a study examining women's perceptions of themselves, their perceptions of tattoos, and the perceived personal meaning and motivation behind this body adornment. One hundred fifty-five women returned completed questionnaires about themselves and their tattoos as well as their perceived levels of body esteem, self-esteem, self-harm ideation/behavior, family satisfaction, and psychological functioning. Five participants were under the age of 18 and these data, therefore, were excluded from the analyses. Consequently, the effective return rate with 150 women was 16.6%. Women were grouped according to the number of tattoos (or square inch surface of body tattooed), and three groups were formed, two tattoo groups and one control group (no tattoos). These women were drawn from tattoo salons, tattoo artist studios, and tattoo conventions;

coffee houses, shops, and hair salons in the same locale as tattoo studios; and advertisements in newspapers and tattoo magazines. Participants were drawn from cities in the Northeast, Midwest, Southwest, and Western United States, with approximately 63% from the Southwest.

Instruments

Demographic Questionnaire. Demographic information was requested and a series of questions relating to tattoos were asked (see Appendix A). These questions included information about the number of tattoos and the amount of body surface tattooed, location of tattoo(s), age when first tattooed, design and placement of tattoo(s), circumstances surrounding acquisition of tattoo(s), personal meaning of tattoo(s), motivation for acquiring the tattoo(s), current feelings and perceptions about the tattoo(s), use of alcohol or drugs, and history of abuse or trauma.

Family Satisfaction Scale (FSS). The FSS (Carver & Jones, 1992) is a self-report, 20-item, five-point Likert-type scale anchored at end-points by Strongly Agree and Strongly Disagree which yields a total score and was developed to measure overall emotional satisfaction with

one's family of origin (see Appendix B). Total scores range from 20-100 with lower scores indicating greater family satisfaction. Sample questions include, "I was never sure what the rules were from day to day," "I was deeply committed to my family," "I usually felt safe sharing myself with my family." The FSS has substantial reliability with coefficients as follows: test-retest coefficient of .88, coefficient alpha for internal consistency of .95 with whole item correlation ranging from .52 to .87 with a mean of .70. This instrument is reported to have high face validity and significant convergent validity (Carver & Jones, 1992). The related measures include: Family Assessment Measure, Family Environment Scale, Interpersonal Orientation Scale, Social Support Questionnaire, Marital Satisfaction and Commitment Scale, Sociability Scale, UCLA Loneliness Scale, with coefficients ranging from $\underline{r}$ = .32 to $\underline{r}$ = .76.

Body Esteem Scale (BES). The BES (Franzoi & Shields, 1984) measures attitudes toward, and satisfaction with, different aspects of one's body. It is a 35-item, self-report, five-point Likert-type scale anchored at end points by Have Strong Positive Feelings About and Have Strong

Negative Feelings About. It is a revision of Secord and Jourard's (1953) Body-Cathexis Scale. It yields a total score and three gender-specific subscales: sexual attractiveness, weight concern, and physical condition for women, and physical attractiveness, upper body strength, and physical condition for men (see Appendix C). Total scores range from 35 to 175, with higher scores indicating greater esteem for one's body. The list of BES items is preceded by the statement, "Indicate how you feel about this part or function of your own body..." Items include: waist, thighs, buttocks, breast, appetite, hair, appearance of stomach, figure, physical coordination, and muscle strength. This instrument was developed and has been substantiated through concurrent validity studies to be a psychometrically sound measure for research with populations at increased risk for body image or eating disorder disturbances. The weight subscale was found to distinguish between people suffering from anorexia and a normal control group. Reliability coefficients for the total scales and subscales are as follows: significant test-retest coefficients range from $\underline{r}$ = .58 to $\underline{r}$ = .89, coefficient alphas for internal consistency range from .82

to .88. This instrument is reported to have high face validity. Further construct, convergent, and discriminant validity of the BES has been supported (Cecil & Stanley, 1997; Franzoi, 1994; Franzoi & Herzog, 1986; Thomas & Freeman, 1990). Only the total score will be used in this study.

Rosenberg Self-Esteem Scale (SES). The SES (Rosenberg, 1965) is a self- report, 10-item, four-point Likert-type scale, anchored at end points by Strongly Agree and Strongly Disagree, which yields a total score and measures general feelings of self-worth. The scale range is 10-40 with higher scores indicating higher self-esteem and lower scores indicating negative self-esteem (see Appendix D). The items require the respondents to report feelings about themselves directly. Sample questions include, "I certainly feel useless at times," "I feel that I have a number of good qualities." The SES is widely used as a unidimensional measure of self-esteem and is a standard against which new instruments are evaluated. Psychometrically sound, internal consistency Cronbach's alphas have ranged between .77 and .88 (Dobson, Goudy, Keith, & Powers, 1979) with test-retest reliability coefficients ranging from .82 to .85. The SES

has been associated with many self-esteem constructs. Convergent validity ranges from .65 to .78 for similar measures such as Coopersmith Self Esteem Inventory and Lerner Self-Esteem scale (Lorr & Wunderlich 1986) to negative relationships between the SES and measures of low self-regard (-.64 with anxiety, -.54 with depression). Considerable discriminant validity has been demonstrated: Locus of control (.04), Scholastic Aptitude Test verbal (.06), quantitative (.10), grade point average (.01), work experience (.07) to name a few. The SES is judged to be one of the best measures of self-esteem (Blaskovich & Tomaka, 1991; Crandall, 1973).

Self-Harm Inventory (SHI). The SHI (Sansone, Wiederman, & Sansone, 1998) is a 22-item self-report, dichotomous scale which yields a total score measuring history of intentional self-harm behavior (see Appendix E). Instructions read: Check yes *only* to those items you have done intentionally, or *on purpose*, to hurt yourself. The list of SHI items is the preceded by the statement, "Have you ever intentionally, or *on purpose*...?" Response options are "yes" or "no," and items include a variety of self-destructive acts such as, "overdosed," "banged your head on

purpose," " driven recklessly on purpose," "lost a job on purpose," and "engaged in emotionally abusive relationships." A score on the SHI is the total of endorsed self-harm behaviors. The instrument is reported to have high face validity, and convergent validity with correlations with related measures (Diagnostic Interview for Borderlines & Personality Diagnosis Questionnaire-R [PDG-R] of $\underline{r}$ = .73 and $\underline{r}$ = .77). This instrument was developed as a measure of self-harm behavior that would predict for a diagnosis of Borderline Personality Disorder (BPD). Formal reliability and validity studies are in the process of being established for this questionnaire though evidence of validity has been shown by demonstration of accuracy in correctly classifying 87.9% of participants as having BPD or not, and by having greater accuracy than the PDG-R in this prediction.

Behavior Symptom and Identification Scale (BASIS-32). The BASIS-32 (Eisen, Dill, & Grob, 1994) is a 32-item self-report, five-point Likert-type scale anchored at end points by No Difficulty and Extreme Difficulty, which yields a total score and five subscales (see Appendix F). The subscales are as follows: Relation to Self and Others,

Daily Living/Role Functioning, Depression/Anxiety, Impulsive/Addictive, and Psychosis. The list of BASIS-32 items is preceded by the statement, "In the past week, how much difficulty have you been having in the area of…?" Items include "managing day-to-day life," "getting along with people outside the family," " isolation or feelings of loneliness," "suicidal feelings or behavior," " hearing voices, seeing things," and " fear, anxiety, or panic." This scale was developed to assess psychiatric symptoms and functional abilities and was designed for use as an outcome measure. Total scores range from 0-128 with higher scores indicating more psychological symptoms or functional difficulty. Internal consistency of the subscales ranged from .63 to .80, with full scale internal consistency of .89. Test-retest reliability ranged from .65 to .81 for the five subscales. Concurrent and discriminant validity analyses indicated that the BASIS-32 successfully discriminated patients with different diagnoses, employment statuses, and rehospitalization statuses.

Procedure

Tattoo salons and artist studios, hair salons, coffee houses, and shops in the aforementioned settings were

contacted directly in person, or first by letter and then directly or by telephone, and asked if they and their customers would be interested in participating in a study about women and tattoos. Participants were also recruited from advertisements in newspapers and tattoo magazines and from direct contact at tattoo conventions. Participants' desire to be included in the study was confirmed directly to the investigator, or by telephone or e-mail contact. All participants who returned completed questionnaires had the opportunity to be entered in a lottery drawing for $100.00, and to receive a copy of the abstract of the study. A total of 900 packets were assembled, which included a cover letter with a brief description of the study, instructions, and how the information would be handled. The cover letter stipulated that the return of the survey questionnaires constituted informed consent to act as a participant in the research. The demographic questionnaire, the five instruments, and a self-addressed stamped envelope for return were also in the packet. Packets were mailed or hand-delivered to participants and were distributed by the investigator or other research assistants. A contact number was provided for any questions that would arise. For

purposes of efficiency, each packet had an identification number that was written on each page of the packet. Following the demographic questionnaire, the order of the dependent measures was varied to control for sequence effects. The returned form, for entry in the lottery drawing or requesting a copy of the abstract of the study, was separated from the remainder of the packet prior to scoring to ensure anonymity and confidentiality.

Statistical Analyses

The major research question in this study was: What is the relationship between tattoos in women and their perceptions of body image, self-esteem, family satisfaction, self-harm behavior, and level of general distress. The research hypotheses of the study were: (a) women with more than three tattoos (or greater than six square inches) will demonstrate a significantly more negative perception of body esteem, self-esteem, and family satisfaction than those women with less tattoos (or less body surface area tattooed), and women with less tattoos will demonstrate a significantly more negative perception of body esteem, self-esteem, and family satisfaction than women without tattoos; (b) women with more than three

tattoos (or greater than six square inches) will demonstrate significantly more self-harm ideation than those women with less tattoos (or less body surface area tattooed), and women with less tattoos will demonstrate significantly more self-harm ideation than women without tattoos; and (c) women with more than three tattoos (or greater than six square inches) will demonstrate significantly more general distress than women with less tattoos (or less body surface area tattooed), and women with less tattoos will demonstrate significantly more general distress than women without tattoos.

Descriptive information was gathered from the questionnaires and tallied, and the frequencies, means and standard deviations calculated. Additionally, yes-no responses were dichotomized and the respective descriptive statistics calculated. A data matrix was produced with participants as rows, and all data, including scores from the employed instruments, as columns. Open-ended questions about personal meaning, motivations, designs, and opinions were included in order to understand how the women in this sample experience and describe their own body ornamentation. These data were organized to reveal

similarities and differences as well as individual variations within those similar, so that diversity of experience would be highlighted. They were content analyzed for themes and patterns with cross-case analyses by question. Each group was coded separately across cases and a summary made for each group. These were then compared and analyzed for what was different and what was the same.

Quantitative testing of the hypotheses was accomplished in the following manner. A two way (2x3) multivariate analysis of variance (MANOVA) was performed with body ornamentation and history of trauma as the two factors. To control for trauma history, which correlates with all outcome variables, it was used as a factor in the design rather than a covariate, since it is a dichotomous variable. There was a control group (no tattoos) and two tattoo groups (1-3 tattoos or 6 sq. inches) (more than 3 tattoos or greater than 6 sq. inches). Since this was an unbalanced design, it was necessary to calculate the average sample size (harmonic mean), and adjust the cell sums prior to analysis. Following significance, two way (2x3) factorial analyses of variance (ANOVAS) were undertaken for each dependent variable, with the exception

of the BASIS-32, which was run with a factorial MANOVA due to its subscales. After interaction occurred, simple effects were examined and Tukey's Honestly Significant Differences Tests was employed following significance in the ANOVAs. An intercorrelation between the dependent measures was also performed.

To investigate the relationship between the variables, simple bivariate correlations were calculated between the number (or area) of tattoos and each dependent variable score, Pearson's (r) for continuous variables and Spearman's coefficient for dichotomous variables. To control for the relevant variable of history of trauma, second order partial correlations were computed. These partial correlations removed the influence of this variable in the correlations between tattoos and dependent measures.

To explore which feature was most associated with tattooing, a stepwise logistic regression was performed. The DV was the presence or absence of tattoos, and the IVs were the scores on the RSES, BES, SHI, BASIS-32, FSS, and presence or absence of trauma. Exploratory analyses were performed to determine predictor variables for the amount of tattoos and for each dependent measure.

Chapter IV

Results

Demographic Information of the Sample

The participants, 150 women, ranged in age from 18 to 65 years, with a mean age of 31.01 years (SD = 9.92). They were well-educated women (mean = 14.77 years of education, SD = 2.57) with a mean household income of $50,112 and median income of $40,000 (see Table 1). The majority of respondents were Caucasian (85%) and heterosexual (85%), with 5% African Americans, 4% Hispanic Americans, 1.3% each Asian American and Native American, and 2.7% Persian, Lebanese, and Asian Indian. Bisexual women accounted for 9% of the sample and 5% were lesbians. Many women were single (41%) or married (33%), while 18% were living with a partner, 8% were divorced, separated, or widowed, and 40% had children. Forty-four percent of participants endorsed a history of abuse with 65% of these women reporting multiple abuse (see Table 2).

The sample was divided into three groups: (1) women without tattoos; (2) women with 3 or less tattoos or < 6

Table 1

Descriptive Information of the Sample (N = 150)

Demographic Variable	Percentage	Mean	Median	SD
Age		31.01	28.0	9.92
Education (years)		14.77	15.0	2.57
Income		50,112.32	40,000.0	33,805.00
History of Abuse	44.0			
Ethnicity				
Caucasian	85.3			
African Amer	5.3			
Hispanic	4.0			
Asian Amer	1.3			
Native Amer	1.3			
Other	2.7			
Marital Status				
Single	41.3			
Married	32.7			
Divorced/Sep	6.7			
Living with	18.0			
Widowed	1.3			
Sexual Orientation				
Heterosexual	85.3			
Lesbian	5.3			
Bisexual	8.7			
Unsure	.7			

Table 2

Reported History of Abuse (n = 66, Multiple abuse n = 44)

Abuse	Reported frequency
Physical Abuse	33
Emotional Abuse	50
Domestic Violence	28
Child Sexual Abuse	17
Rape	18
Other	1

sq. inches of body surface tattooed; and (3) women with more than 3 tattoos or > 6 sq. inches of body surface tattooed. There were some differences in group composition (see Table 3). Across groups, women in group one were older (F (2,147) = 6.96, p = .001) and had a higher income (F (2,135) = 3.092, p = .049) than women in group two and had more years of education (F (2,147) = 8.63, p = <.001) than women in group three.

Table 4 contains additional descriptive information for all women with tattoos. Women in this sample acquired their first tattoo as early as age 14 and as late as age 56 with a mean age of first tattoo at 22 years. Choosing

Table 3

Group Composition: Age, Income, Ethnicity, Years of Education, Sexual Orientation, and Marital Status

	Group 1 n = 49	Group 2 n = 44	Group 3 n = 57
Age	Mean = 34.46	Mean = 27.07	Mean = 31.09
Income	Mean = $59,531	Mean = $42,512	Mean = $47,392
Ethnicity	n	n	n
Caucasian	40	38	50
African Amer	4	3	1
Hispanic Amer	3	1	2
Asian Amer.	0	1	1
Native Amer	1	0	1
Other	1	1	2
Years Education	Mean = 15.86	Mean = 14.73	Mean = 13.88
Sexual Orient	n	n	n
Heterosexual	46	36	46
Lesbian	1	2	5
Bisexual	1	6	6
Unsure	1	0	0
Marital Status	n	n	n
Single	19	26	17
Married	17	9	23
Divorced/Sep	4	2	4
Living with	9	7	11
Widowed	0	0	2

Note. Group 1 = Women with no tattoos. Group 2 = Women with 3 or less tattoos or < 6 sq. inches body surface tattooed. Group 3 = Women with > 3 tattoos or > 6 sq. inches body surface tattooed.

Table 4

Descriptive Information of Women with Tattoos (n = 101)

Demographic Variable	Percentage	Mean	Median	SD
Age first tattoo		22.53	19	7.61
Alone	21.8			
Impulse	28.7			
Permanent	99.0			
Reaction				
Proud	69.3			
Nonchalant	24.8			
Embarrassed	2.2			
Regret	15.8			
Tattoo Artist				
Pro	92.1			
Amateur	7.9			

Note. Alone = Alone when tattooed. Impulse = Acquired tattoo(s) on impulse. Permanent = Realized tattoo was permanent.

equally between original designs and flash (conventional tattoo designs reproduced and sold to tattoo artists) for their tattoos, the great majority (92%) hired a professional tattoo artist in the United States to etch their tattoos. Some women utilized an amateur tattooist (7.9%) and a few acquired their tattoos in Mexico. Almost all (99%) realized their tattoos would be permanent, 78%

were accompanied by a friend or family member when they got tattooed, and many women were proud of their tattoos (69%). Some women (28.7%) acquired their tattoo(s) impulsively, but few voiced regret (15.8%). Greater than half (60%) of the women in the entire sample endorsed using alcohol and/or drugs socially, with 8% using frequently; however, 94% of the tattooed women were sober when they acquired their tattoo(s).

Analyses of Open-ended Questions

The first stated purpose of this study was to qualitatively identify factors which influenced women to adorn their bodies with tattoos and to determine the personal meaning they attributed to this ornamentation. The five open-ended questions in the demographic questionnaire were designed to focus on what was important to the women in the study about their tattoos, what were significant aspects of their experience, and what were principal issues in their perspective.

This portion of the study was intended to be descriptive in nature and does not employ typical qualitative methodology such as in-depth interviewing, participant observation, field notes, or audio/video

taping. The units of analysis were the responses to the questions, which were coded separately by group and emerging themes identified. These themes were broad dimensions that captured the essence of these women's experiences of and perceptions about tattooing. Each question was examined independently by group. Responses were directly transcribed from the questionnaires to yield separate data records as follows: group 2 responses to question 1, group 3 responses to question 1, group 2 responses to question 2, group 3 responses to question 2, and so on. Themes (such as self-expression and ornamentation) were then identified within each group and frequencies tallied. Ornamentation, for example, included any response that referred to acquiring a tattoo because it was an art form, a decoration, or an accessory to enhance appearance. Individual women are not easily categorized on a broad dimension; therefore, to preserve the complex quality of these women's experiences, domains within each theme were identified. In an attempt to be sensitive to the voices of these women, to accurately determine what they were saying, and to diminish experimenter bias, an outside

reader was utilized. Cross group analyses were undertaken and frequencies tallied.

Question 1: What is the design content of your tattoo(s)? Approximately 50% of the designs chosen by the women in this study were animal (26%) or floral (21%), with great diversity among the animal species chosen: ladybug, dolphin, eagle, frog, dragonfly, tiger, rabbit, scorpion, horse-head, wolf, crane, dog, cat, etc. (See Table 5). Tribal, astrological, and memorial designs were the next most frequently chosen designs, each representing approximately 8% of the total number of designs. There were scattered, diverse designs depicting women, ancestry, and spirituality, and finally, less than 2% with oppressive themes such as barbed wire or bondage.

Question 2: What is the reason you got tattooed? Question 3: What do your tattoo(s) mean to you? Similar themes became apparent when the data from these two questions were analyzed. Some women perceived the questions to be redundant: "I answered this in the previous question," while others shared distinctly different information on each question. Four identical broad themes emerged from both questions: Symbol/Memorial, Expression

Table 5

Design Content of Tattoos

Design	Frequencies		
	Total n = 101	Group 2 n = 44	Group 3 n = 57
Ancestry	6	1	5
Animals	70 (26%)	15 (23%)	55 (26%)
Astrological/sun/moon	24 (8%)	7 (10%)	17 (8%)
Barbed wire/bondage	5	0	5
Cross/religious/duality	13	5	8
Earth	6	1	5
Eye	3	2	1
Floral/leaves/vines	57 (21%)	12 (18%)	45 (22%)
Hearts	12	4	8
Memorials	24 (8%)	6 (9%)	18 (8%)
Mythical/cartoon	20	5	15
Tribal	21 (7%)	6	15
Women	6	1	5

Note. Group 2 = Women with 3 or less tattoos or < 6 sq. inches of body surface tattooed. Group 3 = Women with > 3 tattoos or > 6 sq. inches of body surface tattooed.

of Self, Fancy, and Ornamentation; and one distinguishing theme for each question, Psychosensual for question 2 andNo Meaning for question 3 (See Tables 6 and 7). Fancy refers to whimsical, capricious fondness or liking with no

Table 6

Reason for Acquiring Tattoo

Theme and Domains	Frequencies	
	Group 2	Group 3
Symbol/Memorial	9	19
Permanent symbol		
Things dear		
Growth		
Expression of Self	16	35
Self definition		
Self reward		
Strength		
Freedom		
Sexy		
Rebellion		
Individuality		
Ornamentation	4	24
Pretty		
Art		
Decoration		
Fancy	21	24
Wanted		
Liked		
"Cool"		
Psychosensual	3	8
Feeling of getting tattoo		
Pain		
Impulsive		

Note. Group 2 = Women with 3 or less tattoos or < 6 sq. inches of body surface tattooed. Group 3 = Women with > 3 tattoos or > 6 sq. inches of body surface tattooed.

Table 7

Meaning of Tattoo

Theme and Domains	Frequencies	
	Group 2	Group 3
Symbol/Memorial	17	32
Mark Time		
Record Life Experiences		
Heritage		
Religion		
Memorial		
Expression of Self	24	59
Individuality		
Belonging		
Rebellion/defiance		
Freedom		
Strength		
Self-expression		
Ornamentation	1	16
Beauty		
Art		
Decoration		
Fancy	6	6
Just like them		
No meaning	7	2

Note. Group 2 = Women with 3 or less tattoos or < 6 sq. inches of body surface tattooed. Group 3 = Women with > 3 tattoos or > 6 sq. inches of body surface tattooed.

other qualifiers present in the response. In general, the more heavily tattooed women offered more information and detail including multiple reasons and personal meanings, hence their greater numbers in the frequency columns.

Question 2

For the less tattooed women, Fancy was the most frequently stated reason for acquiring a tattoo: "I always wanted one," "I just like tattoos," "I thought it looked cool," "I thought it would look good on me." Though a frequently expressed theme, Fancy was not the predominant theme of the more heavily tattooed women. In this group, Expression of Self with its inclusive domains was most often cited as the reason for tattooing. Many women in this group gave strong, positive messages of independence and self-strength:

> I'm extroverted and an exhibitionist. I wanted a tattoo as an extension of my extroversion, to make a statement to myself and the world and distinguish myself from the masses (putting up a lighthouse in otherwise dreary, dark waters).
>
> …I wanted to change the way myself and others looked at me.
>
> To define myself. Each tattoo represents a part of me, to stand for my beliefs, to show my courage and femininity…
>
> My tattoos have made me love myself more…getting one step closer to the person I want to become.

This theme commonly emerged with the less tattooed women as well:

> I wanted a form of self-expression.

> To represent different aspects of myself--spiritual, faithful, moody.
>
> I like the idea of having something on my body that characterizes me and distinguishes me from the next person.

Some women wanted a permanent symbol of something important to them:

> My relationship with God is the most constant thing in my life and this was kind of like a physical covenant.
>
> ...mark different periods in my life and help me heal some type of scary abuse...
>
> ...one was in honor of my sister.
>
> Celtic and Teutonic pieces (my ancestry) are extremely important to me...
>
> I was a dolphin trainer for several years and wanted a permanent reminder of achieving that goal.

Several women in the heavily tattooed group, and some in the less tattooed group, expressed the love of the art (of tattooing) or beauty among their reasons for acquiring a tattoo:

> The skin is a walking piece of art when tattooed.
>
> ...love the art form.
>
> ...at age 7 or 8 I would paint designs all over myself...
>
> Like to decorate my body with images I enjoy.
>
> ...make the body more beautiful.
>
> ...makes my body a sort of museum.

Although some women tattooed impulsively: "It was purely an impulse, 3 other people were getting them. I really thought I wanted it until 10 minutes after," "I got my tattoo on a dare then opted to cover it up rather than remove it," for others it was a carefully thought out decision: "…something I'd thought about for a while and decided I wanted."

For others, the reason for tattooing was the physical feelings associated with tattooing: "the rush and excitement of getting it," "I like the pleasurable pain," "…like the feel of getting a tattoo." One woman chose to get tattooed "to overcome my fear of needles."

Question 3

Though the themes were similar with questions 2 and 3, the responses to question 3 (meaning of tattoo) were often more personal, candid, revealing, and literary, yielding a lucid sense of context and voice. The theme, Expression of Self, emerged most frequently with both groups of women. Domains of independence, freedom, and strength as sources of identity were common:

> …means that I am a beautiful and powerful woman able to mother AND give and seek pleasure. My flying nymph and mermaid are singing into existence a creative

burst of energy, raw female power manifested in a huge mandala-esque explosive spark between the 2 figures.

I wanted to symbolize the sacred, intuitive part of me that is totally my own, independent of partners.

…symbolizes freedom over this body of mine, no one else, just me,

…courage and strength to face the pain…I can stand physical and emotional pain. It means who I am, I am the same yet I am different in the world of automated people and beliefs.

For some women, their tattoos symbolized past experiences:

Grounding statements of how I felt at the time…

They mean good times,

These tattoos mean a lot… a story about myself,

My college volleyball career--hard times and fun.

50 and freaking out.

My tattoos were gotten during emotionally stressful times--a good way to release stress…

It is permanent but it's OK because I will permanently be in my sorority.

or people they cared about:

My collection (of tattoos) by my youngest child all his ideas. He is an extension of me.

…purple moon--my best friend in Denmark has a matching one. We can look at the moon and think of each other.

…love for my husband and father who both died of AIDS…

Roses for my children, leaves for my grandchildren.

…like a family photo album…

Some women were specific about tattoos as a form of self-definition:

> It helps me accept and appreciate the wilder side of me, helps me realize how vital that facet of me is.
>
> My choice of tattoo changes - like a caterpillar going through its metamorphosis into a butterfly. I'll finish one and look forward to the next and continue my metamorphosis into that beautiful butterfly.
>
> Symbol of who I am (artist). I went to Italy and changed the essence of who I am, then designed the sun from my experiences and feelings about Italy and the way it makes me feel.
>
> …designs I feel will help capture my innermost self.
>
> …show a part of myself that I can't be everyday

Tattoos also depicted women's work, joys, and beliefs:

> I'm an avid gardener and I raise and breed butterflies.
>
> I've always been fascinated with things Japanese…most admired Japanese gardens…tattoos reflect one of my favorite symbols.
>
> Shows my belief, wholeheartedly, in the fairy realm.

Question 4: Why do you think tattoos are popular with women today? From this question, the first to include responses from women without tattoos, emerged six broad themes. In contrast to the previous questions in which freedom, strength, and individuality were considered as

domains within the Expression of Self theme, the frequency, strength, and clarity of women's statements pleaded for their distinction as separate constructs in this question. In addition, the domain "sexy" was included within the ornamentation theme, in contrast to its earlier inclusion as a domain within Expression of Self, since women stated it within the context of beauty or ornamentation (See Table 8). Out of the entire sample, there were seven women who said they did not know why tattoos were popular; one who said, "They're not popular," and ten who did not respond to the question. Further, there were a few defamatory statements from the non-tattooed women, for example: "Tattooed women are trashy," and "Tattoos show a disrespect for the body." These responses were unexpected since this sample of women was drawn from locations thought to have favorable attitudes toward women with tattoos (tattoo conventions and hair salons, shops, and restaurants in neighborhoods with tattoo establishments).

Women without tattoos and those with a small body surface tattooed (groups 1 and 2) opined that tattoos were popular simply as a form of ornamentation: "...a fashion

Table 8

Why Tattoos Popular

Themes and Domains	Frequencies		
	Group 1 (n = 47)	Group 2 (n = 40)	Group 3 (n = 53)
Empowerment	20	11	31
Strength			
Freedom			
"can"			
Expression of Self	11	13	16
Fancy	3	2	5
Liked			
Sentiment			
Individuality	13	8	8
Original			
Unique			
Different			
Ornamentation	21	19	14
Art			
Sexy			
Attention			
Beauty			
Decoration			
Trend	18	5	13
Media			
Fad			

Note. Group 1 = Women without tattoos. Group 2 = Women with < 3 tattoos or < 6 Sq. inches of body surface tattooed. Group 3 = Women with > 3 tattoos or > 6 sq. inches of body surface tattooed.

statement, "an accessory-like jewelry," "beautiful piece of art on a living canvas," "a permanent 'beauty mark'." Although 16% of the responses from the more heavily tattooed women (group 3) included this opinion as well, 31 responses (36%) by these women in group three and 20

responses (23%) from women without tattoos suggested personal empowerment as the reason for the popularity of tattoos. Some women speculated, and others stated with conviction, that tattoos were a gender equalizing factor:

> …anything boys can do girls can do better.
>
> Women are getting more power socially and can do what men traditionally do…
>
> …it is another realm that is no longer "a man's thing".
>
> In a world where men have so much control and influence maybe she is taking control…
>
> …remove the stereotype that tattoos are only for men….

Assertive statements about women's strengths in society and resistance to stereotypes were made:

> …emergence of women willing to stand up for themselves.
>
> We don't have to be seen as stereotypical women (demure, controlled, weak, etc.).
>
> …fighting against privileges held back from us whether in business or society…to show we can handle the same pain…we are not weak vulnerable girlies.
>
> …to overcome the stigma that only "bad" girls get tattoos.
>
> To throw off the image of women having to be "good".

Other women suggested that tattoos were popular because of the increased freedom of women in society today:

Women are no longer afraid to hide who they really are…

Because we can. Now it's acceptable.

Women are finally starting to express themselves…

Women are allowed to do more.

We have a freedom that past women did not have.

…emergence of women who will to stand up for themselves.

Twenty-one percent of the opinions of non-tattooed women, 8% of women with less tattoos, and 15% of heavily tattooed women connected the popularity of tattooing with a trend, fad, or influential media personalities: "…been popularized by celebrities," "trendy," "a really 'in' thing to do lately," "societal acceptance due to the celebrity status it's gained." For this question, chi square analysis, X^2 (df 10, N responses = 231) = 13.78, p = > .10, revealed no significant relationship between women's amount of tattoos and chosen theme.

Question 5: What would you like me to know about you or your tattoo(s) that I haven't asked you? In responding to this question, women without tattoos focused on one central theme, Acquiring Tattoos, with three domains (Table 9): why they have not acquired a tattoo:

Table 9

Additional Information Given in Response to Question #5

Themes and Domains			
Group 1 n = 40	Frequency	Groups 2 and 3 n = 91	Frequency
Acquiring Tattoo	40	Acquiring Tattoo	32
Have not acquired		Plan on more	
Will not acquire			
Plan to acquire			
		No Regret	19
		Discrimination	60
		Not a freak	
		Happy/healthy	
		Normal/successful	
		Details on Meaning or Acquisition	25
		Positive Influence of Tattoos	12

Note. Group 1 = Women without tattoos. Group 2 = Women with 3 or less tattoos or < 6 sq. inches of body surface tattooed. Group 3 = Women with > 3 tattoos or > 6 sq. inches of body surface tattooed.

Because it's painful and I don't like pain.

Because it's permanent and like most creatures on this earth I am a work in progress.

I'm scared...

I once tried to get a tattoo on my 25th birthday but when I got to the parlor it was closed! Now I'm glad, although I may do it on my 50th birthday just to shock everyone.

> …can't decide on a good location or design therefore I probably won't do it.

why they will not get one,

> I hate tattoos and will never have one.
>
> I am an RN and have cared for young girls with AIDS resulting from tattoos so I'm not going to get one.
>
> I would not get a tattoo. I have radical ideas about life but like my appearance to be low-key…
>
> My friends regret or feel indifferent about theirs…don't understand why people choose to allow a needle to leave a permanent scar on their skin.

or their plans to get one,

> I'm planning on getting a tattoo. It will be Cherokee and it will spell my name.
>
> I'm seriously thinking of getting one. I have already picked it out and the location (hip)…
>
> I'll probably get one this next month…I'm a stripper (to pay for college) and lots of women have tattoos so I'm waiting until I finish dancing to get it.

In contrast to non-tattooed women, tattooed women's voices made a unison declaration that tattoos are not bad. In this sample, the pervasiveness of discrimination and invidious comparisons to those without tattoos were integral to these women's experiences and perspectives. They stated this clearly either in direct statements or by explaining how they are healthy:

I am a well-educated professional who does not stereotype individuals with tattoos as "wild", or "strange"... I do not smoke and haven't had a drink in 5½ years...

Tattoos don't make people freaks...we are not hellions...

The tattoo doesn't make or break my ability to be a wonderful wife, mother, me... I am confident in the emotional well-being of my child...I would like to see the day when others can judge a person on more than appearances. I hold little hope for this...society's inability to raise non-racist children. TOO BAD.

Other people have to realize that tattooed [women] are not from another dimension...

I'm a happy person...really...I'm like others, get PMS, get cranky...

...been taking care of myself since age 13...want to be a school teacher...now on full scholarship...

...must be willing to take harassment from those around you and understand that employers will accept men with tattoos but not women. As a professional I must cover everything to keep my job.

...I tell them I own my own business and home and deal with the same things they do, that our lives are not different...but it's sad...I am always prejudged and I have to make an extra effort all the time to make people look past their preconceived notions...

...it doesn't make you "different" on the inside than a non-tattooed person--we shouldn't stereotype...

Don't like "nasty" judgmental comments from others.

I really enjoy mine no matter how silly others perceive them to be.

I was always an honor student...my head is on straight.

Tattooed women frequently shared their plans for getting another tattoo and spoke of the positive influence tattoos have had on them:

> My tattoos give me confidence.
>
> …more secure in my skin than ever.
>
> …love bringing joy to others via tattooing. It's a "rush" to see races come together over tattoos. I have tattooed a man straight from prison one night and a pristine church lady the next morning… thanks to the fine art of tattooing I feel complete.
>
> My tattoos have taught me to be more accepting of people with differences because I am different….

Some women shared information on the pain:

> Breast didn't hurt too much, shoulder hurt like hell.
>
> If they didn't hurt so much I'd get more.
>
> …For me the pain of the tattoo was almost a physical distraction from the emotional problems I have had the last year. And when I get depressed again, I start thinking of getting more work done…I have been able to deal better with my back pain since getting my tattoos.

Others provided words of caution:

> …they cost way too much.
>
> I think a person needs to be absolutely certain. These art designs are forever, expensive, and difficult to remove or cover. No one will cover the one on my foot.
>
> Tattoos are not for everyone…
>
> I would tell everyone not to get one.

In this question, women shared more stories about the meaning or acquisition of their tattoos, for example: a "mother" tattoo revealed to one woman's mother on Mother's Day, childhood dreams of having tattoos some day after getting temporary tattoos while on vacation, how waiting made it more meaningful, and how there were no regrets. Finally, some women revealed their feelings about showing their tattoos:

> If my grandmother saw my tattoo, she would flip.
>
> I don't show it off--it is for me and is something private about me.
>
> You can only see them if I want you to…
>
> At times I feel like a celebrity--people staring, pointing, coming over or even worse, touching me…
>
> …they're a litmus test for the general public (you can tell a lot by how people react)…
>
> …love to flaunt around with my tattoos all showing (in the right setting)--when I am out locally I like to cover them up.

Quantitative Analyses

The second stated purpose of the study was to determine the relationship between tattooing and women's self and body esteem, women's satisfaction with family, women's self-harm ideation and behaviors, and women's level

of distress. Table 10 contains the intercorrelations among the dependent measures, that is, the Behavior and Symptom Identification Scale (BASIS-32) total, the Body Esteem Scale (BES), Self-Esteem Scale (SES), Self-Harm Inventory, (SHI), and the Family Satisfaction Scale (FSS). These significant correlations were anticipated since these instruments have been shown to have significant convergent validity with similar related measures. Table 11 delineates the dependent variable scores, composite and subscale scores, for the sample as a whole and for each ornamentation group.

The independent variable for the five research hypotheses was ornamentation, with three levels: (1) no tattoos; (2) 1 to 3 tattoos or < 6 sq. inches of body surface tattooed; and (3) > 3 tattoos or > 6 sq. inches of body surface tattooed. To control for history of abuse or trauma, which correlated in the literature with all outcome variables, abuse status was used as a factor in the design rather than a covariate since it is a dichotomous variable. With this sample of women, history of abuse did prove to correlate significantly with the SES, FSS, BASIS-32, and SHI, but not with BES (see Table 12). There was also a

Table 10

Intercorrelations Among BASIS-32, BES, FSS, SES, and SHI

Measure	1	2	3	4	5
1. BASIS-32	--	-.420****	.380****	-.618****	.464****
2. BES		--	-.196*	.503****	-.260***
3. FSS			--	-.319****	.349****
4. SES				--	-.428****
5. SHI					--

Note. BASIS-32 = Behavior and Symptom Identification Scale. BES = Body Esteem Scale. FSS = Family Satisfaction Scale (lower scores = more family satisfaction). SES = Self-Esteem Scale. SHI = Self-Harm Inventory.
*$p < .05$ ***$p < .001$ ****$p < .0001$.

Table 11

Means and Standard Deviations for BASIS-32, BES, FSS, SES, and SHI

	Total Sample			Group 1			Group 2			Group 3		
Measure	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD	n
BASIS-32	18.26	17.80	141	21.16	17.42	44	16.20	18.70	43	17.54	17.38	54
Depress	4.59	4.42	146	5.04	4.51	47	3.72	3.76	43	4.88	4.78	56
Impuls	1.85	3.26	146	1.81	3.25	48	1.86	3.64	43	1.87	3.01	55
Livskil	5.09	4.87	145	5.54	4.75	46	4.77	4.87	43	4.96	5.03	56
Psycho	.98	2.25	148	1.04	2.19	49	.95	2.13	43	.95	.44	56
Selfoth	5.36	5.23	149	6.53	5.42	49	4.57	4.99	44	4.96	5.15	56
BES	120.86	25.14	147	116.86	23.39	49	121.48	24.90	42	123.91	26.72	56
FSS	48.67	20.00	147	45.98	21.03	48	46.49	20.13	43	52.66	18.63	56
SES	32.40	5.87	146	30.91	6.24	47	32.88	5.11	43	33.27	5.95	56
SHI	3.03	.33	149	2.94	3.57	49	2.58	2.44	43	3.43	3.71	57

Note. Group 1 = Women without tattoos. Group 2 = Women with < 3 tattoos. Group 3 = Women with > 3 tattoos. For all measures except FSS, higher scores yielded higher levels of the construct examined. BASIS = Behavior and Symptom Identification Scale, ceiling = 128, Depression subscale ceiling = 24, Impulsivity subscale ceiling = 24, Living skills subscale ceiling = 28, Psychoticism subscale ceiling = 16, Self other subscale ceiling = 28. BES = Body Esteem Scale, ceiling = 175. FSS = Family Satisfaction Scale, ceiling = 100. SES = Self-Esteem Scale, ceiling = 40. SHI = Self-Harm Inventory, ceiling = 22.

Table 12

Correlations Between Amount of Tattoos, Abuse Status, Age, Annual Income, Years of Education and BASIS, BES, Depress, FSS, Impuls, Livskil, Psycho, Selfoth, SES, and SHI.

	Independent Variables						
Dependent Variable	Tattoos	Abuse	Age	Income	Education	Piercings	Surftattoo
BASIS-32	-.017	.313****	-.236***	-.245**	-.161	.118	-.088
BES	.060	-.113	.033	.060	.073	-.025	.137
Depress	.039	.378****	-.154	-.245**	-.190*	.075	-.011
FSS	.168*	.476****	.103	-.057	-.179*	.016	.148
Impuls	.054	.224**	-.166*	-.157	-.179*	.128	-.021
Livskil	.003	.249**	-.239**	-.300****	-.119	.137	-.052
Psycho	.046	.184*	-.137	-.114	-.102	.071	-.043
Selfoth	-.077	.279***	-.178*	-.190*	-.171*	.052	-.117
SES	.161	-.181*	.082	.171*	.027	.030	.172*
SHI	.121	.489****	-.125	-.146	-.081	.144	.072
Tattoos	--	.246**	-.086	-.194*-	-.348***	.461****	.905**

Note. Tattoos = Amount of tattoos. Abuse = Abuse status no/yes. BASIS-32 = Behavior Symptom and Identification Scale. BES = Body Esteem Scale. Depress = Depression subscale of BASIS. FSS = Family Satisfaction Scale. Impuls = Impulsivity subscale of BASIS. Livskil = Living Skill subscale of BASIS. Psycho = Psychosis subscale of BASIS. Selfoth = Self-Other subscale of BASIS. SES = Self-Esteem Scale. SHI = Self-Harm Inventory. Piercings = piercings other than the ear. Surftattoo = body surface area tattooed.
*$p < .05$ **$p < .01$ ***$p < .001$ ****$p < .0001$.

significant correlation between abuse and amount of tattoo (r = .246, p = .002) and with comparative analysis, abused women had significantly more tattoos than nonabused women (t = -3.94, p = .002). Further, there was a significant positive relationship between self-esteem and the amount of surface area tattooed (r = .172, p = .037) and between self-esteem and ornamentation (r = .166, p = .046). Two second order partial correlation coefficients were computed to remove the relevant variable of abuse status: (1) for level of ornamentation and self-esteem and (2) for amount of tattoos and family satisfaction. With abuse controlled for, correlations of ornamentation and SES remained significant (r = .210, p = .011) indicating a positive association between tattoos and self-esteem, and the significance disappeared between amount of tattoos and FSS(r = .048, p = .564) indicating no significant relationship between tattoos and family dissatisfaction.

A Multivariate Analysis of Variance (MANOVA) was used to test all five research hypotheses (see Table 13); however, each hypothesis will be reported independently. Since there was a significant interaction in this analysis, cells means for that dependent variable were examined to

Table 13

Multivariate Analysis of Variance for Self-Esteem, Self-Harm, Body Esteem, Behavior and Symptoms, and Family Satisfaction (N = 136)

Source	df	F						
		BES	FSS	SES	SHI	BASIS	Depress	Livskil
		Between subjects						
Abuse (A)	1	3.10	33.54***	4.79*	36.45***	16.99***	22.78***	10.14**
Ornament (O)	2	1.66	.52	3.71*	.13	1.53	1.30	.88
A x O	2	1.50	3.28*	.46	.20	.01	.12	.03
Error	130	(608.17)	(310.14)	(33.47)	(9.20)	(294.42)	(17.72)	(23.48)

Source	df	Impuls	Psycho	Selfoth
Abuse (A)	1	7.80**	6.24*	12.36***
Ornament (O)	2	.31	.71	2.90
A x O	2	.07	.08	.18
Error	130	(11.02)	(5.26)	(26.16)

Note. Values in parentheses = mean square errors. Ornament = Ornamentation. BES = Body Esteem Scale. FSS = Family Satisfaction Scale. SES = Self-Esteem Scale. SHI = Self-Harm Inventory. BASIS = Behavior and Symptom Identification Scale-32. Depress = Depression subscale of BASIS-32. Livskil = Living Skill subscale of BASIS. Impuls = Impulsivity subscale of BASIS. Psycho = Psychoticism subscale of BASIS. Selfoth = Self-Other subscale of BASIS.

*$p < .05$ **$p < .01$ ***$p < .001$.

determine the simple effects of body ornamentation within each level of abuse and the simple effects of abuse within each level of body ornamentation.

Hypothesis 1. Hypothesis 1 stated that women with > 3 tattoos or > 6 sq. inches of body surface tattooed (group 3) would demonstrate significantly more negative perceptions of body image than women with less tattoos (group 2), and women with less tattoos would demonstrate significantly more negative perceptions of body image than women without tattoos (Group 3 < Group 2 < Group 1). This hypothesis was not supported. Abused women in groups 1 (no tattoos) and 2 (1-3 tattoos) did not have significantly less body esteem than nonabused women, and the body esteem of abused women in Group 3 (> 3 tattoos) was substantially equal to that of the nonabused women (F (1,130) = 3.10, p =.081). Further, there were no significant differences in body esteem between tattooed and nontattooed women in either abuse group (F (2,130) = 1.66, p = .195).

Hypothesis 2. Hypothesis 2 stated that women with > 3 tattoos or > 6 sq. inches of body surface tattooed would demonstrate significantly lower self-esteem than women with less tattoos, and women with less tattoos would demonstrate

significantly lower self-esteem than women without tattoos. This hypothesis was not supported. Nonabused women demonstrated significantly higher levels of self-esteem than abused women (F (1,130) = 4.79, p = .030), and there was significance for the ornamentation factor (F (2,130) = 3.71, p = .027) in the opposite direction than was hypothesized. Upon examination of the marginal means (see Table 14) for this factor with Tukey's Honestly Significant Differences test, no significant differences in self-esteem were found between any ornamentation groups (p = .07, .16, .96), but with the less conservative Fisher's Least Significant Differences test, significance differences were found between women with many tattoos and women with no tattoos (p = .03).

Hypothesis 3. Hypothesis 3 stated that women with > 3 tattoos or > 6 sq. inches of body surface tattooed would demonstrate significantly more self-harm ideation/behavior than women with less tattoos, and women with less tattoos would demonstrate significantly more self-harm ideation/behavior than women without tattoos. This hypothesis was not supported. Although abused women demonstrated significantly greater self-harm than nonabused

Table 14

Table of Marginal Means for MANOVA (n = 136)

	Marginal Means				
	Abuse		Ornamentation		
	No	Yes	No tattoos	Less tattoos	More tattoos
BES	122.50	114.70	114.01	118.35	123.45
FSS	40.83	59.18	50.25	47.92	51.85
SES	33.27	30.99	30.21	32.74	33.45
SHI	1.55	4.85	3.36	3.18	3.04
BASIS	13.08	25.80	22.95	18.72	16.66
Depress	3.06	6.68	5.74	4.33	4.54
Impuls	1.23	2.89	2.17	2.26	1.75
Livskil	3.87	6.65	5.93	5.29	4.57
Psycho	.57	1.60	1.33	1.14	.77
Selfoth	4.03	7.26	7.19	5.02	4.73

Note. BES = Body Esteem Scale. FSS = Family Satisfaction Scale (higher scores = more family dissatisfaction). SES = Self-Esteem Scale. SHI = Self-Harm Inventory. BASIS = Behavior and Symptom Identification Scale. Depress = depression subscale of BASIS. Impuls =impulsivity subscale of BASIS. Livskil = living skills subscale of BASIS. Psycho = psychoticism subscale of BASIS. Selfoth = self-other subscale of BASIS.

women (F (1,130) = 36.46, p = <.001), and although women with multiple abuse had significantly more tattoos than singly abused women who had significantly more tattoos than nonabused women (F (2,149) = 8.38, p = <.001), there were no significant differences in self-harm between tattooed and nontattooed women in either abuse group (F (2,130) = .13, p = .88). Further analysis of SHI scores

revealed a total of 51 women (34% of the sample) who scored a 4 or higher (may meet diagnostic criteria for Borderline Personality Disorder as discussed by Sansone, Weiderman, & Sansone, 1998). Of these women, 38 (75%) were tattooed. Of the women who scored a 5 or higher (diagnostic of Borderline Personality Disorder as discussed by Sansone, Weiderman, & Sansone, 1998), 71% were tattooed. In addition, there was a significant relationship between the number of abuses endorsed and the number of self-harm behaviors (r = .490, p = <.001), and the more abuses endorsed the significantly greater the number of self harm behaviors (F (2,146) = 21.76, p = <.001).

Hypothesis 4. Hypothesis 4 stated that women with > 3 tattoos or > 6 sq. inches of body surface tattooed would demonstrate significantly higher levels of psychological distress than women with less tattoos, and women with less tattoos would demonstrate significantly higher levels of psychological distress than women with no tattoos. This hypothesis was not supported. Although abused women demonstrated significantly greater levels of psychological distress as measured by BASIS-32 and its subscales (BASIS total: F (1,130) = 16.99, p = <001; Depress: F (1,130) =

22.80, p = <.001; Impuls: F (1,130) = 7.80, p = .006; Livskil: F (1,130) = 10.14, p = .002; Psycho: F (1,130) = 6.24, p = .014; Selfoth: F (1,130) = 12.36, p = .001), there were no significant differences in levels of distress between tattooed and nontattooed women in either abuse group (BASIS total: F (2,130) = 1.53, p = .22; Depress: F (2,130) = 1.30, p = .28; Impuls: F (2,130) = .31, p = ,74; Livskil: F (2,130) = .88, p = .42; Psycho: F (2,130) = .71, p = .50; Selfoth: F (2,130) = 2.90, p = .06).

Hypothesis 5. Hypothesis 5 stated that women with > 3 tattoos or > 6 sq. inches of body surface tattooed would demonstrate significantly lower levels of family satisfaction than women with less tattoos, and women with less tattoos would demonstrate significantly lower levels of family satisfaction than women with no tattoos. This hypothesis was partially supported. In the MANOVA there was a significant interaction for amount of family satisfaction (F (2,130) = 3.28, p = .041). Cell means were examined to determine the simple effects of body ornamentation within each level of abuse, followed by Tukey's Honestly Significant Differences tests. Examination of cell means (see Table 15) revealed that nonabused women with > 3

Table 15

Cell Means for FSS

	Abuse	Ornamentation		
		No Tattoos	3 or less tattoos	> 3 tattoos
FSS	No	35.31	41.79	45.50
	Yes	65.19	53.92	58.19

Note. FSS = Family Satisfaction Scale (higher scores = greater family dissatisfaction).

tattoos had significantly more family dissatisfaction than those nonabused women with no tattoos (F (2,79) = 3.32, p = .041). There was no significant difference in level of family satisfaction for abused women (F (2,62) = 1.39, p = .26). Abused women had significantly less satisfaction with family than nonabused women (F (1,130) = 33.54, p = <.001), but on examination of cell means to determine the simple effects of abuse within each level of ornamentation, this finding did not hold true for group 2 (1-3 tattoos or < 6 sq. inches body surface tattooed) in which the difference was not significant (p = .06). Significant differences in family satisfaction remained, however, between abused and nonabused women with no tattoos (p = <.001) and women with greater than 3 tattoos (p = .018).

Finally, to explore which feature was most associated with tattooing, a stepwise logistic regression was

computed. The DV was the presence or absence of tattoos and the IVs were the scores on the BASIS-32, BES, FSS, SES, SHI, and the presence or absence of trauma. Of these, greater self-esteem was demonstrated to be the factor most associated with tattooing. Predictor variables for tattooing were also examined. Abuse status, level of education, income, age, age of first tattoo, piercings other than the ears, and all dependent variables were selected to enter into a stepwise multiple regression analysis. Table 16 displays these results. Abuse status, age, age of first tattoo, and piercings significantly predicted, in this equation, the amount of tattoos.

Table 16

Predictors of Amount of Tattoos by Stepwise Multiple Regression

Criterion variable and predictor variables	Mult R	R^2	B	ß	F
Amount tattoos					
Abuse Status	.341	.116	.654	.260	10.788**
Piercings	.451	.173	-.766	-.303	8.444****
Age	.499	.249	--	.548	8.824****
Age first tattoo	.546	.298	--	-.345	8.368****

Note. Piercings = piercings other than ear.
**p <.01 ***p < .001 ****p < .0001

Chapter V

Discussion

Summary of Significant Findings

The purpose of this study was twofold: (1) to identify factors which influence women to adorn their bodies with tattoos and to determine the personal meaning they attribute to this ornamentation and (2) to determine the relationship between tattooing and women's self-harm behavior, women's self and body esteem, women's satisfaction with family, and women's level of distress.

Women's Experiences of and Perceptions about Tattooing

Designs. Approximately 50% of the tattoo designs chosen by the women in this study were animal or floral/leaf designs. Tribal, astrological themes, and memorial designs were also chosen, though less frequently, and less than 2% of women chose designs with violent or oppressive themes such as barbed wire, blood, or bondage. There were no fearsome figures or frightening weapons chosen as designs by these women, in contrast to reported

designs from early Western tattooing or tattooing in incarcerated populations (Grumet, 1983; Sanders, 1989). Tattoo designs in these American, early 21st century women paralleled ancient (500 BCE-1200 ACE) decorative art tattoos from Japan, Egypt, and Siberia, which were replete with themes of animals, gardens, and nature (Hambly, 1925; Sanders, 1989; Steward, 1990). This may not be presumed to be a continuity with pre modern societies but more a revival of these decorative art themes which had waned in popularity and all but disappeared as tattoos became a means of marking a criminal in later centuries (Steward, 1990). Designs depicting ancestry, religion, relationships, and family, popularized by early 20th century tattoo consumers, were seen in only 10% of this sample of women. However, though such specific designs were not chosen as often by these women, this theme of memorializing was a salient feature of both the reason for acquiring and the personal meaning of tattoos.

Motivations. Women in this sample acquired tattoos most frequently out of fanciful, whimsical desire or as a means of self-expression. Tattooing because one wants to, devoid of any other reason, was reported most frequently by

women with three or less tattoos. However, it was also a prominent theme in women with greater than three tattoos. This particular motivation for tattooing is noticeably absent in the tattoo literature reviewed, some of which did include interviews with individuals. Perhaps in an attempt to make attributions of causality with respect to motivation, simple reasons were overlooked in favor of depth and complexity. For example, Sanders (1988) and Hewitt (1997) delineated affiliation, affirmation of identity, and disaffiliation with society as motivations for tattooing, Jeffreys (1996) spoke of self-celebration and self-definition, while Mifflin (1997) asserted self-validation and individuation as reasons why women tattoo. Similarly, many women in this sample expressed strong messages of independence, self-strength, self-definition, freedom, rebellion, and individualization in describing their motivations for acquiring their tattoo(s).

These aspects of self-expression are also consistent with Juno and Vale (1989) who referred to tattooing as a form of self-expression, a way to express individuality in a post modern world whose emphasis is on mass-produced images which have a deindividualizing effect. Congruent

with this theory, one woman in this sample specifically referred to wanting to be different in an automated world. Similar theories espouse that tattoos blur the cultural divides (Mifflin, 1997) or are a statement of permanence in an age of transience, ideas not referred to by these women. However, a purely qualitative exploration, with these topics of culture and transience woven into the interviews, could result in more speculation and philosophical complexity on the part of the participants and these theories would likely be supported.

Copes and Forsyth (1996) proposed a stimulation theory of tattooing as a consequence of an extroverted personality, and Grumet (1983) found tattooees to have an exhibitionist motivation. Consistent with these findings, some women in this sample explained their motivation for tattooing by revealing that their tattoos were an extension of their extroversion and exhibitionism.

Decoration, art, and beauty were also motivations for women's acquisition of tattoos. For some it was the art form or decoration itself, while for others the purpose was to be more physically attractive, similar to Fiji women of the past who placed their tattoos to charms lovers

(Sanders, 1989). Hewitt (1997) clearly suggested a rejection of mainstream adornment in her description of motivating factors for tattooing related to art and decoration. This rejection may be implicit in tattooing, a still unusual form of ornamentation, yet this rejection was not congruent with the stated perceptions of this sample of women. Indeed, it seemed that tattooing was an augmentation of mainstream adornment for these women who wore abundant jewelry, hair ornaments, and make-up, typical mainstream decorations.

The experiential quality of tattooing, the sensations of pain and the sense of aliveness, has been reported by Massey (1999) and Steward (1990) as a motivation for acquiring a tattoo. Some women in this sample tattooed for the physical feelings associated with tattooing. For some, the physical experience was a way to release stress, for others, to test courage, to endure pain, or enjoy the pain and stimulation (see quantitative analyses section for further discussion of the implications of pain).

Meaning. Consistent with Gollwitzer (1986), Hewitt (1997), and Mifflin (1997), independence, freedom, and strength as sources of identity were themes that emerged

for both the meaning of tattoos and the speculation as to why modern women are getting tattooed. The statements of this group of women yielded a lucid sense of context and political voice, one of empowerment, rebellion, transformation, and pride as women who can and do choose to be assertive and resistant to gender stereotypes, and who perceive increased freedom of women in society today. This is in harmonious agreement with Hewitt (1997), who proposed that tattooed women are rebelling against prescribed gender roles. Extending this idea, Juno and Vale (1989) suggested tattooing may counteract feelings of powerlessness to change the world and that women are seeking to provoke change in the external world via tattooing. The women in the present study reported making choices to tattoo to resist the constraints placed on women by traditional roles, norms, and even internalized expectations (a context of relative powerlessness) and do not want to be silenced. This is consistent with theories put forth by Diamond (1985) that when women exert control over the images they choose they challenge mainstream patriarchal representations. Also, are these women rejecting the "good girl-bad girl" patriarchal strategy described by Tolman and

Higgins (1999) by choosing not to be a passively victimized "good girl"--one who doesn't get tattoos?

Similar to reported and theorized meanings of tattoos since the turn of the century, women in this study symbolized past experiences, roles, and passages of life with their tattoos: a way of telling stories of love, loss, achievements, and discovery. Contrary to previous findings, with this sample of women there was noticeably little mention of tattooing for affiliative reasons (group membership, etc.), a common finding in the past and even in the present (Hewitt, 1997). Indeed, even some anti-affiliative sentiment was detected with this sample in their strong statements about being different from others. This, however, is consistent with Campbell's (1993) hypothesis that there have been changes in recent years from affiliation to individuation in the personal meaning of tattoos which, she suggested, reflected affirmation of self and positive body image (seen in this sample and to be discussed later).

In general, women in this sample tattooed intentionally and thoughtfully rather than impulsively. Also, contrary to the reviewed literature which reported

regret or ambivalence, sometimes as high as 75% (Schmidt, 1986), there was little regret voiced and only a few women in the sample were seeking removal of previously placed tattoos. Perhaps these women were more satisfied with the greater availability of designs and professional artists as well as the increased attention to health risks as discussed by Armstrong (1991) and Sanders (1989). Although health risks and concerns were reported as reasons for not acquiring a tattoo, this was not a principle issue in the perspective of the tattooed women in this study. In Armstrong's recent study (1991), tattooed working women reported no health problems as a result of tattooing, and without exception, the studios and individual artists contacted during collection of these data provided instructions to customers about healthy wound care after tattooing.

For tattooed women in this study, the pervasiveness of discrimination and invidious comparisons to those without tattoos was integral to their experiences and perspectives and may have been a contributing factor in their strong political voice. They demonstrated anger and resistance to stereotyping and loudly proclaimed their capable,

confident, emotionally sound functioning in the world while referring to the positive influence tattoos have had in their lives. It could be argued that the personal is political with tattoos. A woman with tattoos may be perceived as a woman constructed to create social connections (tattoos by their very nature attract attention and people to the self) and with them the power of political arguments and attention to the lack of openness to diversity inherent in stereotyping. These women may be Juno and Vale's courageous women, overcoming powerlessness, and quietly, or not so quietly, attempting to affect change. If, as Vicary (1988) suggested, tattoos are part of a complex communication system, a dialog may be surfacing as we enter the 21st century, which may be a way of connecting, discussing, knowing, and accepting diversity.

Quantitative Findings on Women's Self and Body Esteem, Family Satisfaction, Self-Harm, and Levels of Distress

To accurately investigate the relationship between tattoos and a women's self and body esteem, family satisfaction, self-harm behaviors, and levels of distress in this nonclinical sample, it was necessary to control for

the relevant variable, history of abuse/trauma, which is known to correlate with all outcome variables in this study (Briere & Gil, 1998; Farber, 1997; van der Kolk et al., 1991; Wonderlich et al., 1996; Zlotnick et al, 1996; Zweig-Frank & Paris, 1997). Since almost half this sample of women have experienced single or multiple abuse, implications for women abused will be addressed in addition to the group as a whole.

Similar to previous reports in the literature, forty-four percent of the women in this sample endorsed a history of abuse. Resnick, Kilpatrick, Dansky, Saunders, and Best (1993) reported that approximately 33% of women will experience sexual or nonsexual assault at least once during their lives. Moreover, approximately 50% of women in the general population of the US experience at least one traumatic event in their lifetimes (Kessler, Sonnega, Browet, Hughes, & Nelson, 1995).

Findings of the present investigation indicated that women with a history of abuse did indeed demonstrate significantly lower self-esteem and family satisfaction, and significantly more self-harm and psychological distress/malfunctioning than did nonabused women. These

findings were expected and are consistent with previous research regarding women with a history of abuse (Farber, 1997; van der Kolk, et al., 191; Welsh & Fairburn, 1996; Zlotnick, et al., 1996). Women with a history of abuse also had significantly more tattoos than nonabused women, and the more abuses endorsed by these women, the significantly greater the number of tattoos.

It can be argued that the above observed relationships support the theories of Connors (1996), Favazza (1996), Harry (1987), Hewitt (1997), Walsh and Rosen (1988), and Waska (1998), who suggested that tattooing is a form of self-harm, placed on a continuum of self-harm with tattooing much less extreme than cutting or head-banging. It could equally well be suggested, particularly related to the qualitative data in this study, that tattooing may be a positive, empowering way of dealing with abuse (see later discussion).

The Self-Harm Inventory (SHI) used in this study is the first known measure of self-harm behaviors that is related to a diagnosis of Borderline Personality Disorder (BPD), and in studies with nonclinical and clinical populations, has accurately classified more than 87% of

individuals (Sansone, Weiderman, & Sansone, 1998). However, it is important to keep in mind that this is a new instrument (1995), as yet untested by other research teams.

The majority of women in this sample (N = 112, 75%) endorsed at least one item of self-harm. In other nonclinical populations tested to date, 45% (80 out of 176) and 63% (106 out of 168) have endorsed at least one item of self-harm (Sansone et al., 1998). Instructions on the instrument read: "check yes ***only*** to those items you have done intentionally, or ***on purpose,*** to hurt yourself." Also, 34% of the women in this sample endorsed four or more items and of these women, 75% were tattooed. As discussed by Sansone et al. (1998), a score of four or higher may include 90% of individuals who meet diagnostic criteria for BPD. This finding is consistent with previous literature reporting that self-harming individuals were more likely to have tattoos (Britt, 1972; Virkkunen, 1976), and that the presence of tattoos was strongly associated with BPD (Arya, 1993; Raspa & Cusack, 1990). Further, abused women in this study had significantly higher scores on the depression subscale of the symptom inventory. Simeon, et al.(1992), Favazza (1996), and Pattison and Kahan (1983) have

hypothesized that low serotonin, a known component of some depressions, may facilitate self-injurious behavior.

Walsh and Rosen (1988) and others (Farber, 1997; Greenspan & Samuel, 1989) have suggested that self-harm may be a hidden behavior, one underreported in medical and mental health settings. The amount of reported self-harm behaviors in this study may support those suggestions; however, large randomized studies are necessary to achieve conclusive support.

Despite these findings regarding women with a history of abuse, the results of the Multivariate Analysis of Variance (MANOVA) demonstrated only minor significant differences, and some in an unexpected direction, between all women with tattoos and those without tattoos on all measures. In other words, even though abused women had a significantly greater number of tattoos than nonabused women, as well as more self-harm, more distress, less self-esteem and less family satisfaction, the amount of tattoos women had did not significantly impact their scores on the outcome variables. There are three potential explanations for this pattern of data. First, contrary to most of the literature reviewed, it is possible that with this

nonclinical population of women, the number of tattoos one has simply has little bearing on one's esteem, satisfaction, distress, and functioning. The majority of previous studies examining psychological variables have utilized women and men from clinical or incarcerated populations who are not comparable to this group of women. Second, it may be possible that for a percentage of women in this sample, particularly those who have experienced multiple forms of abuse (N = 44, 29% of sample), tattooing may be a form of self-harm, but when absorbed into the larger group in the MANOVA, any significance disappears.

An additional likely possibility, and one that is consistent with the qualitative data in this study, is that tattooing for abused women is one form of attempted resolution of trauma in which women take back their power, assert their strength, gel their identity, transform their sense of self, and establish control over their bodies. One may argue that there are other methods of resolution which do not subsequently cause more pain. Or one may take the position that tattooing has effects similar to other forms of self-injury such as cutting or burning, which relieve dysphoric feelings and are also attempts at trauma

resolution as theorized by Favazza (1996), Kernberg (1987), Menninger (1938), and van der Kolk (1996).

These are indeed valid arguments supported also by the literature which describes the release of endogenous opioids and other enkephalins during self-harm which induce euphoria, regulate emotions, and eventually diminish response to pain (van der Kolk, 1996). These self-injury attempts at resolution have been interpreted as a compulsive reexposure to the trauma, which, it is hypothesized, keeps the trauma (and the suffering) alive and unresolved (Connors, 1996; Favazza, 1996; Kernberg, 1987; van der Kolk, 1996). Yet one could argue that since pain and permanence are integral parts of the significance of tattooing (Coe, et al., 1993; Favazza, 1996; Hewitt, 1997; Steward, 1990), and since pain is also an intricate part of abuse, it is used as a method of resolution that is not perceived to be, and may not be, self-abusive. For example, pain may be endured for beauty (as it is with ear piercing or leg waxing) instead of the ugliness that can occur with abuse (bruises or perceived internal "badness"), or perhaps the pain of a tattoo freely chosen is a statement of control over one's body. Martin (1997)

suggested that tattoos may also be a method of controlling an environment experienced as alien.

Pain may have a different meaning for each woman. Hewitt (1997) referred to the pain of tattooing as lending meaning to abolishing the old and creating the new and she was making reference to things such as role changes and passages in life. This meaning-making may also be true for life experiences such as childbirth or recoveries from other physical and/or emotional pain. This is not a new concept, however, since Aronson and Mills (1959) and Gerard and Mathewson (1966) suggested that the greater one suffers in order to obtain something the greater the tendency to evaluate it positively. Juno and Vale (1989) suggested that tattoos define authenticity of the self. For women abused at a young age, which interferes with development and whose sense of self may be fragile, the permanence of a tattoo may be a reminder of self which will remain despite past, present, or future losses.

If the third entertained possibility is true, that tattooing for abused women is an attempt at resolving trauma, one would expect that the tattooed abused women's scores on the dependent variables would indicate higher

levels of self esteem, body esteem, family satisfaction, and less self-harm and distress than the nontattooed abused women. Heavily tattooed abused women's body esteem was substantially equal to that of nonabused women and there was a significant positive association overall between self-esteem and tattooing. Indeed, the greater the surface area tattooed the stronger the association with self-esteem. Although unable to compare differences among the abused women's levels of psychological distress or self-harm due to design limitations, this appears to be an avenue for further investigation with respect to the relationship between tattooing and resolution of trauma.

With respect to body esteem, although abused women with no tattoos or a small amount of tattoos showed less body esteem than nonabused women, there was not a statistically significant difference between these groups, and the body esteem of more heavily tattooed women was substantially equal to that of the nonabused women. This unexpected finding indicates that in this sample of women, body esteem was less associated with abuse than has been reported in previous literature. It also indicates that abused women who were more heavily tattooed reported

feeling better about their bodies than other abused women, and reported feeling equally as good about their bodies as the nonabused women, maybe stronger because of their tattoos. Such findings lend support to previous research by Mosher, Oliver, and Dolgan (1967) who concluded that tattooed individuals (in their study, men) demonstrated stronger and more positive feelings about various parts of their bodies than did those without tattoos. Campbell (1993) also asserted that the change she observed from affiliative to individuative tattooing reflected an affirmation of self and a positive body image.

Self-esteem findings illustrated a similar pattern. Nonabused women demonstrated significantly greater self-esteem than abused women, but among both abused and nonabused women those with more than 3 tattoos felt better about themselves than did women without tattoos. In the sample as a whole, there was a significant positive association between self-esteem and the amount of body surface tattooed. These findings are in contrast to a previous study in which adolescents with body art such as tattoos reported lower self-esteem than adolescents without body art (Kuniansky, 1997).

In partial support of the research hypothesis that tattooed women would demonstrate significantly less family satisfaction, nonabused women with greater than three tattoos did report less satisfaction with their families of origin than those women without tattoos. Also, abused women with greater than 3 tattoos and abused women with no tattoos demonstrated greater dissatisfaction with their families of origin than those women who did not have a history of abuse. Although these findings accord with previous reports from Taylor (1970) who found that tattooed women showed less interest in family, and received fewer letters and family visits than those women without tattoos, it must be kept in mind that in Taylor's study the population included orphaned or delinquent women and older adolescents.

Over the 20th century, almost all researchers have proposed that tattoos are a form of rebellion and establishment of identity, and this was extended by Mifflin (1997) and Campbell (1993) who asserted that tattoos reflect an affirmation of the self. The point could be made that, developmentally, this identity struggle frequently occurs during adolescence. Yet these nonabused tattooed

women acquired their first tattoo during their mid-twenties (mean = 24 years). Perhaps tattoos were not as popular or accessible when these women were adolescents. More likely, it is conceivable that their struggles with identity occurred at a later age, or may be ongoing if one accepts postmodern ideas of the self being constructed and reconstructed in the context of relationships (Clinchy, 1996). Social norms and roles influenced by a patriarchal paradigm can limit and constrain women's behaviors. Also, if these women felt restricted in decision making or other important tasks of adolescence, felt otherwise unsupported within the family environment, or came from a family where appearances were more essential than reality, it follows that strong self-affirmations such as those symbolized by tattoos would not occur until the mid-twenties. Particularly for those women with a history of abuse, women also may have felt less special or less loved as children (van der Kolk, 1996) and enjoyed the attention that accompanies tattooing.

Implications, for Theory, Research, and Practice

Motivations and Meanings

The data from the open-ended questions in the present

investigation were found to support, supplement, and deviate from the existing theoretical and empirical findings regarding motivations and meanings. Hewitt (1997) theorized that tattoos showed defiance of cultural standards and a gender rebellion. A tattooed woman, she asserted, blurs the assumptions about gender roles in her statement of independence from the societal messages that a woman's body should be pristine and pure for the enjoyment of others. In support of this theory, many women, in sharing their motivations for tattooing, and in speculating why women do tattoo, made strong statements of independence, individuality, ownership, and control of their bodies for themselves. Hewitt (1997) also speculated that tattooed women are rejecting mainstream norms of adornment. In the current investigation, these tattooed women seemed to be augmenting and expanding mainstream adornment to include pictoral art as well as jewelry and other forms of body decoration. For the most part, tattooed women, and especially those heavily tattooed, are not the norm, and implicit in this may be a rejection of mainstream adornment. Nevertheless, these women did not make reference to abandoning other forms of ornamentation, nor were they

critical of them, and although there was some element of cultural rebellion, it was more focused on gender stereotyping and identity then on adornment.

Sanders (1988) and others (Buhrich, 1987; Grumet, 1983; Hewitt, 1997; Yamamoto, Seeman & Lester, 1963) also have found tattoos to be symbols of disaffiliation from conventional society as well as marks of affiliation (group membership). In the past, some individuals tattooed to intentionally disaffiliate themselves from conventional society, and though the women in this sample referred to wanting to be different, it was often not related to rejecting one society and affiliating with another (subculture), but was rather in an individualist vein, one more congruent with the personal self. It was unexpected, given past trends in tattooing toward affiliation, that references about group membership or belonging were rare in the responses of the women in this study. While contrary to much of the literature reviewed, these data support a recent theory of Campbell (1993), who studied the evolution of modern meaning of tattoos and reported a change from affiliative and individuative themes. Future research could examine the affiliative (attachment) vs. the individuative

(autonomy) aspects of tattooing and other forms of body adornment with both women and men, and how this impacts one's sense of community, competition, and isolationism. Questions might include: What are the differences between and among women and men? How do women affiliate and what methods do women choose to connect? Is body ornamentation a unifying or separating construct with women, with men? What is the sense of community within those tattooed? Do men affiliate nonverbally and therefore more often with tattoos?

Juno and Vale (1989) asserted that the post modern world, inundated by millions of mass-media produced images, is a culture with wholesale deindividuation of humans and society, collapsing the distinction between cultures. Mifflin (1997) theorized that tattoos were a mark of individuation in a culture of mass production. One infers from these theories a yearning for individuality and definition of self-within-the-masses, which are exemplified in the variety of designs chosen and strong themes of personal strength and identity in this sample of women. Future investigators may ask the question--"Does this culture of mass production impact one's decision making

ability and creative thinking and are tattoos an attempt to counteract this, a form of responsibility--an ability to respond creatively to the uncertainty of deindividualtion?

Many tattooed women in the present study chose to tattoo capriciously, just because they wanted to. Noticeably absent from the reviewed literature, this observed motivation is likely a result of the open-ended nature of the questions without a follow-up search for meaning. However, it raises questions for further investigation about the importance of meaning in contemporary society. Is a search for meaning diminishing, or is it more difficult to make meaning in this high-tech, pressured, stressed, mass-mediated 21st century? Are the responses of these women indicative of a trend in this direction? To what do we attribute meaning and how is this different from a decade ago?

Though Milligan (1998), Mifflin (1997), and Olguin (1997) have discussed the political implications of tattoos (resistance, transformation, gender rebellion, etc.) in previous theses, in this study a salient political theme emerged which had only brief mention in the study by Armstrong (1991). In the open-ended question in which women

could choose to discuss any issue of importance to them, the great majority of tattooed women chose to relate their experiences of, and reactions to, discrimination. This is a fertile area for further research as these women were eager to communicate not only their experiences but their attempts to combat this nonvaluing of diversity. These women's experiences with discrimination are important issues to consider in an approach to therapy. How does this discrimination effect how they are perceived by their family, their culture, and society (including mental health and health practitioners), and how does this relate to their self-perceptions? How might this impact their functioning in the community as well as their interpersonal and family relationships?

Grumet (1983), Haines and Huffman (1958), Nateras-Domingeuz (1998), and Vicary (1988) hypothesized that tattoos are a form of nonverbal communication. As such, Grumet expressed the belief that tattoos afford opportunities for psychological understanding. He suggested incorporation of the tattoo and information about it in the clinical interview and assessment. Women in this study were not seeking counsel or therapy, yet openly shared quite

personal information in a few brief questions. This may be a result of the protection inherent in the anonymity offered them in this investigation. In practice, tattoos may be a rich source of understanding of an individual's feelings, thoughts, and behaviors, and could be a valuable tool in the development of empathy and trust in the therapeutic relationship. The stories of tattoos and their context may facilitate the exploration of a client's world in relationship and connection to her family, culture, society, and important strengths and possible liabilities may become evident.

Tattoos and Self-Harm

Are tattoos a deliberate non-suicidal destruction of one's body tissue, a culturally sanctioned form of self-harm as theorized by Favazza (1996) and others (Connors, 1996; Harry, 1987; Hewitt, 1997; Walsh & Rosen, 1988; Waska, 1998)? Tattooing as a form of self-harm was not supported by the present investigation. Specifically for nonabused women, the data obtained in this study do not support these theories. Their level of self-harm, regardless of the number of tattoos they had, was significantly less than abused women, and not significantly

different from each other. For the nonabused woman, this finding calls into question the previously held theories of tattooing as a form of self-harm and could benefit from replication. Though it remains clear that abused women have significantly more self-harm and significantly more tattoos, it can only be postulated that tattoos may be a form of self-harm for women with a history of abuse, since they could also likely be a healthy attempt at trauma resolution.

Further investigations via a qualitative approach would facilitate a better understanding of these dynamics and a more careful evaluation of past and present self-harm ideation. Does the motivation for tattooing emerge from experiences of trauma, and if so, how? Are tattoos related to trauma resolution, and if so, how? How is self-harm behavior different in high functioning vs. low functioning abused women? Do tattooed abused women utilize therapy, and if so, what are their perspectives on this and how are these women different from those who do not? How are their tattoo designs different? What other choices are being made by these women to resolve their past abuse? These types of questions may provide information on

resilience and coping, an area ripe for exploration in the trauma field and one which has important implications for treatment as well as prevention of trauma.

Self-harm behaviors have been understood as a method of managing overwhelming dysphoric feelings to restore a sense of control, an attempt at trauma resolution which obscure symptoms and interferes with integration and healing, keeping the trauma alive in a form of reenactment (Connors, 1996; Favazza, 1997; Kernberg, 1987; van der Kolk, 1996). Further, there are significant associations in the literature between dissociation and self-harm (Brodsky, et al., 1995; Neumann, et al., 1996; Ross, 1989). Likewise, Young (1992) asserted that following trauma the body, and all experiences inside the body, may be perceived as "not me," which may catalyze aggressive abuse toward self. Since the findings from this study have shown a trend in tattooed abused women for greater self-esteem and body esteem and less distress than nontattooed abused women, this suggests that tattooing may be an attempt at trauma resolution which is not a reenactment of past trauma. Though the above theories have not been disproved with the findings of this current investigation with a nonclinical population, it

remains unclear how true these assertions are for high functioning abused women. These findings warrant further investigation with measures more sensitive to Posttraumatic Stress Disorder (PSTD) and dissociation and with clinical interviews and detailed histories of abuse and treatment. This would determine more accurately if tattooing is obscuring symptoms of PTSD that might otherwise be addressed. A further question arises. May the incidence of tattooing as a specific form of self-harm be present only in individuals with self-harm behavior on the more severe end of the continuum such as cutting or burning?

Farber (1997) and Favazza (1996) have hypothesized an increased prevalence in self-harm behaviors in the general population and particularly in young adults, and asserted that tattooing may be the beginning of a coming-out of those who quietly self-harm. Podvall (1969) asked if the prevalence of tattoos indicated approval of self-harm by the surrounding culture. Future researchers could ask the following questions: Will the addicting quality of tattooing (Vail, 1999) or other forms of pain-inducing body ornamentation and the tolerance that can develop (van der Kolk, 1996) lead to other more dangerous forms of self-

harm? Or is the pain of tattooing an alternative to cutting, burning, etc.-- is it a more socially affiliative, less isolating, less private, less guilt-inducing, and a more personally meaningful choice?

Crabtree and Grossman (1974), Favazza, (1996), and Walsh and Rosen (1989) discussed the epidemic qualities of self-harm and Vail (1999), the social pressure accompanying tattooing. Most women in this study did not tattoo alone. Is the social component of tattooing a form of peer pressure, encouraging behavior in ambivalent others, or is it as discussed before an affiliative, less isolating behavior?

Body Esteem, Self-harm, and Tattooing

An association between body esteem, self-harm behavior, and history of abuse has been systematically observed and demonstrated in the literature reviewed. Women with less body esteem have repeatedly been found to have higher rates of deliberate self-harm than controls (Fairburn, 1996; Favazza, DeRosear, & Conterio, 1989; Mitchel, et al., 1986) and were more likely to have suffered abuse or trauma (Farber, 1997; Swift, Copeland, & Hall, 1996; Wonderlich, et al., 1996). The data in the

present study did support the previous findings that women with less body esteem were likely to have more self-harm behaviors, more family dissatisfaction, less self-esteem, and more distress, as indicated by significant associations between body esteem and self-harm, family satisfaction, self-esteem, and symptoms. However, contrary to previous literature, in this tattooed population, women with less body esteem were not more likely to have suffered abuse. Additionally, heavily tattooed abused women demonstrated body esteem substantially equal to nonabused women. Further investigation is needed to determine how tattoos and other forms of body ornamentation may mitigate the effects of abuse or trauma in women. Would this finding be replicated in a clinical population or another nonclinical population?

Moreover, how does body adornmentation affect one's self-perception and personal characteristics? For example, do women (or men) with tattoos have more self-love and, if so, how is this demonstrated in their behavior? Are they more altruistic, generous, and loving toward others? Are they more spiritual or religious? How are tattoos' relationship to body esteem different from other forms of mainstream ornamentation such as jewelry, accessories,

make-up, etc., or alternative ornamentation such as multiple piercings or body branding? And how are tattoos' effects on body esteem different from other painful, socially sanctioned practices such as cosmetic surgeries?

Limitations and Conclusions

Though the results of this study provide new information on factors associated with tattooing in women, the findings should be interpreted with caution. There were several limitations to this study. First, due to the nature of the instruments (self-report), and the sensitive nature of the issues, it was difficult to determine the accuracy of the participant's responses. Bias may have been present in some self-report responses, as there may have been a tendency toward caution or self-serving biases on the part of the tattooed women in an attempt to counteract the pervasive discrimination reported by this sample of women. The lack of direct assessment for PTSD and dissociation limited the interpretations regarding body and self-esteem as they related to history of trauma and tattooing. Although specificity was requested regarding the type of abuse experienced (child sexual abuse, domestic violence, physical abuse, emotional abuse, rape), physical and/or

emotional neglect was not included, and this oversight may have resulted in a lack of sensitivity to abuse experienced. Although satisfaction with family of origin was measured in this study, this was not specific for present family constellation satisfaction. If women tattoo as a form of trauma resolution, then perhaps as they recover, their satisfaction with present family relationships also improves. Body piercing, which in this study was a statistical predictor for the amount of tattoos, and which may be a distinct entity from tattooing, may have been a confound in the interpretation of self-harm and tattooing, particularly with women abused. Further studies to compare these two forms of body ornamentation could seek to clarify any differences between the two or how they interact.

Second, the participating women were not randomly selected or assigned, therefore the relationships between variables may not be accurate and generalizability was compromised. However, this sample was geographically diverse, affording some sensitivity to regional differences. Interpretations for minority populations, including ethnicity and sexual orientation, were not

possible since the majority of returned questionnaires were those of Caucasian, heterosexual women, and accurate comparisons could not be made. Diversity is a factor often neglected in the literature. Women of different ethnicities and sexual orientations may have different responses to their experiences of tattooing, cultural support or acceptance may vary as well, and data on these populations would enrich and add balance to the existing literature.

Third, with respect to design, a more efficient way to control for the relevant variable, history of abuse or trauma, may have been to use a continuous variable such as scores on a PTSD measure as a covariate. This may have helped clarify interpretations regarding tattooing and resolution of trauma. Despite incentives, only a small percentage of surveys were returned (16.6%), therefore it was not possible to determine characteristics of the larger group of women surveyed and how they may differ from the present sample.

Tattooing has been practiced by many cultures around the world for thousands of years, most often by collectivist cultures in which group membership and rank are emphasized. Tattoos are not traditionally socially

sanctioned in Western individualist cultures, where self-expression is salient, and the results of this study provide new information about American women who are tattooed, the motivations for and personal meanings of tattoos for these women, and their self-perceived family satisfaction, self and body esteem, self-harm, and levels of distress. Congruent with the individualist cultural paradigm, women tattooed for a variety of reasons: to assert independence, self-strength, self-definition, freedom, rebellion, and individualization; as decoration, art, beauty; to experience sensations, alleviate anxiety, endure pain; as a symbol or memorial; or just because they wanted to. The meanings of tattoos were also diverse and colorful yet with a strong political voice of empowerment, transformation, and pride as women who make their own choices and who do not want to be silenced. Women symbolized past experiences, roles, and passages of life, telling stories with their tattoos of love, loss, discovery and achievements. Most women tattooed thoughtfully, and few voiced regret. The pervasiveness of discrimination was integral to their experiences and perceptions.

Tattoos, however, are not simple ornamentations. They pierce and penetrate the skin and are painful to acquire. Empirical research has demonstrated that those individuals with tattoos had more distress and symptoms, therefore psychological variables were examined. Women with a history of abuse (44%) demonstrated overall less self-esteem, less family satisfaction, more self-harm and greater distress than nonabused women, and more tattoos than nonabused women. With abuse controlled for, the amount of tattoos a woman had did not significantly impact her level of self-harm or her level of distress. Abused women with greater than three tattoos demonstrated a body esteem substantially equal to nonabused women. While women with greater than three tattoos did not demonstrate significantly more self-esteem than women with less tattoos or without tattoos, in correlational analyses the greater the surface area tattooed the stronger the association with self-esteem. Furthermore, of all outcome variables, the one found to be most related to tattooing (in logistic regression) was self-esteem. Tattoos in abused, high-functioning women may be an attempt to resolve trauma, a positive attempt that is not perceived to be, and may not be, self-abusive.

Intentional self-harm was endorsed by 112 women in this sample, high levels of self-harm were found in 51 women, and 75% of these women were tattooed. These frequencies lend credence to theories that self-harm may be more prevalent than previously realized, and that tattooing may be a form of self-harm among abused women, though self-harm did not achieve significance with the large numbers in the MANOVA. Although abused women showed greater family dissatisfaction than nonabused women, nonabused women with greater than three tattoos were significantly more dissatisfied with their family of origin than nonabused women with less tattoos and nonabused women with no tattoos. This may reflect a family in which appearances were more essential than reality, in which the woman felt restricted or unsupported, and where strong self-affirmations symbolized by tattoos would have been taboo.

The tattooing behavior of women today is a powerful expression of self. In some women with a history of abuse, tattooing may be a form of self-harm, but with high-functioning women it may be a positive attempt at resolving trauma, a work of art with minimal negative, or even positive, implications.

REFERENCES

Aldridge, D. (1998). Suicide: The tragedy of hopelessness. London: Jessica Kingsley.

Armstrong, M. L. (1991). Career-oriented women with tattoos. Image - The Journal of Nursing Scholarship, 23, 215-220.

Aronson, E., & Mills, J. (1959). The effect of severity of initiation on liking for a group. Journal of Abnormal & Social Psychology, 59, 177-181.

Arya, D. K. (1993). Tattooed female psychiatric patients. British Journal of Psychiatry, 162, 852-853.

Baden, M. (1973). Symbols: Tattoos on teen-age cadavers. Medical World News, 14, 109-110.

Basquin, M. (1983). Les rituels a l'adolescence: Introduction et synthese. Neuropsychiatrie de l'Enfance et de l'Adolescence, 31, 355-359.

Benjamin, L. S. (1987). An interpersonal approach. Journal of Personality Disorders, 1, 334-339.

Beram, N. (1999). Exene: Warrior punk. Sojourner: The Women's Forum, 22, 21.

Blaskovich, J., & Tomaka, J. (1991). Measures of self-esteem. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), Measures of personality and social psychological attitudes (pp. 115-160). San Diego, CA: Academic Press.

Bourgeois, M., & Campagne, A. (1971). Tatuage et psychiatrie. Annales Medico Psychologiques, 129, 391-413.

Briere, J., & Gil, E. (1998). Self-mutilation in clinical and general population samples: Prevalence, correlates, and functions. American Journal of Orthopsychiatry, 68, 609-620.

Britt, B. E., Panepento, E. L., & Wilson, I. C. (1972). The incidence of tattooing in a male criminal population. Behavioral Neuropsychiatry, 4, 12-16.

Brittlebank, A. D., Cole, A., Hassanyeh, F., Kenny, M., Simpson, D. & Scott, J. (1990). Hostility, hopelessness, and deliberate self-harm: A prospective follow-up study. Acta Psychiatrica Scandinavica, 81, 280-283.

Brodsky, B. S., Cloitre, M., & Dulit, R. A. (1995). Relationship of dissociation to self-mutilation and childhood abuse in borderline personality disorder. American Journal of Psychiatry, 152, 1788-1792.

Bromberg, W. (1935). Psychologic motives in tattooing. Archives of Neurological Psychiatry, 33, 228-232.

Brouwer, D. (1998). The precarious visibility politics of self-stigmatization: The case of HIV/AIDS tattoos. Text and Performance Quarterly, 18, 114-136.

Bruch, H. (1978). The golden cage: The enigma of anorexia nervosa. Cambridge, MA: Harvard University Press.

Brumberg, J. J. (1988). Fasting girls: The emergence of anorexia as a modern disease. Cambridge, MA: Harvard University Press.

Buhrich, N. (1983a). The association of erotic piercing with homosexuality, sadomasochism, bondage, fetishism, and tattoos. Archives of Sexual Behavior, 12, 167-171.

Buhrich, N. (1983b). Significance of tattoos in narcotic abusers. Drug and Alcohol Dependence, 11, 389-394.

Buhrich, N., & Morris, G. (1982). Significance of tattoos in male psychiatric patients. Australian and New Zealand Journal of Psychiatry, 16, 185-189.

Burma, J. H. (1959). Self-tattooing among delinquents: A research note. Sociological and Social Research, 43, 341.

Campbell, B. M. (1993). Mirrors and windows: The movement of meaning in tattoos. Masters Abstracts International, 32-02, 1446.

Carver, M. D., & Jones, W. H. (1992). The Family Satisfaction Scale. Social Behavior and Personality, 20, 71-84.

Cecil, H., & Stanley, M. A. (1997). Reliability and validity of adolescents' scores on the body esteem scale. Educational and Psychological Measurement, 57, 340-356.

Ceniceros, S. (1998). Tattooing, body piercing, and Russian roulette. Journal of Nervous and Mental Diseases, 186, 503-504.

Chernin, K. (1985). The hungry self: Women, eating, and identity. New York: Times Books.

Clinchy, B. M. (1996). Connected and separate knowing: Toward a marriage of two minds. In N. Goldberger, J. Tarule, B. Clinchy, & M. Belenky (Eds.), Knowledge, difference, and power: Essays inspired by Women's Ways of Knowing (pp.205-247). New York: Basic Books.

Coe, K., Harmon, M. P., Verner, B., & Tonn, A. (1993). Tattoos and male alliances. Human Nature, 4, 199-204.

Connors, R. (1996). Self-injury in trauma survivors: Functions and meanings. American Journal of Orthopsychiatry, 66, 197-206.

Copes, J. H., & Forsyth, C. J. (1993). The tattoo: A social psychological explanation. International Review of Modern Sociology, 23, 83-89.

Coureaud, H. (1929). Les tatouages actuels dans la marine; leur frequence, leur signification. Ann. De Med. Legale, 9, 100-114.

Cox, N. (1994). The language of the skin. In A. Nicholas, The art of the New Zealand tattoo (pp.6-14). New Zealand: Tandem Press.

Crabtree, L. H., & Grossman, W. K. (1974). Administrative clarity and redefinition for an open adolescent unit. Psychiatry, 37, 350-359.

Crandall, R. (1973). Measures of self-esteem. In J. P. Robinson & P. R. Shaver (Eds.), Measuring social psychological attitudes (pp.45-168). Ann Arbor, MI: Institute of Social Research.

Cross, L. (1993). Body and self in feminine development: Implications for eating disorders and delicate

self-mutilation. Bulletin of the Menninger Clinic, 57, 41-68.

Diamond, S. (1985). Pornography: Image and reality. In V. Burstyn (Ed.), Women against censorship (pp. 45-64). Vancouver: Douglas and McIntyre.

Diekstra, R. F. W. (1996). The epidemiology of suicide and parasuicide. Archives of Suicide Research, 2, 1-29.

Diekstra, R. F., & Garnefski, N. (1995). On the nature, magnitude, and causality of suicidal behaviors: An international perspective. Suicide and Life-Threatening Behavior, 25, 36-57.

Dobson, C., Goudy, W. J., Keith, P. M., & Powers, E. (1979). Further analysis of Rosenberg's Self-Esteem Scale. Psychological Reports, 44, 639-641.

Dubo, E. D., Zanarini, M. C., Lewis, R. E., & Williams, A. A. (1997). Childhood antecedents of self-destructiveness in borderline personality disorder. Canadian Journal of Psychiatry, 42, 63-69.

Eisen, S. V., Dill, D. L., & Grob, M. C. (1994). Reliability and validity of a brief patient-report instrument for psychiatric outcome evaluation. Hospital and Community Psychiatry, 45, 242-247.

Eisen, S. V., Wilcox, M., Leff, H. S., Schaefer, E., & Culhane, M. A. (1999). Assessing behavioral health outcomes in outpatient programs: Reliability and validity of the BASIS-32. The Journal of Behavioral Health Services and Research, 26, 5-17.

Farber, S. K. (1997). Self-medication, traumatic reenactment, and somatic expression in bulimic and self-mutilating behavior. Clinical Social Work Journal, 25, 87-106.

Favazza, A. F. (1996). Bodies under siege 2nd ed. Baltimore, MD: John Hopkins University Press.

Favazza, A. R. (1998). The coming of age of self-mutilation. The Journal of Nervous and Mental Disease, 186, 259-268.

Favazza, A. R., & Conterio, K. (1989). Female habitual self-mutilators. Acta Psychiatrica Scandinavia, 79, 283-289.

Favazza, A. R., & DeRosear, L. (1989). Self-mutilation and eating disorders. Suicide and Life Threatening Behavior, 19, 352-362.

Feder, S. (1996). Self-mutilation and childhood trauma. Dissertation Abstracts International, 56-08B, 4580.

Feldmann, T. B. (1990). Further thoughts on self-mutilating following trauma. American Journal of Psychiatry, 147, 1105.

Ferguson-Rayport, S. M., Griffith, R. M., & Straus, E. W. (1955). The psychiatric significance of tattoos. Psychiatric Quarterly, 29, 112-131.

Franz, C. E., & Stewart, A. J. (Eds.). (1994). Women creating lives: Identities, resilience, and resistance. Boulder, CO: Westview.

Franzoi, S. L. (1994). Further evidence of the reliability and validity of the Body Esteem Scale. Journal of Clinical Psychology, 50, 237-239

Franzoi, S. L., & Herzog, M. E. (1986). The Body Esteem Scale: A convergent and discriminant validity study. Journal of Personality Assessment, 50, 24-31.

Franzoi, S. L., & Shields, S. A. (1984). The body esteem scale: Multidimensional structure and sex differences in a college population. Journal of Personality Assessment, 48, 173-178.

George, M. (1995). Seeking the hidden in female and secret images: Learning about culture as spiritual experience. Anthropology of Consciousness, 6, 9-16.

Gerard, H. B., & Mathewson, G. C. (1966). The effect of severity of initiation on liking for a group: A replication. Journal of Experimental Social Psychology, 2, 278-287.

Gifford, D. (1994). Romulan dogmatism, contextual complications and the danger of absolutism. Off Our Backs, 24, 15.

Gittleson, N. L., Wallen, G. P. D., & Dawson-Butterworth, P. (1969). The tattooed psychiatric patient. British Journal of Psychiatry, 115, 1249-1253.

Goldstein, N. (1979). Psychological implications of tattoos. Journal of Dermatologic Surgery and Oncology, 5, 883-888.

Gollwitzer, P. M. (1986). Striving for specific identities: The social reality of self-symbolizing. In R. F. Baumeister (Ed.), Public self and private self (pp. 145-149). New York: Springer Verlag.

Greene, R. L. (1991). The MMPI-2/MMPI: An interpretive Manual. Boston, Mass: Allyn and Bacon.

Greenspan, G. S., & Samuel, S. E. (1989). Self-cutting after rape. American Journal of Psychiatry, 146, 789-790.

Grumet, G. W. (1983). Psychodynamic implications of tattoos. American Journal of Orthopsychiatry, 53, 482-492.

Hambly, W. D. (1925). The history of tattooing and its significance. London: H. F. & G. Witherby.

Haines, W. H., & Huffman, A. V. (1958). Tattoos found in a prison environment. Journal of Social Therapy, 4, 104-113.

Harry, B., (1987). Tattoos, body experience, and body image boundary among violent male offenders. Bulletin of the American Academy of Psychiatry Law, 15, 171-178.

Hassan, M. D. (1976). Tattoos and body image: Tattooed and non-tattooed incarcerated narcotics addicts differentiated by barrier scores and internal-external locus-of-control. Dissertation Abstracts International, 37-09B, 4683.

Hathaway, S. R., & McKinley, J. C. (1940). A multiphasic personality schedule (Minnesota): I. Construction of the schedule. Journal of Psychology, 10, 249-254.

Hawkins, R. E., & Popplestone, J. A. (1964). The tattoo as exoskeletal defense. Perceptual and Motor Skills, 19, 500.

Hawton, K. & Fagg, J. (1992). Deliberate self-poisoning and self-injury in adolescents; A study of characteristics and trends in Oxford, 1976-1989. British Journal of Psychiatry, 161, 816-823.

Heller, N. (1990). Object relations and symptom choice in bulimics and self-mutilators. Dissertation Abstracts International, 51-08A, 1387.

Hewitt, K. (1997). Mutilating the body: Identity in blood and ink. Bowling Green, OH: Bowling Green State University Press.

Hoffman, F. L., Capelli, K, & Mastrianni, X. (1997). Measuring treatment outcome for adults and adolescents: Reliability and Validity of BASIS-32. The Journal of Behavioral Health Services and Research, 24, 316-331.

Houghton, S., Durkin, K., & Carroll, A. (1995). Children's and adolescents' awareness of the physical and mental health risks associated with tattooing: A focus group study. Adolescence, 30, 971-988.

Houghton, S. J., Durkin, K., Parry, E., Turbett, Y., & Odgers, P. (1996). Amateur tattooing practices and beliefs among high school adolescents. Journal of Adolescent Health, 19, 420-425.

Jacobs, B. W., & Isaacs, S. (1986). Prepubertal anorexia nervosa: A retrospective controlled study. Journal of Child Psychology and Psychiatry and Allied Disciplines, 27, 237-250.

Jeffreys, S. (1996). How orgasm politics had hijacked the women's movement: Why has the big O seduced so many feminists - even Ms - into a counterrevolution from within? The Progressive Woman's Quarterly, 5, 18.

Juno, A. & Vale, V. (1989). Modern primitives. San Francisco, CA: Research Publications.

Kernberg, O. (1987). A psychodynamic approach. Journal of Personality Disorders, 1, 344-346.

Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C.B. (1995). Posttraumatic stress disorder in the national comorbidity survey. Archives of General Psychiatry, 52, 1048-1960.

Kim, E., & Ainslie, G. (1990). Another case of self-cutting after combat stress. American Journal of Psychiatry, 147, 1572-1573.

Kowalski, R. M., & Leary, M. R., Eds. (1999). The social psychology of emotional and behavioral problems:

Interfaces of social and clinical psychology. Washington, DC: American Psychological Association.

Kuniansky, N. K. (1997). The relationship between body art and adolescent self-esteem. Masters Abstracts International, 35-06, 1775.

Lander, J., & Kohn, H. M. (1943). A note on tattooing among selectees. American Journal of Psychiatry, 100, 326-327.

Lester, D. (1986). Tattoos, eye color, and method for suicide. Activitas Nervosa Superior, 28, 239-240.

Litman, R. E. (1995). Suicide prevention in a treatment setting. In M. M. Silverman, & R. W. Maris (Eds.), Suicide Prevention: Toward the year 2000 (pp. 134-142). New York: Guilford.

Loimer, N. & Werner, E. (1992). Tattooing and high-risk behavior among drug addicts. Medicine and Law, 11, 167-174.

Lombroso, C. (1896). The savage origin of tattooing. Popular Science Monthly, April, 793-803.

Lorr, M., & Wunderlich, R. A. (1986). Two objective measures of self-esteem. Journal of Personality Assessment, 50, 18-23.

Lyons, J. A. (1991). Self-mutilation by a man with PTSD. Journal of Nervous and Mental Disease, 179, 505-507.

MacLeod, A. K. (1995). Suicide and parasuicide. British Journal of Clinical Psychology, 34, 481-482.

Martin, A. (1997). On teenagers and tattoos. Journal of the American Academy of Child and Adolescent Psychiatry, 36, 860-861.

Martin, G., Rozanes, P., Pearce, C., & Allison, S. (1995). Adolescent suicide, depression and family dysfunction. Acta Psychiatrica Scandinavica, 92, 336-344.

Massey, J. (1997). Magic flashes: Tattoo and technical reproduction. The Princeton Journal of Women, Gender, and Culture, 2, 78.

McClure, M. G. (1994). Suicide in children and adolescents in England and Wales 1960-1990. British Journal of Psychiatry, 165, 510-514.

McCrea, P. H. (1996). Trends in suicide in Northern Ireland: 1922-1992. Irish Journal of Psychological Medicine, 13, 9-12.

McGee, M. D. (1997). Cessation of self-mutilation in a patient with borderline personality disorder treated with Naltrexone. Journal of Clinical Psychiatry, 58, 32-33.

McKerracher, D. W., & Watson, R. A. (1969). Research and methodology: Tattoo marks and behavior disorder. The British Journal of Criminology, 9, 167-172.

Menninger, K. (1935). A psychoanalytic study of the significance of self-mutilation. Psychoanalytic Quarterly, 4, 408-466.

Mifflin, M. (1997). Bodies of Subversion: A secret history of women and tattoo. New York: Juno Press.

Milligan, K. J. (1998). Exquisite corpses in America: Ornamented bodies of the late twentieth century. Dissertation Abstracts International, 59-04A, 1167.

Mitchell, J. E., Boutacoff, C. I., Hatsukami, D., Pyle, R. L., & Ekert. E. D. (1986). Laxative abuse as a variant of bulimia. Journal of Nervous and Mental Disease, 174, 174-176.

Mosher, D. L., Oliver, W. A., & Dolgan, J. (1967). Body image in tattooed prisoners. Journal of Clinical Psychology, 23, 31-32.

Murray, B. J. (1993). I never promised you a rose garden: Compulsive self-mutilation. In Rediscovering childhood trauma: Historical casebook and clinical

applications (pp. 191-199). Washington, DC: American Psychiatric Press.

Myers, J. (1992). Nonmainstream body modification: Genital piercing, branding, burning, and cutting. Journal of Contemporary Ethnography, 21, 267-307.

Nateras-Dominguez, A. (1998). Body aesthetics: Tattoos in urban youth in Mexico City. International Sociological Association paper. Sociological Abstracts, 046.

National Women's Health Resource Center, (1996). Skin art: Tattoos. National Women's Health Report, 18, 6.

Neumann, D. A., Houskamp, B. M., Pollock, V. E., & Briere, J. (1996). The long-term sequelae of childhood sexual abuse in women: A meta-analytic review. Child Maltreatment: Journal of the American Professional Society on the Abuse of Children, 1, 6-16.

Newman, G. (1982). The implications of tattooing in prisoners. Journal of Clinical Psychiatry, 43, 231-234.

Nicholas, A. (1994). The art of the New Zealand tattoo. New Zealand: Tandem Press.

Ohberg, A., Lonnqvist, J., Sarna, S., & Vuori, E. (1996). Violent methods associated with high suicide

mortality among the young. Journal of the American Academy of Child and Adolescent Psychiatry, 35, 144-153.

Olguin, B. V. (1997). Tattoos, abjection, and the political unconscious: Toward a semiotics on the Pinto visual vernacular. Cultural Critique, 37, 159-213.

Parry, A. (1934). Tattoo: Secrets of a strange art as practiced among the natives of the United States. New York: Simon & Schuster.

Pattison, E. M., & Kahan, J. (1983). The deliberate self-harm syndrome. American Journal of Psychiatry, 140, 867-872.

Perkins, K. C. (1997). Adolescent trends in the late 20th century: Fad or societal alienation? West Virginia Medical Journal, 93, 313-316.

Pettigrew, J., & Burcham, J. (1997). Characteristics of childhood sexual abuse and adult psychopathology in female psychiatric patients. Australian and New Zealand Journal of Psychiatry, 31, 200-207.

Pierce, R. (1995). Tattooed Doll. New York Times Magazine, June, 18.

Pitman, R. K., (1990). Self-mutilation in combat-related PTSD. American Journal of Psychiatry, 147, 123.

Podvoll, E. M. (1969). Self-mutilation within a hospital setting: A study of identity and social compliance. British Journal of Medical Psychology, 42, 213-221.

Popplestone, J. A. (1963). A syllabus of the exoskeletal defenses. The Psychological Record, 13, 15-25.

Post, R. S. (1968). The relationship of tattoos to personality disorders. The Journal of Criminal Law, Criminology, and Police Science, 59, 516-524.

Putnam, F. W., & Trickett, P. K. (1997). Psychobiological effects of sexual abuse: A longitudinal study. Annals of the New York Academy of Sciences, 821, 150-159.

Raspa, R. F., & Cusack, J. (1990). Psychiatric implications of tattoos. American Family Physician, 41, 1481-1486.

Resnick, H. S., Ki;lpatrick, D. G., Dansky, B. S., Saunders, B. E., & Best, C. L. (1993). Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. Journal of Consulting and Clinical Psychology, 61, 984-991.

Riria, K. T., & Simmons, D. (1989). Moko rangatira: Maori tattoo. Auckland, New Zealand: Reed Publishing.

Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (1991). Measures of personality and social psychological attitudes. New York: Academic Press.

Rorschach, H. (1921). Psychodiagnostik. Bern: Bircher (Transl. Hans Huber Verlag, 1942).

Rose, S. M. (1991a). Missing the point and passing the buck: Overlooking abuse in mental health histories. Health/PAC Bulletin, spring, 13-16.

Rose, S. M. (1991b). Acknowledging abuse backgrounds of intensive case management clients. Community Mental Health Journal, 27, 255-263.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Rosenthal, R. J., Rinzler, C., Walsh, R., & Klausner, E. (1972). Wrist-cutting syndrome: The meaning of a gesture. American Journal of Psychiatry, 128, 1363-1368.

Ross, C. A., Heber, S., Norton, G. R., & Anderson, G. (1989). Differences between multiple personality disorder and other diagnostic groups on structured interview. Journal of Nervous and Mental Disease, 179, 487-491.

Rouanzoin, C. C. (1981). Personality and behavioral differences between tattooed and nontattooed prison inmates. Dissertation Abstracts International, 42-06B, 2547.

Roy, A. (1978). Self-mutilation. British Journal of Medical Psychology, 51, 201-203.

Rudofsky, B. (1971). The unfashionable human body. New York: Doubleday.

Ruttenberg, D. (1998). Dyke nightlife: A report from Mecca. Sojourner: The Women's Forum, 23, 17.

Sakinofsky, I., Roberts, R. S., Brown, Y, & Cumming, C. (1990). Problem resolution and repetition of parasuicide: A prospective study. British Journal of Psychiatry, 156, 395-399.

Sanders, C. R. (1989). Customizing the body: The art and culture of tattooing. Philadelphia, PA: Temple University Press.

Sanders, C. R. (1988). Marks of mischief: Becoming and being tattooed. Journal of Contemporary Ethnography, 16, 395-432.

Sansone, R. A., Wiederman, M. W., & Sansone, L. A. (1998). The Self-Harm Inventory (SHI): Development of a

scale for identifying self-destructive behaviors and borderline personality disorder. Journal of Clinical Psychology, 54, 973-983.

Schmidt, R. L. (1986). Correlations of acting out behaviors, personality types, and attitudes toward education. Dissertation Abstracts International, 47-07A, 2462.

Scott, J., House, R., Yates, M., & Harrington, J. (1997). Individual risk factors for early repetition of deliberate self-harm. British Journal of Medical Psychology, 70, 387-393.

Shapiro, L. (1995). A display of identity. Sojourner: A Women's Forum, 20, 1.

Shapiro, S. (1992). Sexual trauma and psychopathology: Clinical intervention with adult survivors. New York: Lexington.

Shepperd, F., & Kwavick, J. (1999). Maladaptive image maintenance. In R. M. Kowalski & M. R. Leary (Eds.), The social psychology of emotional and behavioral problems: Interfaces of social and clinical psychology (pp. 152-178). Washington, DC: American Psychological Association.

Simeon, D., Stanley, B., Frances, A., Mann, P. R., Winchel, R. M., & Stanley, M. (1992). Self-mutilation in personality disorders. American Journal of Psychiatry, 149, 221-226.

Simmons, D. (1986). Ta moko: The art of Maori tattoo. Auckland, New Zealand: Reed publishing.

Sowell, T. L. (1999). From darkness to light: Art and the Hawaiian theory of the body. Dissertation Abstracts International, 60-06A, 1802.

Steward, S. M. (1990). Bad boys and tough tattoos: A social history of the tattoo with gangs, sailors, and street-corner punks 1950-1965. New York: Harrington Park Press.

Stone, M. (1987). A psychodynamic approach. Journal of Personality Disorders, 1, 347-349.

Swift, W., Copeland, J., & Hall, W. (1996). Characteristics of women with alcohol and other drug problems: Findings of an Australian national survey. Addiction, 91, 1141-1150.

Taylor, A. J. W. (1970). Tattooing among male and female offenders of different ages in different types of institutions. Genetic Psychology Monograph, 81, 81-119.

Thomas, C. D., & Freeman, R. J. (1990). The Body Esteem Scale: Construct validity of the female subscales. Journal of Personality Assessment, 54, 204-212.

Tolman, D. L., & Higgins, T. E. (1996). How being a good girl can be bad for girls. In N. B. Maglin & D. Perry (Eds.), Bad girls good girls: Women, sex, and power, in the nineties (pp.205-225). New Brunswick, NJ: Rutgers University Press.

Torem, M. S. (1995). A practical approach in the treatment of self-inflicted violence. Journal of Holistic Nursing, 13, 37-53.

Vail, D. A. (1999). Tattoos are like potato chips…you can't have just one: The process of becoming and being a collector. Deviant Behavior, 20, 253-273.

van der Kolk, B. A. (1989). The compulsion to repeat the trauma: Revictimization, attachment, and masochism. Psychiatric Clinics of North America, 12, 389-411.

van der Kolk, B. A. (1996). The complexity of adaptation to trauma: Self-regulation, stimulus discrimination, and characterological development. In B. A. van der Kolk, A. C. McFarlane, & L. Weisaeth (Eds.),

Traumatic stress: The effects of overwhelming experience on mind, body, and society (pp. 182-213). New York: Guilford.

van der Kolk, B. A., & McFarlane, A. C. (1996). The black hole of trauma. In B. A. van der Kolk, A. C. Mcfarlane, & L. Weisaeth (Eds.), Traumatic stress: The effects of overwhelming experience on mind, body, and society (pp. 3-23). New York: Guilford.

van der Kolk, B. A., Perry, J. C., & Herman, J. L. (1991). Childhood origins of self-destructive behavior. American Journal of Psychiatry, 148, 1665-1671.

Vicary, G. Q. (1988). The signs of clothing. Crosscultural Perspectives in Nonverbal Communication, 291-314.

Virkkunen, M. (1976). Self-mutilation in antisocial personality disorder. Acta Psychiatrica Scandinavica, 54, 347-352.

Walsh, B. W., & Rosen, P. M. (1988). Self-mutilation: Theory, research, and treatment. New York: Guilford.

Waska, R. T. (1998). Self-mutilation, substance abuse, and the psychoanalytic approach: Four cases. American Journal of Psychotherapy, 52, 18-27.

Welch, S. L., & Fairburn, C. G. (1996). Impulsivity or comorbidity in bulimia nervosa: A controlled study of deliberate self-harm and alcohol and drug misuse in a community sample. British Journal of Psychiatry, 169, 451-458.

Wexler, L., Weissman, M. M., & Stanislav, V. (1978). Suicide attempts 1970-1975: Updating a United States study and comparisons with international trends. British Journal of Psychiatry, 132, 180-185.

Wilson, C. P. (1988). Bulimic Equivalents. In H. J. Schwartz et al. (Eds.), Bulimia: Psychoanalytic theory and treatment (pp. 489-522). Madison, CT: International Universities Press.

Wilson, C. P. (1989). Ego functioning in psychosomatic disorders. In C. P. Wilson & I. L. Mintz (Eds.), Psychosomatic symptoms: Psychodynamic treatment of the underlying personality disorder (pp. 13-32). New York: Jason Aronson.

Winchel, R. M., & Stanley, M. (1991). Self-injurious behavior: A review of the behavior and biology of self-mutilation. American Journal of Psychiatry, 148, 306-317.

Wonderlich, S., Donaldson, M. A., Carson, D. K., Staton, D., Gertz, L., Leach, L. R., & Johnson, M. (1996). Eating disturbance and incest. Journal of Interpersonal Violence, 11, 195-207.

Wright, J. (1995). Modifying the body: Piercing and tattoos. Nursing Standard, 6, 27-30.

Yamamoto, J., Seeman, W., & Lester, B. K. (1963). The tattooed man. Journal of Nervous and Mental Disease, 136, 365-367.

Young, L. (1992). Sexual abuse and the problem of embodiment. Child Abuse and Neglect, 16, 89-100.

Zlotnick, C., Shea, M. T., Pearlstein, T., Simpson, E.,Costello, E., & Begin, A. (1996). The relationship between dissociative symptoms, alexithymia, impulsivity, sexual abuse, and self-mutilation. Comprehensive Psychiatry, 37, 12-16.

Zlotnick, C., Shea, M. T., Recupero, P., Bidadi, K., Pearlstein, T., & Brown, P. (1997). Trauma, dissociation, impulsivity, and self-mutilation among substance abuse patients. American Journal of Orthopsychiatry, 67, 650-654.

Zweig-Frank, H., & Paris, J. (1997). Relationship of childhood sexual abuse to dissociation and self-mutilation

in female patients. In J. Paris & H. Zweig-Frank (Eds.), Role of sexual abuse in etiology of borderline personality disorder (pp. 93-105). Washington, DC: American Psychiatric Press.

Zweig-Frank, H., Paris, J., & Gizder, J. (1994). Psychological risk factors for dissociation and self-mutilation in female patients with borderline personality disorder. Canadian Journal of Psychiatry, 39, 259-264.

Appendix A

I UNDERSTAND THAT THE RETURN OF MY COMPLETED QUESTIONNAIRE CONSTITUTES MY INFORMED CONSENT TO ACT AS A PARTICIPANT IN THIS RESEARCH

DEMOGRAPHIC QUESTIONNAIRE

Listed below are some general questions about you. Please check the appropriate response to each question or fill in the blank provided.

1. Age: _____ State and country you are currently living in_____

2. Ethnicity: Caucasian_____ African American_____ Hispanic/Latino_____
   Asian American_____ Native American_____ Other (specify)_____

3. Please state your annual household income (to the nearest thousand): _____

4. How many years of education have you had? (please begin counting from elementary school)
   Number of years_____

5. What is your marital status? Single_____ Married_____ Divorced/separated_____
   Living with partner_____ Widowed_____

6. What is your sexual orientation? Heterosexual_____ Lesbian_____ Bisexual_____

7. Do you have children? Yes _____No_____ (if yes, how many) _____

8. Do you use alcohol or drugs? Yes____ No____ (if yes, specify type, amount, and frequency)
   _____

9. Are you a survivor of any of the following (please check all that apply)
   Physical abuse_____ Emotional abuse_____ Domestic violence_____
   Childhood sexual abuse_____ Rape_____ War/ combat_____
   Other_____I am not a survivor of abuse_____

10. Do you have any body piercings? (in location other than your ears) Yes_____ No____

11. Do you have a tattoo? Yes____ No_____ (if yes, please continue; if no, go to question #28)

12. How many tattoos do you have? 1_____ 2_____ 3_____ More than 3_____

13. Total body surface tattooed? (approximately) One square inch_____ 2 to 5 sq inches_____
    6 to 12 sq. inches_____13 to 24 sq. inches_____ more than 24 sq. inches_____

14. Where did you receive your tattoo(s)? USA_____ Europe_____ Asia_____ Middle East_____
    Other(please specify where)_____

15. Who placed your tattoo(s)? Professional_____ Amateur_____ Both_____

16. How old were you when you received your first tattoo? _____ years old

17. Did you realize your tattoo(s) would be permanent? Yes_____ No_____

18. Location of tattoo(s): (Check all that apply) Hand_____ Arm_____ Wrist_____ Leg_____Ankle_____
    Foot_____Chest_____ Abdomen_____ Neck_____ Back_____ Shoulder_____ Buttocks_____
    Genitals_____ Face_____Head_____Eyebrow_____Eyelid_____

(Please continue)

19. How did you choose the design of your tattoo(s): From a flash_____ Original design_____ Both_____

20. Did you get your tattoo(s) on impulse? Yes_____ No_____

21. Were you alone when you got your tattoo(s)? Yes_____No_____

22. Were you sober when you got your tattoo(s)? Yes_____ No_____

23. What is your reaction to your tattoo(s) today? For example: Proud_____ Nonchalant _____ Embarrassed____ Other_____

24. Have you ever regretted getting your tattoo(s)? Yes_____ No_____

25. What is the design content of your tattoo(s)? (If you feel this will identify you, you do not need to respond)

26. What is the reason you got tattooed?

(Please continue)

27. What does your tattoo (s) mean to you?

28. Why do you think tattoos are popular with women today?

(Please continue)

29. What would you like me to know about you or your tattoo(s) that I haven't asked you?

Appendix B

The Family Satisfaction Scale can be obtained by contacting Warren H. Jones, Ph.D., Department of Psychology, 307 Austin Peay, University of Tennessee, Knoxville, TN 37996.

Appendix C

The Body Esteem Scale can be obtained by contacting Stephen L. Franzoi, Ph.D., Department of Psychology, Marquette University, Milwaukee, WI 53233.

Appendix D

Appendix E

The Self-Harm Inventory can be obtained by contacting Randy A. Sansone, M.D., Sycamore Primary Care Center, 2115 Leiter Road, Miamisburg, OH 45342.

Appendix F

The Behavior and Symptom Identification Scale can be obtained by contacting Susan V. Eisen, Ph.D., McLean Hospital, 115 Mill Street, Belmont, MA 02478-9106.