PSYCHIC NUMBING IN INNER CITY ADOLESCENTS REFERRED FOR SPECIAL EDUCATION ASSESSMENT

by

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A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor in Philosophy, The City University of New York

1995

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

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Psychic numbing is a reaction to extreme life events and affects the capacity to symbolize and integrate experience, impairing the ability bring cognitive controls or defense mechanisms to bear on affective experience. The premise of the study is that inner city life conditions constitute an extreme life event and result in a form of numbing. The subjects are 90 adolescents who live in public housing projects and 26 who do not. Following an interview, each subject was assigned a numbing score, then administered the WISC III, Rorschach, and Human Figure Drawing tests. The subjects' social histories were scored for the severity of life events. A group of experts was asked to identify the variables associated with psychic numbing, creating a numbing profile. A significant relationship was found between the numbing score and the severity of life stressors. The variables selected by the experts were found to be significant predictors of the numbing score. The implications of the findings are discussed in the context of a psychology of evil. Key Words: Psychic numbing, adolescents, inner city, stress, psychology of evil.

Acknowledgements

This has been a long and arduous process, and I have to thank those involved: Stanley Milgram, whose insight and sense of humor I will always miss; Professor Robert J. Lifton, whose ideas, kindness, and unwavering support made it all possible; Professor Suzanne Ouellette, who never lost confidence and kept on pushing me; Professor Salomon Rettig whose support was much needed and appreciated. I would also like to thank Professor Gary Winkel and Professor Michelle Fine for their suggestions, as well as my friends who believed in me, and especially Dr. Maria Derevenco and Dr. Linda Jacobs for their contributions. Finally, and most of all, I have to thank my family, my wife, Mihaela, who never lost faith, and my daughter, Andrea, who taught me what being a fighter really means.

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The purpose of this study is to identify the effects of life in inner city public housing projects on adolescents. The underlying premise is that the prevailing life conditions, namely systemic generational poverty, hopelessness, pervasive violence, and intense frustration constitute an extreme life event, and that their adjustment is based on mechanisms similar to those identified in the survivors and/or victims of wars and concentration camps.

The problems of stress and resilience are approached differently by Lifton (1976,1979,1986) and by the overwhelming majority in the field of stress research. The hypothesis testing approach prevalent in the field, based on rigid methodological positivism, yielded a wealth of data, but the cumulative body of knowledge, as Kasl (1983) notes, has progressed little beyond common sense.

Lifton's methods are completely different. By conducting structured interviews with people who had been exposed to extreme life situations, such as Hiroshima survivors, concentration camp victims and victimizers, and Vietnam veterans, he explored their thoughts, their feelings, their coping strategies. He noticed similarities across persons and across situations. Based on his theories of personality and culture, and on the observed commonality of reactions to extreme situations, he proposed two psychological mechanisms of adjustment: psychic numbing and doubling, that are crucial for the understanding of the

psychology of adaptation to extreme situations.

Gergen (1982) argues that "the chief criterion for theoretical evaluation (by traditional standards) namely empirical validity (or its close associates, "truth value", "empirical content",and "resistance to falsification"), is inappropriately applied to theories of human conduct". He proposes as a replacement the "generative capacity" - the capacity to raise fundamental questions, to challenge the basic assumptions of a culture concerning social life, to provide alternatives for social action. Rapaport (1972) differentiates between the explanatory power of a theory and its explanatory appeal. Lifton's theory has major generative capacity and explanatory appeal; its explanatory power remains untested due to the divergence of methodology between his approach and the hypothesis testing approach prevailing in the field of stress research. The present project proposes to bridge - in part - this gap, by providing some experimental support for the mechanism of psychic numbing and shedding some light on the nature of what I feel is an important and needed concept.

Psychic Numbing: A Theoretical Discussion

In order to properly address the theoretical implications of numbing, a short presentation of Lifton's general theoretical approach is necessary.

Drawing on Freud and Erikson, Bowlby's (1958, 1969)

developmental theory, as well as Langer's (1953, 1962) and Cassirer's (1957) emphasis on symbolization, Lifton characterizes his approach as "formative - symbolic" since it "takes into account the increasing awareness of symbol formation as a fundamental characteristic of man's psychic life" (Lifton, 1976). The ongoing process of symbolization, the continuous creation and re-creation of images is, in Lifton's opinion, the essential, "basic" psychological process, an inner ordering that conveys meaning to life experiences: "in human mentation we receive no perception or stimuli nakedly, but inwardly re-create each exposure"(Lifton, 1976). Lifton's concept of image - an anticipatory interpretation of the environment and a scheme for action - is similar to Piaget's concept of representation. During the formative process, the images evolve into forms - more highly symbolized, complex, more enduring structures, the result of a more intricate re-creation of experience. Each image and form is at the same time a configuration in itself and part of larger configurations, or to use Lacan's (1966) words "like rings of a necklace that is a ring in another necklace made of rings". I believe that Lacan's (1966) view of this process is useful and relevant: each image is the intersection of an associative chain of images and may symbolize them; in turn, images may be divested of their emotional valence which can be attached to other associated images. The adaptive value of such a combinatory, ongoing and autonomous process is that it orders experience by relations of similarity and contiguity while dissipating tension.

Lifton does not consider the unconscious a mental realm, but rather a formative ordering process which takes place outside awareness. Rejecting a dynamic based on repression, resistance, and defense, Lifton believes that the essential dynamic factor of the formative process is the self's awareness of its own vulnerability and mortality. He sees the self as permanently and simultaneously involved in proximate and ultimate matters. In this context, "ultimate" matters connect the individual to what Berger and Luckman (1968) call "symbolic universes": a socially determined, shared system of beliefs, values and expectations that impart a transcendental and historic context and meaning to individual experience. The linking of the self to a symbolic universe alleviates the pain and anxiety caused by the awareness of impermanence. The major source of psychological impairment is "not so much a problem of relegating unacceptable ideas to the unconscious, or the experience of identity confusion. The more basic difficulty is the impaired capacity to feel and to give inner order to experience in general" (Lifton,1976).

The formative process takes place along three polar dimensions: connection - separation, movement - stasis and integration - disintegration, each evolving "from physical inclination to enactment to inner imagery to symbolization... Each takes shape initially in relations to bodily impulses and physical relationships to sources of nurturance and protection: each issues ultimately in complex adult capacities for participation in love and communal relationships, for moral and

ethical commitment, and for maintaining a sense of self that includes symbolic development, growth and change" (Lifton, 1976).

In turn, this process depends on two interrelated capacities which enable the self to order its experiences: centering and grounding (similar to the social process and Ego process described by Erikson (1950, 1968). Centering orders the experience temporally -connecting the event to older forms and images in order to facilitate anticipation; spatially -linking proximate, immediate and distant, abstract meanings; and emotionally -differentiating between valences, as well as central and peripheral images. In fact, centering is only one component of a dialectical process. In order to make judgments on experiences that transcend the self, a degree of detachment is essential. The process that allows for that is decentering - a suspension of integrations in the anticipation of new, more inclusive ones. Without a centering - decentering balance, the self is unable to either consolidate or evolve: impaired centering makes the integration of new experiences impossible, while impaired decentering leads to stasis.

Both processes are made possible by grounding, which is defined as "the relationship of the self to its own history" (Lifton,1976) and provides continuity during decentering. Without adequate grounding, decentering leads to an inability to deal with change and to anxiety, rage and vulnerability. The underlying process is "desymbolization" - a loss of the ability to inwardly re-create (form) experiences which is characterized

"by various degrees of inability to feel and by gaps between knowledge and feeling" (Lifton, 1976). This is the very essence of psychic numbing, "a cessation... of the formative process, the impairment of man's essential mental function of symbol formation or symbolization... (Psychic numbing) refers to an incapacity to feel or to confront certain kinds of experience due to the blocking or absence of inner forms of imagery that can connect with such experience" (Lifton, 1976). Numbing occurs along a continuum, ranging from reactions to extreme life events to highly circumscribed adaptations, for example the professional detachment of a surgeon. The subjective experience of numbing can take different forms: apathy, rage, guilt, shame.

Is numbing a defense mechanism or coping? In the field of coping research, some authors such as Murphy (1974) believe that coping and defense mechanisms are completely different processes; others consider them the poles of a linear dimension (Haan, 1977, 1982), or see defense mechanisms as "adaptive devices gone wrong" which compared to coping "are rigid, partially blocking or distorting the cognitive field" (Mechanic, 1974), while yet other viewpoints stress the continuity between defense mechanisms and coping (Kroeber, 1970). In depth psychology oriented literature Hoffer (1954, 1968) proposed the concept of an integrated defensive organization which includes both coping modalities and defense mechanisms; Sampson, Weiss et al. (1976) illustrated how a defense gradually changes from a segregated structure which does not function in harmony with the rest of the Ego, to an

integrated, Ego syntonic voluntary action of self control. Lifton believes that numbing is essentially different from defense mechanisms because it implies neither a repressed content nor a compromise between internalized societal norms and impulses. While originally a simple mechanism, related to the freeze response, numbing acquires complexity only due to its unique position in the defensive organization: it has a voluntary component (Lifton, 1979), but at the same time, most of it takes place outside of awareness. I believe that numbing occupies, within the defensive organization, an intermediate position between defense mechanisms and coping, being part conscious, part unconscious, part voluntary and part autonomous. It is this almost unique characteristic, which it shares with Lifton's "doubling" and Milgram's (1968) "agentic state", that imparts its explanatory appeal.

At the same time, I believe that the unconscious component of numbing is at the root of its wide ranging impact on a variety of behaviors. As mentioned previously, Lifton considers the unconscious an active formative process, consisting of the combination and re-combination of images. Freud (1915) wrote that repression "does not hinder... (the repressed representation) from organizing itself further, putting forth derivatives and instituting connections". The ability to express the repressed representation acquires flexibility through this process, which makes symbolic satisfaction and compromise possible; the complexity of the associative chain, which is

dynamically related to the intensity of the repressed affect, enhances the ability to symbolize. I think that in the case of numbing the process is reversed: what starts out as a relatively simple defensive reaction, with its origins in the freeze response, gains complexity when the causative event is extreme and important. The blocking of inner imagery, the loss of the ability to symbolize, do not remain limited to the event, but spread, retracing the associative chains, and extending the blocking to imagery which is only symbolically connected to the initial traumatic event. What started out as an almost reflexive protective reaction of selective desensitization loses its specificity and expands in direct proportion to the centrality and intensity of the causative event, increasingly impairing the formative process. The appropriate metaphor (or controlling image) here is malignancy.

Numbing and Resilience

I believe that numbing has both a quantitative aspect - a restriction of the formative process, and a qualitative one - a poorer fit between the imaging process and life events. The degree of numbing - the extent and degree of generality of desymbolization - is related to the severity and centrality of the causative event as well as to the resilience of the individual. From a developmental standpoint, resilience is related to acquiring Erikson's (1950) "basic trust" or Kernberg's (1976) "Ego identity", and depends, I believe, on a successful effort to integrate the positive and negative aspects of the

initial nurturing relation, a position consistent with the conclusions of Bowlby (1969) and Mahler (1965), among others.

The issue of resilience is approached differently in the field of stress research. According to Endler and Edwards (1989), resilience can be conceptualized in terms of cognitive factors (Kobasa, 1979, Lefcourt, 1980), in terms of interaction between traits and situations (Endler, 1980, 1983, Chesney and Roseman, 1983), and in terms of the interaction process (Lazarus and Folkman, 1984).

A factor that influences vulnerability to stress is perceived control. Lefcourt (1980) has found differences in coping strategies and emotional response to stressors between subjects with external or internal locus of control. Campbell,Converse and Rogers (1976) equate internal locus of control expectancy with competence, coping ability and relative invulnerability to stress. Johnson and Sarason (1979) have found a weak but significant correlation between anxiety and depression and negative life events for externals but not for internals, and suggest that locus of control may be a mediator of the effects of life events.

Kobasa has postulated "hardiness" as a personality characteristic, differentiating individuals who do -or do not - become ill as a result of high levels of stress. Hardiness has three components : commitment, control and challenge. The hardy persons perceive themselves as being in control, feel deeply committed to their activities,and perceive change as an exciting

challenge. Kobasa (1979) and Kobasa,Maddi and Kahn (1982) concluded that hardiness influences both the appraisal of an event and the resulting coping strategies, defusing the effects of stress, while allowing the individual to attend to the situation rather than avoiding it. This is one of the few occurrences in the field when the personality factor is considered fully: as an active participant in the transaction with the environment, determining how the situation is appraised, and as a modifier of the relation with the environment, ensuring adjustment and continuity.

Another theoretical viewpoint on resilience - namely the inoculation effect - has similarities with numbing. Its basic hypothesis is that certain repeated stressful experiences lead to better coping with stress. Eysenck (1985) and Berndt, Gunther and Rohle (1980) found that cancer patients score lower on neuroticism than controls; Eysenck (1985) also found a negative correlation between cancer and psychosis, while Ahnve et al (1979) and Dimsdale et al (1978) have found a negative correlation between neuroticism and coronary heart disease.

Unfortunately, the inoculation hypothesis is placed in the framework of the relation between personality and disease, making comparisons with numbing difficult. Nevertheless, it is plausible that the effect of inoculation and numbing are congruent in chronic stress situations.

Longitudinal approaches to resilience are based on long term studies of children at risk. The most commonly used risk factors

are low parental socioeconomic status, parental psychopathology, abuse and neglect.

Garmezy's (1981) studies of families in poverty reached the following conclusions: children who were more stress resistant had at least average intellectual ability, were better able to maintain a socially decentered perspective, were better able to remain engaged and attend school, showed good cognitive control displayed a capacity for divergent thinking and a good sense of humor. These findings are consistent with those of Murphy (1974) and Felsman and Vaillant (1987): more resilient children have an increased level of sensory neural integration, show a reflective rather than impulsive cognitive style, a more creative approach in problem solving, use flexible coping strategies rather than a rigid, brittle type of reaction and have good impulse control and good frustration tolerance. They are more independent and capable of goal oriented strategies and planing.

Werner (1989) in a 30 year longitudinal study found that resilient youngsters came from smaller families and had a space of two years or more between themselves and their siblings, allowing them to establish a close bond with at least one major caretaker; they also had the ability to find social support outside their immediate family and tended to be well liked.

I believe that the characteristics of resilient children put forth by these studies are indicative of the capacity for a richer, more finely tuned symbolization process which may well mitigate the effects of numbing. However, numbing and resilience

are not polar opposites; there are adaptive aspects of numbing, such as the professional numbing of the surgeon, that actually enhance resilience.

Anthony (1974a, 1974b, 1987) defines "representational competence" as the individual's ability to make meaningful sense out of the traumatic and/or chaotic events that confront him. He developed a typology based on his concept of an interaction between vulnerability and risk, comprised of the following categories:

- hypervulnerable: low risk/high vulnerability
- pseudo invulnerable: high risk/high vulnerability
- invulnerable: high risk/low vulnerability
- non vulnerable: low risk/low vulnerability

Anthony studied the invulnerable offspring of manic-depressives and schizophrenics, following them up for 15 years.He found that they seem to utilize mechanisms such as distancing, isolation of affect, rationalization, intellectualization which are not conducive to the maintenance of good object relations with adequate levels of intimacy. They tended towards relationships with problematic objects, towards diluting and diffusing relationships by adhering to cults and fads, and also sought treatment for reasons they could not specify.

While one should note that "invulnerability" as discussed here may not equal "resilience", these results indicate that it comes at a price: the children identified as "invulnerable"

showed characteristics which are highly consistent with numbing.

Steps Toward a Psychology of Evil

Numbing is a condition that Lifton (1976,1979,1986) identified as essential in facilitating the average individual's participation in acts so extreme, and which run so counter to any established norm of human behavior, that we need a moral category to define them, namely evil. While numbing does not constitute a comprehensive explanation of participation in evil, it is a necessary condition of it. In order to elucidate this point, a discussion of the cognitive-emotional context of psychic numbing becomes necessary.

Is evil a legitimate subject of study for psychology? Making it the object of scientific inquiry requires impartiality, a difficult position to assume relative to moral categories. As already noted, Gergen (1982) believes that the old fact - value dichotomy is misleading and that values hold a legitimate place in the creation of knowledge. Lifton (1986) traces the reticence of psychology to address the issue of evil to a fear that understanding the process implies forgiveness; however he notes that if understanding includes moral issues along with individual issues, such need not be the case.

What is being sought is a specific configuration of social, cognitive and emotional factors that facilitate the average person's participation in evil, and, at the same time, constitute the context of numbing. I believe that participation in evil is made possible by the interaction of several universal

interpersonal, intrapersonal, and social phenomena with adaptive value: humankind's acceptance of symbolic reality, the function of which is to foster socialization; the denial of mortality and the quest for symbolic immortality in an effort to avoid anxiety and pain; and several psychological mechanisms whose function is to dilute responsibility and to help coping with extreme situations, namely obedience to authority, numbing, doubling, and self deception.

We live, in Lifton's words, "on images". The mental images dominate our inner world and prepare and motivate our actions. We are a symbol- making species - a process described by Langer (1948) as a primary activity "essential to thought and prior to it". By acting on symbols and images "man ... in a very concrete sense creates his universe" (Bertalanffy, 1968). This process is made possible by the human tendency to accept symbolic reality as the equivalent of reality "proper". It is impossible to trace this universal trait back to its beginnings, but by Plato's time, as illustrated in his allegory of the cave, it was argued that the universe of ideas (i.e. the symbolic universe) was the "real"one, while the universe of objects was seen only as a poor reflection of it, mere shadows distorted by the limitations of our senses.

By positing a universal need to find and integrate meaning Berger and Luckmann (1966) argue that reality is a social construct. They trace its emergence through several steps, from the bridging together by language of the constancies of everyday

life, to the formation of different spheres of reality - sub universes - which are finally integrated by incorporation in the same overarching universe of meaning. The symbolic universe "constitutes the universe in the literal sense of the word because all human experience can now be conceived as taking place within it." (p. 96), and fulfills the functions of conferring meaning to experience, sheltering the individual from the "ultimate terror" of aloneness, and ordering history.

These symbolic universes are sustained by universe maintenance mechanisms, which insure their internal consistency and continuity, and act as a safeguard against dissonance. Mythology, theology, philosophy and science are all universe maintenance mechanisms.

Ernest Becker (1976) argues that culture has evolved from humankind's attempts to master the awareness of its own mortality and that the main function of culture is to provide transcendence - in essence death denial.

Lifton follows a similar line of reasoning, but emphasizes the role of culture in fostering a sense of "oneness" and continuity, creating a context in which one can "both die and continue" (1983).

While mankind became more and more immersed in symbolic reality, the forms of death denial also changed: continuity with nature was substituted by continuity with culture and survival was replaced with symbolic immortality. Power, wealth and prestige are "immortality symbols" conferring symbolic

immortality to their owner: ordinary people who cannot attain them identify with those who do, subordinating themselves in order to share in the quest for symbolic immortality. This leads to a paradoxical situation: humans may try preserve their immortality rather than their lives. Death denial and the promise of symbolic immortality have become intrinsic parts of our symbolic universe, being in fact universe maintenance mechanisms. Culture performs a sleight of hand by substituting symbolic immortality for survival and mankind is ready to die for ideas. The pressure to conform, to share in the common quest, is considerable. Asch's (1951) classic study provided a startling example of the effects of perceived pressure to conform to even an ad-hoc group. Following the same line of reasoning in a more socially meaningful context, Milgram (1969) took this conclusion even further: in order to conform and obey authority, a significant number of "normal" people are ready to hurt their peers.

Their moral scruples are, according to Milgram (1969), overridden by the demands of authority because of a special condition - the "agentic state". The agentic state is the opposite of autonomy and occurs when "a self regulating entity is internally modified so as to allow its functioning within a system of hierarchical control... In this condition the individual no longer views himself as responsible for his actions, but defines himself as an instrument for carrying out the wishes of others" (p.134).

The keys to understanding the agentic state are the person's acceptance of the definition of the situation by those in authority and the person's self definition within this situation.

The moral restraints on the use of violence, already weakened by the pressure to conform, are further undermined by the use of stereotypes to dehumanize potential victims.There is a clear correlation between dehumanization and disinhibition of aggression: Bandura (1975) found that dehumanized subjects are treated more punitively, and Zimbardo (1973) believes that deindividuation of both victim and victimizer facilitates aggression. In fact, the relationship between numbing and violence is cognitively mediated by negative stereotyping, specially when the violence is based on group membership. In this context, negative stereotyping constitutes a moral sanction for evil.

As Milgram points out, the above processes contain an element of free will. There is a considerable amount of "as if" behavior involved; nonconformity, albeit subjectively difficult, is always possible and personal responsibility is never fully eschewed.

Aside from numbing, another psychological mechanisms described by Lifton (1983, 1983a, 1986) provides relief from stress and guilt -namely and "doubling". In an obscene congruence both victims and victimizers benefit from it. The psychological principle of doubling is, according to Lifton "the division of the self in two functioning wholes. In that way, a part-self

becomes, in effect, an entire self" (1986). By doubling one could "not only kill and contribute to killing, but organize silently, on behalf of that evil project, an entire self structure (or self process) encompassing virtually all aspects of his behavior" (1986).

Doubling differs from splitting or dissociation because there is a continuity between what Lifton calls "the Auschwitz self" (his findings are based on interviews with Nazi doctors who performed experiments on prisoners) and the prior self, and the two selves are syntonic: "the Auschwitz self had to be both autonomous and connected to the prior self that gave rise to it" (1986).

The controlling image that facilitated this continuity in perhaps the most extreme of cases - the Nazi doctors - was described by Lifton as "killing in the name of healing" - a rationalization helped by simplistic imagery describing the victims as a danger to the "health" of the nation, their disposal being "a question of political hygiene". (Please note the similarities with the current fad of "ethnic cleansing").

While doubling does not eliminate conscience it "transfers" it: "the requirements of conscience were transferred to the Auschwitz self which placed it within its own criteria for good ... thereby freeing the original self from responsibility for actions there" (Lifton, 1986). Although this process is very similar to the agentic state, it represents a further step: the demands of authority have been internalized and given autonomy

within the self. It should be noted that both the acceptance of the agentic state and doubling are greatly facilitated by numbing and by self deception.

In order to have become a co-participant in evil, one has to make decisions; while not always made with full awareness of motives, the decision itself is a conscious act - no one becomes "unconsciously" a drug dealer. This is achieved by self deception: one has only to feel convinced that, in fact, there is "no choice" and the moral dilemma disappears.

But is this a conscious act? Is there an awareness of the self deception?

Paul Ricoeur (1967) has proposed the concept of the "intimate core of personality": while there are successive layers of truth, half truth and falsehoods, at the level of the intimate core self deception is impossible. It is not a moral arbiter, but merely an incorruptible witness.

The multiple layers of truth and lies permit the forging of coherent versions of reality and of versions of the past - or life stories - consistent with them, at different levels of self deception corresponding to different levels of justification.

Orwell named this phenomenon (in a more drastic form) doublethink - a vast system of mental cheating that flourishes in totalitarian society, and, by extension, in totalitarian situations.

Without dependence on a particular historical condition or on psychopathology, this theory tries to provide an explanation

of the "common man's" participation in evil: the readiness to accept symbolic reality facilitates the emergence of symbolic universes and replaces survival with the search for symbolic immortality. In order to share symbolic immortality, humans accept others' definition of reality and, by implication, tend to become subservient to authority, to accept and share the stereotypes that facilitate the use of violence. Psychic numbing and doubling insulate them against the consequences and self-deception allows them to create life stories consistent with the sense of meaning and history of the symbolic universe they belong to.

This demonstration is neither rigorous nor comprehensive, but rather the outline of a possibility. Its purpose is to establish a context for numbing, to help explain why widespread numbing has such dire social consequences, as well as to emphasize the fact that numbing is an essential first step in one's involvement in the more complex processes described above.

Psychological Consequences of Numbing

Describing the long term effects of severe numbing, Lifton (1976) wrote: "the environment is experienced as a perpetual threat to existence, and the self is threatened by annihilation from within by various combinations of severe anxiety, numbed guilt and uncontrollable rage. The numbing process takes the form of constricted human relationships because of the rechaneling of psychic energy away from intimacy, and of numbed guilt that requires continuous maneuvers to avoid the awareness of extremely

negative self judgement ... and negative affect." The struggle to attach meaning to experience, which serves the purpose of connecting the individual to social and historical context, involves violence and destruction, for example gang membership and involvement in criminal subcultures.

As stated before, the premise of the study is that the life conditions in inner city housing projects, namely systemic generational poverty, pervasive violence, intense frustration, free floating, diffuse rage and hopelessness are so dysfunctional as to constitute extreme life events. These conditions share all the characteristics included in the definition of stressful life events: imply loss of control and are undesirable, aversive, or hazardous to personal adjustment; are unexpected or accidental and throw off the "shared timetable for the lifecourse (Neugarten & Hagestad,1976;Hagestad & Neugarten, 1985), and are major in their implications for maintaining the present understanding of self and the meaning of life (Cohler,1987). Furthermore, I believe, exposure to these life conditions leads to widespread numbing, which in turn has significant consequences:

The impairment of the ability to symbolize affects the complexity, flexibility and diversity of the imaging process and diminishes the defensive organization by rendering more sophisticated defenses ineffective. The numbed person is at the same time constricted and impulsive. The constriction is due to the decreased ability to modulate and integrate affect, a direct consequence of the blocking or limiting of the formative process.

As a result, the emotional reactions are experienced as diffuse and disorganizing, and evoke intense uneasiness and anxiety. Because of the loss of complexity in defensive responses, the only means for controlling the expression of emotions is by further constriction, trapping the individual in a vicious cycle. Due to the inability to bring defenses or cognitive controls to bear on affective experience, the responsiveness is toned down and the inner world remains barren, with most of the feelings split off from conscious awareness. The prevailing affect is relatively flat, dysphoric and depressed; the dominant feeling is rage linked to perceived powerlessness and loss of control. In turn, because of diminished ability to fine tune emotional reactions, inner rage contaminates the expression of other emotions as well as social interactions. Impulse control is poor, and mood tends to shift rapidly and unpredictably from apathy to anger.

The self image of the numbed subjects is poor. They tend to perceive themselves as vulnerable and inadequate, then make efforts to deny this perception by finding exterior and superficial sources of self worth: having nice clothes, being seen as tough, belonging to the "right crew". As a result their feeling of self esteem oscillates from poor to inflated, without a middle ground. Due to their efforts at denial, they experience social situations involving self actualization as highly ambivalent, and prefer ritualized exchanges. This leads to rigidity, hypersensitivity and suspiciousness in social

interactions, since even minor loss of face constitutes a frontal challenge to the entire process of maintaining self esteem, and is experienced as severe narcissistic injury. The poor awareness of one's strength and weaknesses results in unrealistic expectations and failure to fulfill them further enhances the feelings of vulnerability and loss of control.

The object relations of the chronically numbed person are fragile and superficial, and seen in an utilitarian light. Due to an inability to symbolize, their objects are only concrete ones (rather than subjective ones). This means that there is little mediation between need and action, since the emotions cannot be relationally integrated and cognitively processed. The ability for empathy is relatively poor and subject to distortion; occasionally an astute ability to perceive others' weaknesses is devoid of compassion and used to manipulate, frequently accompanied by efforts to justify unacceptable behaviors by denying the meaning of alternative forms of conduct. Relations with authority figures are relatively poor and fraught with conflict.

Moral development is arrested at an early stage; guilt and shame are not effective inhibitors of social behaviors, which are controlled mostly by fear of retaliation. Group inclusion often leads to a further diffusion of responsibility, which in conjunction with poor empathy and poor impulse control, hypervigilance to perceived challenges and toned down responsiveness, facilitate a strong propensity for violence.

Such wideranging effects should be observable by methods different than those used by Lifton, for example in the projective test answers of the subjects. This study attempts to identify the manifestations of numbing in the test answers of inner city adolescents.

General Methodological Considerations

There is a considerable rift today between the theory of methods in social sciences and the practice of research. While some orientations in methodology, such as Popper (1968), Habermas (1971) and Gergen (1982) advocate the need for new criteria in evaluating theories in social sciences, most of the research in the field is based on hypothesis testing in the framework of the experimental model.

As Gergen (1982) argued, this model is not appropriate for the study of phenomena in social sciences. The human capacity for the autonomous envisioning of the alternatives, the quest for freedom from restraint, for uniqueness, for unpredictability,the individual capacity for an infinite variation, directly contradict the underlying assumption of stability of phenomena.

A major contributor to this instability is the effect of the observer on the phenomena under study; another is the "enlightment effect" - the effect of scientific theory on common modes of thinking and acting. Furthermore, the units of understanding human actions are not the result of observation but rather of "participation in a cultural system of understanding" - and as such subject to the "enlightment effect"and culturally

determined. The building block in the process of accumulating scientific knowledge is the "hypothesis test". However, because of the above stated reasons, the condition of no correlation between independent variables is systematically overlooked. Furthermore, because of the arbitrary selection of the dependent variables and the elimination, through control, of the influence of all potentially relevant variables, the amount of variance accounted for by the variable left free is greatly enhanced, even though the proportion of variance it might control in a natural setting is very small. Gergen (1982) adds that the articulation between the independent variables and the intervening processes is subject to variation in its frequency of occurrence in society and to alteration over time, and that the "dependent variable assessment may occur at virtually any point during a multiple array of continuously altering psychological states". He continues by arguing that given the variation and fluctuation in human conduct, "there is no reasonable hypothesis for which support (or disconfirmation) cannot be generated".

After reviewing the major theoretical orientations: Popper, Habermas, the phenomenological and the dialectical method, Gergen (1982) believes that there is a commonality of ideas underlying them which may constitute the basis for a unified alternative, resting on the following major assumptions:

Knowledge is socially constituted: scientific theory is not merely "data driven" but a product of social context and modified by it. Social activities are convention governed, the result of

voluntary decisions rather than "immutable laws". Social knowledge is a product of its socio-historical conditions and it is embedded in its context. As a result, scientific theory is neither objective nor neutral; the social description does not reflect the empirical world but rather the concepts of the observer. Since theory influences social action and reflects the ideological bias of its authors, values hold a legitimate place in the creation of knowledge.

Gergen (1982) expresses the hope that these metatheoretical developments represent the emergence of a new, "sociorationalist" metatheory: the generation of rationality by social interchange.

Unfortunately, this newly emerging paradigm seems to exist in a methodological vacuum; most of the research continues to be essentially empiricist in nature. I believe this state of affairs exists because the critical analysis of the foundations of knowledge succeeds too well: it is convincing in undermining the experimental paradigm, but fails to propose a practical criterion for the acceptance or rejection of a theory, forcing the social sciences, despite the stated differences in their nature, to strengthen their epistemological status by partially relying on the experimental paradigm. As noted in the introduction, Rapaport (1972) differentiates between the explanatory power of a theory and its explanatory appeal. The explanatory appeal is a subjective criterion, making the transition from natural science to hermeneutics. This has lead authors, such as Clara Dan (1978), to propose models for social sciences that include verifiability

and prediction only as secondary criteria and put emphasis on post-diction (similar to Rapaport's explanatory appeal to Gergen's generativity), and this is the methodological approach the present study embraces. I am well aware that such a hybrid approach is open for criticism from both sides, but this study is trying to find common ground between radically different orientations, so compromise seems necessary. This approach is consistent with both the manner in which the theoretical problems have been discussed and with the manner in which the data will be collected and analyzed.

Method

Subjects

The subjects of the study were 90 junior high school students attending the "Nathan Hale" Intermediate School 293 in Brooklyn, New York, ranging in age from 11 to 17 years, and referred for evaluation by the School Based Support Team (such a team includes a School Psychologist, a Social Worker, and an Educational Evaluator). Only students listed in their school file as residing in the Gowanus Gardens, Red Hook and Wyckoff Gardens public housing projects, which are in the school's catchment area, were included. In addition, the study includes a control group of 26 students belonging to the same age group and also referred for evaluation, who attend Intermediate High School 293, but do not live in public housing projects. The purpose of this control group is to help in identifying more specifically the

effect of living in housing projects as separate from the influence of the school and the referral for assessment. Subjects diagnosed as psychotic or mentally retarded were dropped from the subject pool.

Procedure

The Social Worker met with the parent or legal guardian of each subject, and obtained a consent for the evaluation, covering all its components, namely educational evaluation and psychological assessment, and informed the parents of their rights. Upon securing the consent, the Social Worker interviewed the parent and obtained a full social history. While there are no strict guidelines as to the structure of the parent interview, the complete social history covered the following areas: health history, developmental history, family constellation, family dynamics including the mental health of family members, sibling relations, parental relations, interpersonal and community relations. In addition, the Social Worker consulted the subjects' school record and teacher updates of current behavior. The results of the social history were not known to the School Psychologist until after the evaluation was completed.

The social histories were rated for severity of life events and dysfunctionality by the School Based Support Team during the case conference, and a severity of social stressors score ranging from 1 -very low- to 9 - very high- was assigned to each subject by team consensus. While interrater agreement was 76.3% and the severity of social stressors scores were within 1 point of each

other 91.5% of the time, it was felt that discussing the differences and achieving consensus provided a better opportunity to take into account subjective impressions as well. A checklist of stressful events was used to help in scoring, but only as a guideline. As Kasl (1983) notes, such instruments are inappropriate for the measurement of stress for a multiplicity of reasons. The resulting scores were used in the study as an indicator of life stressors.

The entire psychological assessment was conducted by one clinician, the School Psychologist, namely the author of the study. The design does not require the evaluator to be blind to the hypothesis. While this approach raises the problem of contamination, it is felt that it offers a uniformity in scoring procedures and in clinical skills that compensates for the above shortcoming.

An intake interview precedes the testing of all subjects. The interview is structured in the sense that all the subjects are being asked the initial number of questions, which cover their interests, social relations, conflicts, aspirations, as well as possible symptoms of disorders. At the same time, the interview is flexible and open ended: depending on the subject answers, additional questions may be asked. At the end of the interview, but before any testing, a subjective "numbing score", ranging from 1 to 5 (with a score of 5 representing severe numbing), based on the examiner's conclusions, was assigned to each subject, and recorded. The design does not provide for a

reality check on this rating. The purpose of this numbing score is to see whether the clinical impression obtained by interview will correlate with more objective indicators of numbing. The other team members were blind as to the subjects' numbing scores.

Each subject was administered a standard evaluation battery, of which the following tests were used in the study: WISC III, Rorschach and Draw a Person.

The "person" drawing is made with a number 2 pencil on a standard 8 1/2 by 11 white page. The standard instruction is: "Please draw a person". Any questions the subjects may have are answered in a non-directive manner. For example the question "what kind of person?" is answered by "whatever kind of person you feel like drawing".

The administration is followed by an inquiry, a series of questions meant to explore the subjects' degree of identification with the drawing and their projected feelings. The length and width of the person drawing (in inches) were recorded. The examiner and another School Psychologist, blind to the hypotheses, scored each person drawing on a scale from 1 to 9 for the severity of pathological indicators with a score of 9 representing the highest degree of pathology. Interrater agreement was 84.6% and the scores were within 2 points of each other 93.3% of the time. As in the case of the score for severity of life stressors, the differences were discussed and the final score, achieved by consensus was recorded for each subject.

The WISC-III was administered and scored in the standard

manner, and the resulting Verbal and Performance IQ scores were recorded. The Rorschach was administered in the standard manner, and the scoring of the protocol was done by the Beck scoring system; since all the administering and scoring is being done by one person, uniformity is assured. As mentioned above, the only problem is contamination, namely whether prior knowledge of the numbing score assigned after the intake interview will affect the scoring. There are two safeguards against this problem: the scoring follows fairly objective criteria, and, at the time of the scoring the examiner was unaware of the response patterns that operationalize numbing in this study.

Numbing was operationalized in the following manner: a group of independent judges, comprised of 6 school and clinical psychologists was given a short theoretical description of numbing as well as a description of its clinical consequences, listed on pages 15 to 17 of this paper; the judges were also presented with the list of variables to be included in the study, and asked to make suggestions which were incorporated in the final variable list. The judges were asked to identify those variables and patterns they believed were associated with numbing (for example: lower Verbal than Performance IQ, low number of Rorschach responses, high number of "animal" content answers, etc.). Any pattern present in 5 of the 6 judges opinions was used to create an expected "numbing pattern", operationalizing numbing for the purposes of this study. This method, namely using a consensus of experts, was used by Milgram (1974) in his studies

of obedience to authority. The variables included in the study were divided into several groups: demographic variables (age, gender, ethnicity, family composition), Draw a Person Test variables (dimensions of drawing, pathological indicators score), Intelligence test variables (Verbal and Performance IQ scores), and diagnostic outcome (classification of learning disabled or emotionally disturbed). The Rorschach test variables include the number of answers (the other Rorschach variables were expressed as a proportion of the number of answers), a variable indicating the level of organization of the answers, determinant variables (proportion of answers determined by a perception of human or animal movement, by color, form or a combination of the two, by shading, primary color and white space) and content variables (proportion of human or animal content answers, anatomical content answers, popular or pathological answers). In addition each subject received a numbing score and a severity of life stressors score (as a rule, the labeling of Rorschach variables follows scoring conventions, with a few exceptions; a list of all the variables and variable labels, including a short statement as to their diagnostic significance can be found in Appendix A). These last two variables were included in the analysis of the data, but were not submitted to the consensus of the experts. All categorical variables were treated as dichotomous variables. Descriptive statistics for both groups of subjects are listed in Appendixes B and C.

By its nature, this study is an attempt at validation. The

difficulty in finding significant results resides in the fact that the psychological effects of numbing are embedded in the psychological make up of the subjects, all of whom are numbed to a certain degree; the study tries to identify those subjects who are more affected. Despite the difficulties it raises, this approach was considered preferable to comparison with a less numbed group, for instance junior high school students from a middle class suburb.

The "hardy" subjects identified by the study appear as outliers, going against the trend. The case histories of such subjects may provide significant clues as to their coping strategies.

Hypotheses

The following hypotheses are formulated in regard to the findings:

- the consensus of the experts will result in an identifiable "numbing pattern" which will be significantly correlated to the numbing score. The variables included in the "numbing pattern" will be strong predictors of the numbing score.

- a significant correlation will be found between the numbing score and the severity of social stressors score.

- due to more stressful life conditions, the subjects living in public housing projects will have higher numbing scores than the control group.

Gergen's (1982) criticisms of the experimental method have be taken into consideration to the extent that is

possible: an effort has been made to use the consensus of the experts rather
than the measurement of arbitrary units of behavior and most of the controls are natural - that is, take place in the life of the subjects and are not the result of the experimenter's efforts to limit sources of variance.

Results

The answers of the experts were remarkably consistent and a "numbing pattern" did indeed emerge by combining their answers. The criterion of inclusion was the agreement of five out of six experts on whether a variable is correlated with numbing and the sign of that correlation. The predicted pattern of numbing is listed below:

Higher score on "pathology of person drawing", lower Verbal IQ score, lower number of Rorschach answers, high proportion of weakly structured answers, high proportion of form determined answers, low proportion of answers combining form and color, low proportion of human movement determined answers, high proportion of animal movement determined answers, high proportion of color determined answers, high proportion of primary color determined answers, high proportion of white space determined answers, high proportion of animal content answers, low proportion of human content answers, high proportion of anatomical content, high proportion of primary process indicators.

This profile was further validated by computing the correlations between the selected variables and the numbing score. Table 1

presents the results, the predictions of the panel, the

Table 1

Correlations Between the Numbing Score and Numbing Profile Variables, Experimental Group (N=90)

Variable	Prediction	Agreement	r	p
A	Higher	100%	.254	<.05
ANAT	Higher	83.3%	.061	.567
CCF	Higher	100%	-.247	<.05
CPRI	Higher	100%	.357	<.01
FC	Lower	100%	-.612	<.01
FM	Higher	100%	.123	.228
F	Higher	100%	.259	<.05
M	Lower	100%	-.444	<.01
P	Higher	83.3%	.569	<.01
PRI	Higher	83.3%	.272	<.01
R	Lower	100%	-.597	<.01
S	Higher	83.3%	.068	.521
VIQ	Lower	100%	-.239	<.05
WW	Higher	100%	.761	<.01

Note: For a listing of variable labels, please see Appendix A.

coefficients of interrater agreement and the significance level (2-tailed).

Of the 14 variables listed above, which the panel selected as being associated with numbing, 11 -or 78.5% - were indeed significantly correlated with it. However, on the case of variable CCF -proportion of color determined answers- the sign of the correlation is opposite to the prediction, bringing the correctly predicted percentage down to 71.4%. The reason for this error in prediction is the very low number of any color determined answers, be it well organized or not. This is an indicator of inner impoverishment, of an underlying depressive process, and of the inability to integrate and modulate emotional reactions. The statement regarding the relation between numbing and the occurrence of color determined answers has to be modified as follows: the few color determined answers found in the Rorschach protocol of a severely numbed person will be poorly organized.

Of the three variables included in the numbing profile, but found not significant, the most interesting is FM - proportion of answers determined by animal movement. Since the proportion of answers with animal content is high, the lack of movement in the answers has to be seen as an indicator of impoverishment. The other two variables - proportion of white space determined answers and anatomical content answers - are too closely associated with specific psychopathology rather than the more general process of psychic numbing.

The association between the numbing score and the rated severity of social stressors is r = .675, significant at a p <.01 level (2-tailed). The correlations between the severity of social stressors and the variables included in the numbing profile, presented in Table 2, illustrates the strength of this association. Of the variables significantly correlated with the numbing score, only two Rorschach content variables -namely animal content and anatomical content are not significantly correlated with the severity of social stressors. In addition, none of the variables included in the numbing profile, but not related to the numbing score, have significant correlations with the severity of the social stressors score.

A stepwise multiple regression (see Table 3) with the numbing score as the dependent variable confirmed the validity of the numbing profile created by expert consensus; variables included in the profile and the severity of social stressors account for 77% of the variance in numbing (adjusted R Square = .769), a highly significant result (Signif. F=.0000).

At this point it may be useful to eliminate the severity of the social stressors and the degree of pathology of the person drawing from the analysis in order to concentrate on Rorschach test variables. Furthermore, Variable WW - poorly organized "whole" answers, that is, poorly integrated answers encompassing the entire Rorschach card, is not an independent variable, but rather an indicator of the degree of the organizational activity involving many of the variables included in the numbing profile.

Table 2

Correlations Between the Severity of Social Stressors and Numbing Profile Variables, Experimental Group (N=90)

Variable	r	p (2-tailed)
A	.152	.154
Anat	.112	.291
CCF	-.368	<.01
CPRI	.218	<.05
FC	-.421	<.01
FM	.002	.981
F	.399	<.01
M	-.340	<.01
P	.336	<.01
PRI	.123	.224
R	-.492	<.01
S	-.015	.890
VIQ	-.350	<.01
WW	.602	<.01

Note: For a listing of variable labels, please see Appendix A.

Table 3

Multiple Stepwise Regression, Numbing Profile Variables, Experimental Group (N=90). Dependent Variable: "Numb".

Multiple R	.88583
R Square	.78469
Adjusted R Square	.76913
Standard Error	.62342

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	6	117.56401	19.59400
Residual	83	32.25822	.38865

F = 50.41513 Signif F = .0000

Variables in the Equation

Variable	B	SE B	Beta	T	Sig T
FC	-.049819	.013745	-.223464	-3.624	.0005
F	-.014437	.004046	-.219002	-3.568	.0006
M	-.024531	.007915	-.198808	-3.099	.0026
P	.187328	.040440	.277380	4.632	.0000
SOC	.193624	.041003	.309102	4.722	.0000
WW	.020187	.005215	.328435	3.871	.0002
(Constant)	1.076359	.360672		2.984	.0037

Note: All the variables included in the numbing profile were included in this analysis. For a listing of variable labels, please see Appendix A.

As such, the degree of organizational activity may mask other sources of variance. When variable WW - namely an indicator of organizational activity - is also removed from the analysis, more of the variables associated with numbing emerge (see Table 4).

These findings validate the numbing profile created by expert consensus. While some of the variables included in the profile are missing from the above analysis, the explanation is relatively straightforward: the experts consulted tended to think along the lines of a correlation model rather than a multiple regression model. A look at the correlation tables listed above confirms this proposition. In addition, the Rorschach variables are not truly independent. For example, some correlation exists between determinant variables and content variables (i.e. between the proportion of answers determined by human movement and the proportion of answers with human content). In a multiple stepwise regression the amount of common variance between such related variables is distributed to the variable more closely associated with the dependent variable, diminishing the predictive value of the second variable. Furthermore, because numbing's strong association with a lower number of Rorschach responses ($r = -.597$, $p < .01$, 2-tailed), the variance of the Rorschach answers is reduced.

Despite the above problems, one can conclude that several of the working hypotheses have been proven: the consensus of the expert panel has resulted in a numbing profile, and variables

Table 4

Multiple Stepwise Regression, Rorschach Variables, Experimental Group (N=90).

Multiple R	.76784
R Square	.58958
Adjusted R Square	.55992
Standard Error	.86072

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	6	88.33277	14.72213
Residual	83	61.48946	.74084

F = 19.87229 Signif F = .0000

Variables in the Equation

Variable	B	SE B	Beta	T	Sig T
CCF	-.028182	.010698	-.190592	-2.634	.0101
CPRI	.049374	.019469	.186470	2.536	.0131
FC	-.067060	.020475	-.300803	-3.275	.0015
M	-.025557	.009443	-.207123	-2.706	.0083
PRI	.024902	.011155	.161781	2.232	.0283
R	-.068790	.024604	-.260811	-2.796	.0064
(Constant)	4.248450	.313012		13.573	.0000

Note: All Rorschach variables were included in this analysis. For a listing of variable labels, please see Appendix A.

included in that profile have been shown to be strong predictors of the numbing score; a strong association has been found between the numbing score and the severity of social stressors.

A factor analysis of the numbing profile is helpful in illustrating more clearly the relation between the selected variables. The results, which are presented in Table 5, can be interpreted as follows: Factor 1 represents poor impulse control, an inability to inwardly organize and structure stimuli, and an inability to mediate verbally the expression of emotions, Factor 2 represents emotional constriction, an inability to acknowledge and express one's feelings, while Factor 3 represents depression and emotional maladjustment. These findings are entirely consistent with the description of the psychological effects of numbing presented earlier. The results of the factor analysis were used to test the hypothesis that the subjects who live in housing projects are significantly more numbed than the control subjects. Each subject's score on each of the three factors described above (labeled "barren", "constriction", and "pathology" respectively) was calculated, and a multivariate analysis was used to test the proposition that the individual scores on these factors vary with the status of being an inhabitant of the housing projects. The results, which are presented in table 6, are highly significant, and indicate that the subjects living in housing projects are more numbed than the control group. Significant differences have been found between the two groups on other test variables as well, but their

Table 5

Factor analysis, Numbing Profile Variables, Experimental Group (N=90

Pattern Matrix

	Factor 1	Factor 2	Factor 3
A	.51453	.07201	-.07752
CPRI	-.01992	.07546	.65136
FC	-.60561	-.22808	-.31114
FM	.21869	.89743	-.03264
F	.41148	-.75180	.13674
M	-.64289	.24307	-.03676
P	.06298	-.05102	.74106
PRI	-.01991	-.10169	.54417
R	-.72387	-.27826	-.15799
VIQ	-.63288	.24718	.28826
WW	.70970	-.10008	.35198

Factor Correlation Matrix

	Factor 1	Factor 2	Factor 3
Factor 1	1.00000		
Factor 2	-.08661	1.00000	
Factor 3	.21683	.07370	1.00000

Note: For a listing of variable labels, please see Appendix A

Table 6

Multivariate Analysis, Factor Analysis Variables, All Subjects (N=116)

WITHIN+RESIDUAL Variances and Covariances

	BARREN	CONSTR	PATHOL
BARREN	501.353		
CONSTR	219.636	322.856	
PATHOL	187.589	90.151	162.374

EFFECT .. PROJ

Univariate F-tests with (1,114) D. F.

Variable	Hyp.SS	ErrorSS	Hyp.MS	Error MS	F	Sig.F
BARREN	7336.25	57154.26	7336.25	501.35	14.63	.000
CONSTR	3037.91	36805.54	3037.91	322.86	9.41	.003
PATHOL	2624.09	18510.64	2624.09	162.37	16.16	.000

explanation requires further clarification. I believe the answer lies in the different significance of the severity of social stressors: in the case of those subjects living in housing projects, this variable represents a multiple, ongoing traumatic situation, much more pervasive and unavoidable than in the case of the control group. Thus the quantitative difference in the severity of social stressors score may in fact reflect a significant qualitative difference. Furthermore, "living in the projects" is a complex variable, involving not only a place of residence, but also family history and social status. Kahn (1963) believes that repeated and prolonged traumatic situations lead to a retardation in the development of Ego functions such as the ability to discriminate as applied both to inner and external reality and the ability to cope with self or other directed aggressive impulses, leading ultimately to a "bias" in Ego development: the ability to organize the inner and outer reality lacks the Ego's experience of itself as a coherent entity, as well as its subjective awareness. Herman (1993), believes that repeated and prolonged trauma leads to a "Complex Post Traumatic Stress Syndrome" whose symptoms include somatization, dissociative reactions, affective changes, as well as pathological changes in identity and in interpersonal relations. This explanation is further supported by the fact that, when considering the totality of the subjects, there is a positive correlation between living in the housing project and being numbed ($r = .2808$, $p < .01$, 2-tailed), and also between being

classified as "emotionally disturbed" and living in housing projects ($r = .3464$, $p < .01$, 2-tailed). In fact, a multiple regression with "Emotionally Disturbed" as the dependent variable indicates (see Appendix D) that being numbed and living in the projects are the best predictors, accounting along with depression for 43.2% of the variance (Adjusted R Square = .432, Signif F = .0000).

A comparison between the two groups, using 2-tailed T tests for the significance of differences between means, indicates that subjects living in housing projects are seen as more numbed ($t = 3.84$, $p < .01$), are more likely to be classified as emotionally disturbed ($t = 6.07$, $p < .01$) than learning disabled ($t = -3.20$, $p < .01$), and lead more stressful lives ($t = 3.81$, $p < .01$). Significant differences are also found between test variables: subjects living in projects are more likely to be constricted as suggested by a higher proportion of animal content answers ($t = 2.98$, $p < .01$), and of animal movement determined answers ($t = .307$, $p < .01$), less likely to have a capacity for empathy and introspection as indicated by a lower proportion of human movement determined answers ($t = -3.05$, $p < .01$), more likely to have a poor self image as suggested by a higher score of pathological indicators on the human figure drawing ($t = 2.84$, $p < .01$), and less able to organize their experiences and their inner reality into complex, coherent and self consistent structures, as indicated by the higher number of poorly organized Rorschach answers ($t = 6.10$, $p < .01$). The social implications of

these findings are troubling (to say the least), and will be discussed later.

Outliers

The study identified a number if subjects who, despite having a very high severity of social stressors score, were not rated as numbed and whose test results did not correspond to the "numbing profile". While their life histories are widely divergent, perhaps it is useful to present one short case history:

Anna is a 13 years, 11 month old African-American 8-th grade student, who was tested as part of her triennial evaluation. She is attending the Resource Room program and is receiving counseling. The social history indicates that Anna was born prematurely, after a gestation of 7 months to a 15 year old mother. The recorded birth weight was 2 lb. Anna's mother was shot and killed by her husband when Anna was 4 years old; she witnessed the murder and still has nightmares related to it. After her mother's death, Anna was relegated to the custody of her maternal grandmother together with her younger sister. Three other siblings (cousins) also share the two bedroom apartment. Anna's grandmother is in very poor health, practically bedridden. Being the oldest, Anna has to supervise her younger siblings and to perform household chores. In addition, she also helps the grandmother in daily health and hygiene related activities. Anna has a heart murmur and feels sometimes tired and out of breath. Her father has been recently released from prison, and although

he has not tried to contact Anna, that possibility is a source of anxiety, both for her and the grandmother.

Anna is a petite, well groomed, normally developed, attractive adolescent. She is well related and approached all tasks with a sense of competence, being able to cope well with frustration and to maintain motivation under difficult circumstances. Anna has age appropriate conflicts and interests. She is a good dancer and participates in an after school dance group. In addition she plays in the church band.

Anna's test results indicate average intellectual functioning with above average potential. While there are indicators of anxiety and depression, her Rorschach answers are complex and well organized, indicative of an age appropriate personality development. Her social judgement is age appropriate. Anna's academic skills are also good: her reading is almost on grade level, while her arithmetic skills are very high, reaching the beginning college level. One can readily find in Anna's behavior and attitude the components of hardiness identified by Kobasa (1973): the ability to stay in control of her personal and social life despite extremely difficult circumstances, her commitment to academic and community activities, her ability to accept challenges, as well as her ability to establish a close bond with at least one major caretaker, as indicated in Werner's (1989) and Rutter et al's (1975) longitudinal studies of resilient youngsters.

Five such "outliers" were identified by the study. Their

average numbing score was 1.8 (the minimum score being 1 and the maximum score 5); their average severity of social stressors score was 8.8 (out of a possible maximum score of 9). All five subjects were African-American females, confirming Rutter's (1979) finding that boys are more likely to be damaged by psychosocial stressors, and all five have succeeded in establishing a stable relation with a significant other. By comparison, eight subjects scored the highest possible score on both numbing and the severity of social stressors, namely an average numbing score of 5, and an average severity of social stressors score of 9. Five of them were African-American males, two were Latino females, and one was an African-American female; all had only dysfunctional interpersonal relations. This gender disparity, which mirrors crime statistics, suggests that it may be easier, and more socially acceptable for females to secure a major caretaker, and to maintain a stable relationship, in essence preparing the groundwork to making them more hardy.

Discussion

While it is fair to draw the conclusion that the working hypotheses have been proven and a psychodiagnostic profile of numbing has been identified and validated, several questions arise. Firstly, the correlations and the proportion of variance they explain are rather large for a social science study. Without doubt, the relationship between independent test variables, and an inevitable degree of contamination contribute to magnify the results. Secondly, while the clinicians involved in the study

were unfamiliar with the concept of psychic numbing, they were certainly familiar with the phenomenon of numbing and its psychological effects. For many years, each clinician has observed empirically that the test results obtained from children living in extreme conditions were different from what our training and the published test norms would lead one to expect. To use a simple description, their Rorschach protocols lacked complexity; I used to compare them to "landscape after battle". When introduced to the concept of psychic numbing, the clinicians' reaction was that this theory names and confirms a familiar phenomenon. However, one has to bear in mind that all the subjects of this study have been referred for Special Education assessment, which means that they have a long history of academic failure and\or persistent discipline problems. This represents an additional and significant source of stress. While I believe that the results are generalizable to inner city adolescents, that generalization represents a plausible, but not proven extrapolation of the findings.

A different question concerns the nature of the process identified and validated in this study: is this psychic numbing in the sense used by Lifton? Some differences are readily apparent: Lifton's studies involve an extreme event in the person's past, for example being in a concentration camp or being a prisoner of war, while for the subjects of this study, the extreme life condition is the ongoing reality of their daily lives. Consequently, some aspects of numbing, for example

survivor guilt, are muted, while others like constriction of affect and hopelessness are emphasized. In addition, Lifton's concept of numbing is based on the experiences of people who have had a chance to form adequate object representations, and who later in their life, were the victims of a catastrophic event. He compares numbing to "death in life"- a faustian bargain providing freedom from pain in exchange for the loss of all vitality. Lifton emphasizes an element of choice, of free will in accepting numbing. However, this element of free will is more difficult to identify in the subjects of this study, specially so when considering numbing from longitudinal perspective: By being the numbed children of parents who very likely were themselves numbed, their early interaction with nurturing others may be so dysfunctional as to preclude the adequate development of the ability to symbolically re-create events. Winnicott (1960) described the mother's "protective shield" role: mediating between the infant and the environment, screening out stimuli, modeling affect and even being a source of frustration. Khan (1963) writes that by protecting and modeling, the mother enables the integration of a qualitative organizing component, which later can be identified in the Ego's ability to discriminate and mediate both internal and external demands. In addition, by providing phase adequate frustrations, she supports the development of the ability to tolerate tension and unpleasure. When the mother is numbed, the adequate naming and modeling of affects is replaced by the concrete mirroring of the infant's

emotions (You're angry?! I'm angry back! You hit me? I hit you back!). If nothing exists beyond the concrete, drives and impulses are never subject to repression, deferral, sublimation or symbolization, meaning there is little mediation between need and action. Under such conditions, Ego differentiation, as well as the ability to cope with aggressive impulses are impaired, and generally speaking, the symbolization of affect, or of self representations and object representations is severely limited. In this sense, it is improper to describe the subjects' behavior as regressive, since the primary affects are never fully symbolized or brought under cognitive control. Rather, they are indicative of the low level of Ego development. Due to the poor ability to differentiate affect, feelings are experienced as diffuse and disorganizing. The dynamic of arousal and discharge is also simplified: instead of a situation specific reaction followed by a corresponding action, generalized arousal is followed by a reaction along the path of least resistance, namely anger The normative structures of personality (Ego ideal, superego) are replaced by part objects - objects of identification in the literal sense - that they crave and imitate. This leads to a diminished sense of self: lacking a basis to conceive of themselves as people they do not conceive others as people either. Hence the lack of inner conflict: frustration has replaced anxiety as the signal warning of danger to the integrity of the personality structure; the expression of anger is Ego syntonic and does not trigger the defenses, the

emphasis being on immediate gratification. In effect this is a new type of dynamic process, because the nature of the repressed contents, as well as the normative structures that shape their expressions are different.

Admittedly this is a worst case situation, based on the assumption of severe numbing of the mother and maximum impact of the numbing on mother - child interactions; a more realistic expectation is that the range of numbing in the mothers is matched by a corresponding range of numbing in the children. It should be noted that the above explanation highlights the dynamic of numbing from two different points of view: as a individual, developmental process and as a social, cyclic, self perpetuating phenomenon.

The relation between numbing and violence was not directly addressed by this study, yet it appears plausible that exposure and participation in violence promote numbing. This connection could be described as crosscatalytic: persistent exposure to violence leads to numbing, which in turn facilitates participation in violence by insulating the victimizers against the consequences of their actions. Following the accidental fatal shooting by the police of one of our students in the Gowanus projects, I conducted ad hoc group therapy sessions with the grieving and enraged students. In an informal survey, each of them was able to name at least five persons who have died violently or as the result of drug use. The New York Times (09-28-1994) reported that four murders and 22 shooting incidents

have taken place in the Gowanus projects in the first nine months of 1994. Shooting at night is a common occurrence; as one of the students put it "we learn to duck before we learn to talk". The physical reality of the projects - large, impersonal buildings without distinctive features, out of proportion with their neighborhood of brownstone buildings and tree lined streets, and without a historical connection to it - reinforces the inhabitants sense of isolation. One can gauge the distance from the projects by the security measures taken by liquor stores: the more proximate ones are veritable fortresses of bullet proof glass, perhaps a symbolic expression of societal expectations.

The September 19, 1994, issue of Time magazine had on its cover the portrait of Robert "Yummy" Sandifer, who, a murderer at age 11, was in turn murdered. His mother was a crack addict who resorted to prostitution to support her habit. She has six other children. His father, convicted of drug and weapons charges, left the family. When his mother did not neglect him, she abused him violently. For the last year and a half of his life, Yummy averaged a felony a month. His mother described him as "an average 11 year old" and the policemen, probation officers and psychologists familiar with the case agreed with that characterization. The Cook County public guardian is quoted as saying "we see this 100 times a week".

The crime statistics justify that perception: according to the U.S. Justice Department (The New York Times, 12-01-1994), 55% of all crimes and 64% of all gang related violence committed

against people 12 to 19 years of age are committed by people in the same age group. From 1987 to 1991 the number of juveniles arrested for murder grew by 85% (four time the adult rate), and the arrests for violent crimes rose by 50% (double the adult rate). Federal Bureau of Investigation statistics (The New York Times,12-01-1994) indicate that 1240 blacks under the age of 18 were murdered in 1992, compared to 1103 whites of the same age (note that blacks constitute approximately 12% of the population).

If inner city life conditions cause widespread numbing, as I believe this study proves, the findings raise several disturbing questions.

Numbing and doubling have been identified by Lifton (1976,1979,1986) to be the consequence of having been involved in an extreme life event, such as war or concentration camp, natural or man made cataclysms. However, his findings indicate that when the extreme situation includes both victims and victimizers, numbing and doubling can be detected in both groups, relieving guilt and pain, and insulating the participants from the full impact of the events. While the victimizer, in the widest sense, is a society that allows life conditions to decay to the point of being justifiably considered extreme, one can opt for predatory behavior and become a victimizer. Numbing greatly facilitates this choice, and offers the additional benefit of illusory control; its effects are both pervasive and destructive.

Due to a weakened sense of identity, there is a tendency

to congregate based on teritoriality, ethnicity, etc., in gangs, or more often, in loosely organized "posses". The similarities between "in" members, and the differences with "out" groups are emphasized and rigidly adhered to (a condition Erikson (1968) calls totalism). Indiscriminate violence is then directed towards "out" groups: drive by shootings, sniper fire directed at school children who happen to be on "enemy" territory, setting homeless persons on fire etc. Teenagers engage in ritualistic antisocial behaviors such as car stealing for the sake of making "doughnuts" and "crazy eights"; posses engage in group predatory behavior. Perceived slights - being "dissed"- are met with extreme violence, without any gradation or proportionality of response. A veritable cult of firearms has sprung up, complete with its own slang, which contains expressions that make the use of guns impersonal and attributes intentions to them such as "it wants to buck" - meaning the gun wants to shoot.

The continued contact with luxury, via television and by physical proximity, leads to intense frustration. As indicated previously, frustration has replaced anxiety as the signal of danger to Ego integrity, and requires immediate gratification. In this context, a drug dealer, sporting his weapons, his expensive car and clothes is the epitome of a stable personality, since he can have instant gratification. In order to make actions socially acceptable, the frustration is channelled into a false sense of entitlement. Children kill other children over shearling coats, radios and bicycles, and have children in turn. The widespread

apathy and despair are conducive to drug and alcohol abuse, which in turn create additional incentives for predatory and exploitative behavior.

Rutter(1979) identified six family factors closely associated with child psychiatric disorder: Severe marital discord, low social status, overcrowding, paternal criminality, maternal psychiatric disorder, and being taken into custody by local authorities. The findings also indicate that the presence of only one risk factor does not increase the likelihood of psychiatric disorder; however if two risk factor occurred simultaneously, the risk increased four times, and more than two risk factors raised the chance of psychiatric disorder "several times higher". It seems very likely that children living in housing project are exposed to several of the above risk factors most of the time. Furthermore, Rae-Grant et al. (1989) have found that parental problems are not a predictor of disorder for children age 4 to 11, but they have a significant main effect for the 12 to 16 year age group.

If one is to apply the "psychology of evil" to analyze the situation of youngsters who live in the extreme life conditions of the urban ghetto, several worrisome trends are noticeable: their lives take place in a different reality, governed by different economic and social rules, integrated by a different vision of history, constituting in fact a different symbolic universe than that prevalent in the rest of society. This isolation is not only physical, but cultural and normative as

well. For example, several recent racially polarizing crimes (such as the Crown Heights riots, the Central Park jogger rape, the Tawana Brawley case) were reported completely differently in the independent "Black" press and the mainstream media; each claimed to represent "the truth"and did so for the community it represented. Due to their isolation and to the poorer quality of their schooling, as well as their more limited resources, the skills needed to seek out information independently are more limited, making inner city children more likely to accept others' definition of reality and their stereotypes, specially so when they include an ideology of superiority and revenge, as well as outlets for their rage. Gang membership satisfies the need for a symbolic connection with a transindividual value and belief system.

The fact that inner city life conditions promote numbing in adolescents with learning and behavioral problems is documented in this study, and the effects of transgenerational numbing have been discussed as well. It also appears plausible that the same life conditions facilitate doubling, as illustrated by the stereotype of the organized crime member who is a good family man. Having a "ghetto self" and an alternate, "mainstream" socially adjusted self presents obvious advantages, the only question being which is the prior self and which is the one that emerged through doubling. Finally, because of the racism that still permeates our society, self deception is exceedingly easy: one has only to attribute failure to discrimination in order to

provide a plausible, socially acceptable explanation, consistent with the shared reality and the history of the community.

We can only conclude that this society permits the continuation of conditions in which immoral, destructive and self destructive behavior is likely to emerge, and that both victims and victimizers are affected by it. To quote Dr.Beverly Coleman Miller, who runs a program in Washington for people who have witnessed violent crime: "You work with children exposed to serious levels of violence, both those who commit it and those who are victims of it, and you come to realize that the behavior of many of them reflects a new, awful way of looking at the world. I call it terminally ill behavior. They are convinced that their lives are worthless, and so they are making all the choices of someone who is preparing for death" (The New York Times,12-01-1994).

Conclusions

If the above suppositions are correct, the existence of a large chronically numbed population poses a tremendous challenge for social sciences. Furthermore, if one believes in the concept of social theory as agency, the influencing of social action becomes a necessary moral corollary of this study.

Is numbing avoidable and is it reversible? The first part of the question addresses societal issues. Poverty, racism, unemployment, helplessness, form a vicious cycle; breaking it requires a change in social policy. Unfortunately, the changes in

the political climate make constructive social action unlikely. The emphasis is on punitive rather than preventive measures, and the plethora of recent books such as "The Bell Curve", which link social differences to genetically transmitted differences in intellectual ability, prepare the ground for an ideology of non intervention.

Nevertheless, programs that promote the administration of housing projects by the people who live in them have resulted in dramatically improved life conditions, as well as an increased sense of autonomy and control (Saegert,1989). The initiation of programs setting reachable, realistic goals, and emphasizing individual and community control, thus giving challenge a positive connotation is certainly a promising avenue of intervention. Early family intervention programs, sex education, and the inclusion of parenting skills in the school curriculum may also prove helpful. Changes in the curriculum enhancing the feeling of identity and inclusion, with emphasis on cultural background could also have a positive effect. I am not referring here to ethnocentric revisions, which only fuel the sense of frustration and false entitlement, but rather to programs help confer the individual a sense of continuity and belonging. Finally, exchange programs providing contact with social environments other than the inner city may help connect the individual to mainstream value and belief systems.

The second part of the question is whether numbing, at a personal level is reversible. In view of the complexity and

pervasiveness of its effects, a definitive answer is not possible. Helping a person develop adequate object relations in the place of stunted and dysfunctional ones constitutes therapy in its truest sense, but it does not represent a practical solution. However, I believe that its effects can be counteracted to a certain degree, and "encapsulated", limiting their extent. Early intervention programs preventing aggressive acting out behavior by teaching conflict mediation skills are useful in providing alternatives to violence; programs that use modeling and labeling of emotions, result in better differentiated reactions. Teaching children how to reframe threatening perceptions, restructuring anger inducing thought process may result in an increased awareness of anger and its dynamic, providing options for acceptable behavior. Volunteer programs pairing adult community members with children help in the acquisition of the basic social skills needed to maintain that very important supportive relationship. Involvement in programs fostering a sense of identity and autonomy, rewarding commitment, and setting goals that are reachable, thus giving challenge a positive connotation, may prove successful in enhancing the individual's ability to cope with stress making him in effect more hardy. Most importantly, one has to impart and maintain a sense of hope. While this may prove exceedingly difficult in the present social context, programs that teach goal directed behavior towards realistic expectations are successful in instilling a sense of competence and opportunity. Changing

community culture so that success in mainstream society is not seen as a betrayal, but rather as an asset, is also very important, since it would provide a social context for maintaining hope, as well as a reward for excellence.

If our society cannot or will not break this cycle of alienation, the consequences will threaten the very core of our democratic value system. I can find no rational alternative to (cautious) optimism. There were after all, as George Steiner wrote (1987), "wolves in the streets of cities in the center of Europe at the close of the Thirty Years War. If man is a rabid creature, he is also a tenacious one. There are living Jews and Hiroshima is a booming city".

Appendix A

Variable Labels and Descriptions

Demographic Variables

ML - Male

FL - Female

B - Black

L - Hispanic

AGE - Subject's age (in month)

INT - Whether the subject comes from an intact family

PROJ - Whether the subject lives in a housing project

Draw A Person Test Variables

D1 - Length of Person drawing in inches

D2 - Width of Person drawing in inches (small dimensions of the person drawing are associated with a poor self image)

P - Score of pathological indicators

Diagnostic Outcome Variables

LD - Subject diagnosed as learning disabled

EH - Subject diagnosed as emotionally disturbed

Intelligence Test Variables

VIQ - Verbal IQ score on the WISC-R

PIQ - Performance IQ score on the WISC-R (this group of variables are deemed important to self image and were included in order to control for their effect)

Rorschach Test Variables

R - Number of Rorschach answers

WW - proportion of weak, unstructured "Whole" answers, an indicator of poor Ego strength and shallow, superficial adjustment. WW is a qualitative variable, representing a judgement as to the degree of organization of the answers.

Determinant Variables (indicators of what has determined the answer)

F - Form determined answers as a proportion of R (a high percentage of F answers indicates constriction and excessive control)

FC - Proportion of answers integrating form and color, with form being dominant -an indicator of emotional control

M - Proportion of human movement determined answers an indicator of the ability for empathy and inner complexity

FM - Proportion of animal movement determined answers which indicate repression and a reduced capacity for empathy

CCF - Proportion of color determined answers obtained by adding the C and CF answers (a high proportion of C and CF answers indicates impulsivity and poor emotional control)

CPRI - Primary color determined answers, mainly an

indicator of depression

VSK - Proportion of shading determined answers (a high number of these answers indicates excessive anxiety)

S - Proportion of white space determined answers (a high proportion of these answers indicates suspiciousness and oppositionalism)

Content Variables (indicate the content categories of the answers)

A - Proportion of animal content answers (too high a proportion indicates avoidance of human content)

H - Proportion of human content answers (too low a proportion indicates avoidance; one too high over involvement)

ANAT - Proportion of anatomical content answers

PRI - Proportion of primary process indicator answers (the above are indicators of pathology)

POP - Proportion of popular answers (an indicator of social adjustment and reality testing). This last variable represents a judgement on the adequacy of the content variables.

In addition the following variables were included:

N - subjective numbing score

SOC - rated severity of life stressors

Appendix B

Descriptive Statistics, Experimental Group (N=90)

Variable	Mean	Std Dev	Minimum	Maximum	Valid N	Label
A	58.66	19.40	0	99	90	
AGE	165.90	12.78	127	195	90	
ANAT	2.82	6.01	0	30	90	
B	.67	.47	0	1	90	
CCF	5.53	8.77	0	40	90	
CPRI	2.99	4.90	0	22	90	
D1	4.44	1.82	1.0	9.9	90	
D2	2.38	1.25	.5	7.0	90	
ED	.43	.50	0	1	90	
FL	.30	.46	0	1	90	
FC	3.08	5.82	0	28	90	
FM	26.29	19.10	0	90	90	
F	53.58	19.68	9	99	90	
H	23.38	14.58	0	90	90	
INT	.32	.47	0	1	90	
L	.34	.48	0	1	90	
LD	.62	.49	0	1	90	
ML	.69	.47	0	1	90	
M	8.94	10.52	0	50	90	

NUMB	3.16	1.30	1	5	90
P	5.49	1.92	1	9	90
PIQ	90.44	11.06	65	117	90
POP	35.26	15.26	3	73	90
PRI	7.96	8.43	0	42	90
R	12.32	4.92	1	37	90
S	7.83	8.92	0	33	90
SOC	6.04	2.07	2	9	90
VIQ	85.36	8.69	64	107	90
VSK	8.28	7.29	0	26	90
WW	50.87	21.11	8	99	90

Note: For variable labels, please see Appendix A. Subjects' age is expressed in months.

Appendix C

Descriptive Statistics, Control Group (N=26)

Variable	Mean	Std Dev	Minimum	Maximum	Valid N	Label
A	47.38	16.26	25	92	26	
AGE	162.50	16.44	131	203	26	
ANAT	3.15	4.63	0	14	26	
B	.38	.50	0	1	26	
CCF	6.31	7.77	0	27	26	
CPRI	3.12	4.49	0	11	26	
D1	3.96	1.30	2.0	7.0	26	
D2	1.83	.84	1.0	3.5	26	
ED	.04	.20	0	1	26	
FL	.23	.43	0	1	26	
FC	5.65	8.37	0	30	26	
FM	17.81	9.65	0	40	26	
F	49.58	15.59	10	78	26	
H	26.35	11.22	8	50	26	
INT	.38	.50	0	1	26	
L	.46	.51	0	1	26	
LD	.88	.33	0	1	26	
ML	.77	.43	0	1	26	
M	15.08	8.55	0	30	26	
NUMB	2.31	.88	1	4	26	

P	4.42	1.55	2	7	26
PIQ	93.38	15.50	63	121	26
POP	32.62	13.96	7	62	26
PRI	5.19	7.45	0	33	26
R	12.38	3.07	8	20	26
S	7.58	5.87	0	20	26
SOC	4.54	1.68	2	8	26
VIQ	88.69	16.83	59	118	26
VSK	6.42	6.18	0	20	26
WW	31.15	11.94	10	50	26

Note: For Variable labels, please see Appendix A. Subjects' age is expressed in months.

Appendix D

Multiple Stepwise Regression, Dependent Variable "Emotionally Disturbed, All Subjects (N=116)

Multiple R	.66867
R Square	.44711
Adjusted R Square	.43230
Standard Error	.35968

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	11.71747	3.90582
Residual	112	14.48942	.12937

F = 30.19115 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
CPRI	.016359	.007290	.164248	2.244	.0268
NUMB	.198173	.028789	.524909	6.884	.0000
PROJ	.228917	.083800	.200840	2.732	.0073
(Constant)	-.469825	.095187		-4.936	.0000

Note: For a listing of variable labels, please see appendix A.

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