LOCUS OF CONTROL AND ADJUSTMENT IN ADULT SURVIVORS OF CHILDHOOD SEXUAL ABUSE

By

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SEXUAL ABUSE

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In recent years adjustment issues associated with childhood sexual abuse as well as numerous other traumatic life events have emerged as integral aspects of human development. Indeed, a generous amount of literature on the negative consequences of childhood sexual abuse exists. Studies incorporating clinical and nonclinical samples of children and adults propose that many victims of abuse experience numerous consequences whereas other victims do not. The consequences of abuse often appear as cognitive, affective, and behavioral difficulties that may persist over long periods of time with some victims (Bagley & Ramsey, 1986; Briere, 1987; Conte & Berliner, 1987).

Much of the research conducted on the relationship between adjustment and childhood sexual abuse comes from specific theoretical models of trauma and adjustment (for review see Hazzard, 1993). Such models as the cognitive adaption model, a social learning/behavioral model, 'Traumagenic Dynamics' model, a behavioral model, an attributional model, and a control orientations model propose to explain the relationship between adjustment and the experience of abuse.

The purpose of this project was to investigate the

locus of control seen in women with a history of childhood sexual abuse and to examine the role that locus of control may play in predicting the adjustment of adult survivors. Because much of the literature on adjustment and traumatic life events contains elements of control as a primary issue, it was proposed here that locus of control is a possible explanation for levels of adjustment in childhood sexual abuse survivors. Before the specific hypotheses of this study are discussed, however, a review of the literature is offered on the incidence and prevalence of childhood sexual abuse, effects of abuse, and adjustment issues.

Childhood Sexual Abuse

In recent years a significant amount of research has been generated on childhood sexual abuse. A growing body of literature proposes that there are immediate effects of childhood sexual abuse and long-term effects in adulthood. In addition, studies have suggested that childhood sexual abuse is quite prevalent.

Studies of adult survivors of childhood sexual abuse have identified prevalence rates ranging from 6% to 62% (Peters, Wyatt, & Finkelhor, 1986). In part, this wide range may be due to variations in the reporting and documentation of cases of childhood sexual abuse. Other differences appear to be related to methodological factors

in the studies conducted (e.g., population sampled, definition of childhood sexual abuse employed, and assessment method employed). Taken together, however, it generally appears that approximately 25% to 35% of all women have experienced childhood sexual abuse at some point in their lives (Peters et al., 1986).

Possible Effects of Childhood Sexual Abuse

Research on the immediate effects of sexual victimization during childhood reveals several consequences. Anger and hostility (Gomes-Schwartz, Horowitz, & Sauzier, 1985), sleeping and eating disturbances (Anderson, Bach, & Griffith, 1981), fears and phobias (Gomes-Schwartz, Horowitz, & Sauzier, 1985), inappropriate sexual behavior (White, Halpin, Strom, & Santilli, 1988), and guilt, shame, and depression (Anderson et al., 1981) are all initial symptoms often seen in sexual abuse victims. However, Browne and Finkelhor (1986) caution that all victims do not experience these or similar symptoms.

Similarly, Browne and Finkelhor provide the same caution for investigating long-term adjustment. In effect, although many long-term symptoms do manifest, not all victims experience long-term difficulties. Adjustment issues that do arise have been well researched and are adequately consistent across studies.

For example, Badley and Ramsey's (1986) community study

found the occurrence of depression in women reporting childhood sexual abuse to be nearly twice that seen in nonabused women. Results indicated that 17% of the victims experienced depression compared to only 9% of the nonvictims. In a college sample, Sedney and Brooks (1984) found women with a history of sexual abuse were more likely to display depression than controls.

Anxiety is another frequently reported long-term effect of childhood sexual abuse. Victims in Sedney and Brooks' (1984) study reported sleeping difficulties and symptoms such as nightmares, nervousness, and anxiety. Increased levels of fear and the occurrence of phobic disorders have been found in abuse victims as well (Jehu, Gazan, & Klassen, 1985; Becker, Skinner, & Abel, 1983).

In addition to depression and anxiety, a negative self-image has emerged as another long-term effect of childhood sexual abuse (Jehu et al., 1985; Tsai & Wagner, 1978). In Courtois' (1979) study, 87% of the incest victims reported that their sense of self had been moderately to severely affected by the abuse experience. Similarly, in a clinical sample, Herman (1981) found 60% of the victims in her study indicated a negative self-image.

Victims of childhood sexual abuse have also been found to experience suicidal ideation and attempts at self-harm at higher rates than nonvictims. Herman (1981) found victims

to be more likely than nonvictims to attempt suicide. In a college sample, Sedney and Brooks report a suicide rate of 16% for victims as compared to only 6% of a nonvictim control group. In congruence with such findings are those of Briere and Runtz (1986), which indicate that victims of abuse are more likely to report at least one suicide attempt and more suicidal ideation than nonvictims.

Sexual abuse has also been found to have long-term effects on interpersonal relationships. Harter, Alexander, and Neimeyer (1988) report that victims often experience feelings of social isolation in adulthood. Similar affective responses of social isolation and alienation were reported by 73% of the victims in Courtois' (1979) community sample. In studies using college populations, when compared to nonvictims, abuse victims tend to report more difficulties with social adjustment (Jackson, Calhoun, Amick, Maddever, & Habif, 1990).

In addition, victims often report difficulties relating to and trusting others. In a clinical sample, 64% of victims indicated the existence of conflict with, or fear of, a husband or sexual partner (Meiselman, 1978). Jehu et al. (1985) found 75% of the victims in their study experienced a fear of intimate relationships.

There is also evidence suggesting that women with a history of sexual abuse are vulnerable to revictimization

and may be more likely to be a part of a victimizing family later in life. Research indicates that revictimization occurs in the form of nonconsensual sexual activities (e.g., rape) (Fromuth, 1986) and physical abuse (Russell, 1986). Furthermore, abused mothers appear to be more likely to have children who also experience physical and/or emotional abuse. Goodwin, McCarthy, and Divasto (1981) report that 24% of the mothers in their sample of child abusing families reported a history of incest whereas only 3% of mothers in a nonabusive control group reported a history of incest.

Sexual difficulties have also been reported as long-term effects of childhood sexual abuse. Becker, Skinner, Abel, and Cichon (1986) found 58.6% of abuse victims reported sexual dysfunction and 71% of these individuals related the dysfunction to their childhood abuse experience. Of the incest victims in Herman's (1981) study, 55% reported having sexual problems whereas Meiselman (1978) found 87% of the victims in her study indicated serious sexual adjustment difficulties later in life. In addition, a lower sexual self-esteem in victims has been reported by Finkelhor (1979) in a nonclinical sample, whereas indications of sexual guilt, sexual anxiety, dissatisfaction with sexual relationships, and phobic reactions to sex have been noted in clinical samples (Kaplan, Fyer, & Novick, 1982; Langmade, 1983).

Findings from Watkins (1990) study of sexually victimized children and adults provides a good example of the types of long-term difficulties associated with abuse. He reports a vulnerability in victims for major depression, mania, drug abuse and dependence, phobias, panic disorder, and obsessive-compulsive disorder.

Theoretical Models of Abuse Effects

Past and current research suggests that childhood sexual abuse is associated with both immediate and long-term adjustment difficulties. Many researchers have proposed to explain, from a specific theoretical perspective, how sexual abuse and other traumatic events may affect victims' life adjustment. Such perspectives include, but are not limited to, the cognitive adaptation model, a social learning/behavioral model, 'Traumagenic Dynamics' model, a behavioral model, an attributional model, and a control orientations model.

Cognitive Model

One example of a cognitive perspective is Taylor's (1983) theory of cognitive adaptation to threatening events. This theory holds that the effects of abuse are subject to an individual's successful search for meaning in the traumatic event. A successful search for meaning results in regaining a sense of mastery over the event and the

environment in general and in an enhancement of self-esteem. Taylor's theory is supported by Drauker (1989) who found that the victims of sexual abuse who were able to gain a sense of mastery over the event and environment experienced decreased amounts of depression.

Also from a cognitive perspective, Janoff-Bulman and Frieze (1983) suggest that other adjustment difficulties can occur on a cognitive level. They propose that individuals have "three basic assumptions about the world: a belief in personal invulnerability, a perception of the world as meaningful and predictable, and a positive self-concept" (Berliner & Wheeler, 1987, p.421). The abuse experience can destroy these assumptions and leave the victim with difficulties developing trust and intimacy in relationships, lower self-esteem and self-efficacy, feelings of betrayal, and a sense of powerlessness in the environment.

Social Learning Model

It has also been suggested that post-abuse adjustment difficulties occur by way of "maladaptive social behaviors, beliefs, and attitudes that abuse victims learn from the abuse experience and the adaptive beliefs, behaviors, and attitudes they fail to learn" (Berliner & Wheeler, 1987, p.420). According to the social learning model, much of what a child learns from perpetration is mediated through social learning processes (Bandura, 1969, 1977). In effect,

the perpetrator's behavior can be thought of as a form of learned aggression that is reinforced by sexual gratification. Through the perpetrator's modeling, instruction, reinforcement, threats, and punishment, childhood victims learn a repertoire of sexual behaviors and experiences prior to developing the necessary cognitive, emotional, and social capabilities to regulate their own sexuality. Subtle discriminations based on the unique circumstance of sexual abuse may be learned that manipulate the child's perspective of how sexual behaviors are used to obtain reinforcement and avoid punishment. Thus, the premature exposure to distorted sexualization can lead to disinhibition of the child's expression of sexual behaviors, which, in turn, can lead to additional revictimization, victimization of other children, and long-term sexual dysfunction (for review see Berliner & Wheeler, 1987).

Social learning models also consider elements of a classical conditioning paradigm when explaining the effects of childhood sexual abuse. Whereas sexual abuse typically is perceived negatively by most victims, the physical stimulation occurring during abuse can be pleasurable for some victims. Similarly, many victims are told by the perpetrator that they are special, cared for, and loved in the context of abuse. In effect, through classical conditioning the abusive situation becomes associated with

positive factors (including physical and emotional closeness) (Tsai, Feldman-Summers, & Edgar, 1979). The victim therefore comes to view abusive situations as an avenue by which to gain acceptance, develop intimacy, and experience a sexual release.

By the same token, the behavioral perspective holds that an abuse experience can also lead to sexual and relationship difficulties. Victims often experience negative emotions such as fear, anxiety, shame, and anger in the context of abuse. It is proposed that these negative emotions become classically associated with close, personal relationships (e.g., the relationship with the perpetrating father). Furthermore, it is theorized that these negative responses can become generalized to sexual encounters and intimate relationships later in life.

'Traumagenic Dynamics' Model

Another explanation for sexual abuse symptomatology is the coping/mediational model of traumagenic dynamics (Finkelhor & Browne, 1988). Finkelhor and Browne propose that sexual abuse can manipulate a child's cognitive and affective perceptions of the environment. The altered orientation leads to dysfunctions related to four disturbances: traumatic sexualization, stigmatization, betrayal, and powerlessness. Traumatic sexualization is "the process by which a child's sexuality is shaped in

developmentally inappropriate and interpersonally dysfunctional ways" (p.277). Betrayal refers to the "dynamic in which children discover that someone on whom they were vitally dependent has caused them harm" (p.278). Powerlessness or disempowerment, is "the process in which the child's will, desires, and sense of efficacy are continually contravened" (p. 278). Stigmatization refers to "the negative connotations, (e.g., badness, shame and guilt) that are communicated to the child around experiences of molestation that then become incorporated into the child's self-image" (p.279).

Finkelhor and Browne propose that disturbances among the four dynamics can lead to adjustment difficulties later in life. For example, traumatic sexualization may lead to anxiety and self-esteem difficulties associated with sexuality as well as a vulnerability for at-risk behaviors such as promiscuity. Stigmatization may play a role in the development of "guilt, poor self-esteem, and social isolation" (p.280). Betrayal may be related to depression, anxiety, and dependency. Finally, powerlessness may lead to a damaged sense of self and anxiety.

Attributional Models

Abramson, Seligman, and Teasdale (1978) propose a reformulated model of learned helplessness theory which attempts to account for depression resulting from negative

life events. There is evidence that this learned helplessness theory may also be applicable to understanding how childhood sexual abuse may affect a woman's long-term adjustment. The reformulated model describes attributional dimensions characteristic of human helplessness. According to Abramson et al.'s hypothesis, helplessness is a product of certain attributions that people make when faced with an uncontrollable event. The reformulated helplessness hypothesis describes three dimensions in which attributions of control and/or causality are made. These three dimensions are internal-external, global-specific, and stable-unstable. Abramson et al. suggest that when faced with negative events over which a lack of control is experienced, individuals may develop internal, stable, and global attributions for negative events. Research on the learned helplessness model has resulted in an attributional theory related to depression.

Seligman, Abramson, Semmel, and von Baeyer originally reported the existence of a depressive attributional style in 1979. Seligman et al. began categorizing the depressive style by restating part of the reformulated model of helplessness (Abramson, Seligman, & Teasdale, 1978) which holds that attributing a lack of control over an event to internal factors (e.g., the self) leads to a lower self-esteem. Making an attribution to external factors (e.g.,

the environment) does not lead to similar results. Second, making attributions of uncontrollability to stable factors appears to lead to helplessness. Finally, attributing a lack of control to global factors results in a wide-spread generalization of helplessness across situational variables.

Thus, Seligman et al. assert that internal, stable, and global attributions about events with negative outcomes constitutes a depressive attributional style. Furthermore, although not explicitly a part of the depressive attributional style hypothesis, Seligman et al. suggest that depressed individuals are in turn more likely to attribute events with positive outcomes to external, unstable, and specific factors.

Support for the attributional perspective as it relates to childhood sexual abuse comes from Gold (1986) who reports evidence for a depressive attributional style of victims having adjustment difficulties later in life. Gold found distinct differences in control orientations between victims and non-victims. She reports that female sexual abuse victims who reported psychological distress and low self-esteem tended to have a more internal, stable, global attributional style for negative events than nonvictims. Specifically, victims were found to attribute the outcome of negative events to their character and personal behavior and the outcome of positive events to external factors.

Control Models

The general construct of control, including the specific construct of locus of control, has also been theorized to effect adjustment. Furthermore, such models may be applied to the relationship between childhood sexual abuse and later adjustment. Burger (1989) suggests that the research findings in the area of control form a pattern. It has been posited that a perception of controllability over an event or set of events is a positive experience whereas perceiving an event as uncontrollable is associated with more negative consequences. A general assumption seems to be that perceived personal control leads to stress reduction and that the sense of having no control is more stress inducing (Folkman, 1984). Glass and Singer (1972) offer support for the latter. They found that personal control over life events leads to better coping in stressful situations. Peterson and Seligman (1984) found depression to be characteristic of individuals perceiving a lack of control over the environment.

Making the proposition that maintaining control over the events in one's life is, on the average, a positive experience, is certainly not new to the psychological community. For example, Adler (1930) proposed that human beings have a general tendency to "strive for superiority."

Accordingly, maintaining personal control was viewed by

Adler as an integral component in the "strive for superiority." In addition, White (1959) argued that individuals are motivated to gain a sense of mastery over the environment by seeking out and engaging in, challenging life tasks. Success in gaining mastery was posited to enhance an individuals general sense of competency. The latter is generally assumed by most to be a positive experience.

According to the literature a perception of personal control appears more often than not to be a positive commodity related to many aspects of behavior. Literature in past and recent years suggests that there is indeed a relationship between control and adjustment (e.g., depression and anxiety). Many of the control oriented schools of thought propose that the control construct plays a key role in the relationship between life events and one's perceptions of the self and the environment.

As with other theoretical models, some support exists for the importance of control in understanding the effects of childhood sexual abuse. The purpose of this study is to examine this relationship specifically with the locus of control construct. Before thoroughly reviewing the literature on childhood sexual abuse and control, it is pertinent to present research on the general construct of locus of control.

Locus of Control

Rotter (1966) submitted the locus of control construct out of social learning theory. Locus of control can be broadly defined as a generalized expectancy of reinforcement. Individual differences are said to occur on the basis of the degree to which a person views the outcome of events as contingent on his/her behavior. Specifically, when the reinforcement or outcome of an event, whether positive or negative, is perceived by an individual as not contingent on his or her behavior, but rather as the result of luck, fate, chance, or powerful others, the person is said to have an external locus of control. If the individual perceives the events as contingent on his/her behavior or his/her own relatively permanent characteristics, the individual is described as having an internal locus of control.

Rotter (1975, 1992) submitted that generalized control expectancies have their greatest influence when the situation is novel or ambiguous. In effect, locus of control seems to be most operational when there is a lack of clarity in the environment and in the situational cues regarding the nature of an event's outcome. A basic tenant of the locus of control construct is that a control belief is founded on the expectancy of an outcome. The expectancy

comes to form a generalized gradient across situations. Rotter (1989) reports that locus of control follows a social learning theory assumption which holds that behavior is different in different situations, but that there is a gradient of generalization from one situation to another. The generalization leads to a control orientation that comes to be a relatively stable characteristic of the individual that is often described in terms of personality traits.

Indeed, research on locus of control as a personality variable suggests that there are certain behavioral differences between internal and external control-oriented individuals. Compared to externals, internals appear to be more likely to take responsibility for their personal health and well-being by presenting a greater awareness of health issues and conditions, and internals are more likely to engage in physically adaptive behavior as compared to externals (Strickland, 1978). Strickland reports that such behavior results in the internal individual being less likely to suffer physical and psychological dysfunctions. Other researchers have found alcoholics to be more external than control subjects (Naditch, 1975; Nowicki & Hopper, 1974) and there are even results which suggest that internal control oriented alcoholics engage in less maladaptive behavior than external alcoholics (Donavan & O'Leary, 1975; Pryer & Distefano, 1977).

In addition to its use as a personality trait, Carlisle-Frank (1992) suggests that there may be a situational quality of locus of control within an internal or external personality. According to Carlisle-Frank, an individual may have a locus of control for general life events that is different for certain health behaviors. She further suggests that individuals may have an external orientation when they engage in risky health behaviors such as smoking and alcohol and drug abuse but may be internal in other health related and life areas. Carlisle-Frank also contends that the latter results because of "learned externality." Individuals attempt to discontinue health damaging behaviors but may not be successful. The conception of failing becomes too stress inducing and the individual learns to perceive the event as outside of his/her control and therefore becomes external in regards to health damaging behavior.

Rotter's theory holds that although there are situational aspects of control, an individual's locus of control is based on a generalized gradient of expectancy and it is this gradient that substantiates locus of control's quality as a personality variable. Phare (1978) offers a summation with regard to this. Phare suggests that on the average, in a responsive environment, the internal individual appears to be one who actively engages and comes

to grips with outcomes of events in the environment, is resistant to social pressure, and is motivated to pursue ambitious goals, whereas the external person is less likely to demonstrate ambitious behavior and to cope with unpleasant events effectively.

Locus of Control and Adjustment

Adjustment to unpleasant life circumstances has often been explored using the locus of control construct. Indeed, Strickland (1978) suggests that although the relationship between locus of control and adjustment is not without complexities, it does appear that reports of life contentment are more common in individuals with an internal locus of control whereas psychological difficulties are more common in the external person. Much of the research on locus of control and adjustment suggests that, in general, internal individuals tend to cope differently than externals and therefore appear to have less adjustment difficulties in response to traumatic life events. This literature is reviewed below.

The relationship between locus of control and adjustment has been used by many researchers investigating mental health issues. It has been found that individuals with an internal locus of control are more likely to seek relevant information when confronted with disease or health

problems and are more likely to be active in preventive behaviors, such as maintaining healthy dietary habits and scheduling physical examinations, as compared to individuals with an external locus of control (Taylor & Cooper, 1989). Other researchers have reported similar results more specific to adjustment.

For example, in sample of battered and non-battered women, Feldman (1983) examined personality differences and the role of locus of control. She found little differences in personality type between victims and non-victims. However, when separate analyses were conducted for differences between victims who continued involvement in violent relationships and women who discontinued the relationships, she found women who stayed in the abusive environment were more likely to exhibit an external locus of control.

Further evidence for the relationship between locus of control and adjustment is put forth by Anderson (1977). He studied businessmen who were restoring their property in the aftermath of a severe flood. It was found that internals were more likely than externals to utilize task-centered coping strategies and fewer emotion-centered strategies. Anderson reported that at the beginning of restoration externals were more stressed than internals. Internals engaged in task-centered coping strategies more and were

more well adjusted than externals at a 2 1/2 year follow-up. Of notable interest, Anderson found that internals whose adjustment improved from the initial assessment increased in their internality and externals whose adjustment was poorer at the follow-up became more external.

Poll and Kaplan De-Nour (1980) report results in support of Anderson's findings by investigating the relationship between locus of control, as a mediating variable, and levels of adjustment in response to critical life events. Specifically, Poll and Kaplan examined locus of control in patients undergoing treatment for chronic hemodialysis. Findings indicated that internals as compared to externals were more likely to comply with dietary regulations, participate in vocational rehabilitation, and have an acceptance of the illness. Furthermore, Poll and Kaplan De-Nour report that internals experienced less distress than externals and tended to achieve better psychological outcomes.

In a meta-analytic study, Benassi, Dufour, and Sweeney (1988) investigated the orientation of control and depression. Results suggest that individuals with an external locus of control are more susceptible to experiencing depression than internals. Benassi et al. found that although depressed individuals have a general tendency to perceive outcomes of events as outside of their

control, they also tend to blame themselves for failure.

Other researchers have reported similar findings on measures of adjustment. Kilman, Laval, and Wanlass (1978) found that externals reported a more difficult adjustment to unspecified traumatic events two years after the event occurred. Denney and Frisch (1981) suggest that locus of control plays a role as a mediator between stressful events and their impact on mental and physical well-being. Denney and Frisch report that external subjects tend to experience more symptomatology in response to life events than internals. Furthermore, Kobasa, Maddi, and Kahn (1982), report that an internal locus of control acts as a buffer against the effects of life stress on psychological and physical illness. The relationship between mental health and locus of control has generated a significant amount of research in the past few decades.

Hutner and Locke (1984) investigated health locus of control as a moderator variable between life stress and psychopathology. They hypothesized that undesirable events are correlated with psychological symptoms for individuals with an external health locus of control. Furthermore, it was hypothesized that when undesirable events are placed under personal control then there will not be significant correlations with psychological symptoms for internal or external individuals. Hutner and Locke found the

undesirable events to be significantly correlated with depressive symptomatology and anxiety only for the subjects with an external locus of control. The external subjects presented psychological symptoms regardless of whether or not control over the event was present.

The implications of Hutner and Locke's findings for adjustment offer strong support for the role of locus of control as a generalized expectancy of reinforcement. An individual's locus of control may be a more accurate predictor of future adjustment following stressful life events rather than a situation-specific perception of control.

Nowack and Sassenrath (1980) investigated the relationship between coronary-prone behavior, locus of control, and anxiety. Subjects were assessed for anxiety rating, Type A/B coronary-prone behavior, and locus of control. They found that Type A individuals with an external locus of control had ratings of anxiety significantly higher than Type A individuals with an internal locus of control and Type B individuals in general. In a review of the literature on the stress-prone personality in an organizational/occupational context, Taylor and Cooper (1989) support Nowack and Sassenrath's findings and add that, although extreme measures of internality and externality are both considered maladaptive,

low-risk individuals tend to have an internal locus of control.

As noted earlier, Taylor and Cooper (1989) suggest that internal individuals are more likely than externals to seek medical treatment and relevant information on both a preventive and remedial level. It has also been mentioned that external individuals are more passive in their responses to stressful life situations and tend to be more vulnerable to depression and anxiety. Further, the literature suggests that an external pattern of behavior, as described above, is more associated with adjustment difficulties than internal behavior.

Locus of Control and Childhood Sexual Abuse

There is currently an ample amount of literature on the relationship between locus of control and adjustment in general. Further, the relationship of childhood sexual abuse to later adjustment problems has been well documented by numerous researchers. However, there appears to be a paucity of research examining the locus of control variable and its relationship with childhood sexual abuse. Despite the lack of information on locus of control, theorists and researchers alike have examined control as a general construct in relation to childhood sexual abuse. Their findings can be used to speculate on the role locus of

control plays when victims cope with sexual abuse.

For example, Jehu (1988) proposes a theory of adult adjustment and childhood sexual abuse, and suggests that the abuse experience often weakens the coping abilities of the victim. In turn, the victim may come to perceive their coping difficulties as a pervasive effect of the victimization. According to Jehu, states of depression often ensue. Contributing to the depressive affect are feelings of a lack of control over the self and environment and a poor sense of self-efficacy. Jehu appears to be describing cognitions characteristic of an external locus of control. However, at best, tentative inferences toward locus of control, as a measure of generalized expectancies of reinforcement, can be made from Jehu's study because locus of control was not the specific construct being described.

In an article describing control in adult victims of childhood sexual abuse, McCann, Pearlman, Sakheim, and Abrahamson (1988), propose a relationship between control and adjustment. McCann et. al suggest that experiencing a lack of control over the childhood perpetration may alter an individual's perception of control over events in the future. The victim is often left believing that they are powerless to affect their environment. Again, such a perception of control is characteristically external.

In addition to such theoretical writing, a few empirical studies have examined the role of control in childhood sexual abuse victim's adjustment. The locus of control construct has been used by Valentine and Feinauer (1993) in a study on resiliency in adult survivors of childhood sexual abuse. The women who served as participants in this study displayed, on the average, a high level of adjustment. Furthermore, the majority of the victims were found to have an internal locus of control. During interview sessions, victims reported that their sense of personal control over life events in general enabled them to accomplish such achievements as obtaining a college education, maintaining satisfying careers, and holding stable and intimate interpersonal relationships. In this qualitative study, Valentine and Feinauer offer an exhaustive illustration of the well adjusted victim and provide information which suggest that locus of control may be an important construct in understanding successful coping in childhood sexual abuse survivors.

However, in reviewing Valentine and Feinauer's study, some weaknesses should be noted. For example, Valentine and Feinauer fail to describe the instrument used to identify locus of control. Thus, it is impossible to discern the reliability of the assessment of control and validity of the results. Furthermore, data on victims with a low level of

adjustment are not made readily available. The reasons for this are not clear.

Using a sample of college women, Cohen (1994) also investigated the role of control in the later adjustment of childhood sexual abuse victims. Specifically, adult eating disorders were examined. Cohen found that victims, as compared with nonvictims, reported an overall greater level of maladjustment characteristic of eating disturbances.

The findings further suggest that the existence of some types of control are correlated with eating disturbances. Control over one's life in general either currently or at the time of abuse emerged as strong predictors of the level of eating disturbances in victims. Victims perceiving a lack of control over their lives in general indicated greater levels of eating disorders than did victims with a higher level of perceived personal control.

Although Cohen presents a relationship between control and adjustment issues, such as eating disturbances, there are limitations which prevent drawing conclusions regarding locus of control. First, information on control was obtained with seven, individual items. These items were examined individually as measures of different types of control. Locus of control was not measured as a personality trait and no information is presented on the reliability of the items used. It is unclear, therefore, whether the

control construct here was well operationalized.

In a college sample, Fromuth (1983) also examined the relationship between locus of control and childhood sexual abuse. She found that a history of abuse was not significantly related to locus of control. However, a significant weakness of Fromuth's study is that it apparently did not assess the relationship between locus of control and adjustment. Further, similar to Cohen (1993), Fromuth used a small number of items to measure control (i.e., four items). Neither study operationally defined control or described it in terms of content. Again, there was a lack of information on the measure which prevented the reader from determining whether or not the control instrument was a reliable and valid measure. Thus, it is difficult to interpret the meaningfulness of such results.

A review of the literature on locus of control and childhood sexual abuse reveals several limitations of the current research. First, many studies do not address locus of control specifically. Rather, the general construct of control is often used without providing an operational definition of the variable. The latter results in other complications. For example, in many studies it is not clear if the perception of control over life events is meant as a generalized perception, such as a personality variable, or a perception of control with situation-dependent

characteristics. In the few cases where the relationship between locus of control and sexual abuse has been assessed, measurement tools often appear to be of questionable reliability and validity.

Overall, there is a lack of research investigating whether or not a victimization experience affects the development of an individual's locus of control. In fact, only one empirical study to date has considered this, and this study failed to identify a relationship between victimization and locus of control (Fromuth, 1983). However, as discussed previously, the fact that such a relationship was not identified may be related to several limitations in the study. Clearly there is also a paucity of research on the relationship between locus of control and adjustment to childhood sexual abuse. Although the existing body of literature on the general construct of control suggests the importance of this construct in understanding individuals' adjustment to a variety of stressors, no well controlled studies have been conducted with the experience of childhood sexual abuse. Nevertheless, theoretical writings by researchers in the area of childhood sexual abuse suggest the importance of considering the role of locus of control in understanding survivors' adjustment.

Purpose of the Study

The first purpose of the present study was to examine the locus of control that develops in women with a victimization history and to identify if this style is different from the locus of control that develops in women without such an abuse history. In addition, this study explored whether or not the locus of control that develops is related to the victim's perception of control over the abuse experience. It was hypothesized that, compared to nonvictims, victims would have a more external locus of control, and it was expected that the level of control that victims perceived that they had over the abuse experience would be related to their current locus of control.

A second purpose of the present study was to examine the role of locus of control in predicting the adjustment of adult survivors of childhood sexual abuse. It was hypothesized that not only victimization status, but also locus of control would predict adjustment. Specifically, it was hypothesized that victims would report more problems with depression, anxiety, hostility, and symptom severity than nonvictims. It was also hypothesized that women with an external locus of control would have more adjustment difficulties than women with an internal locus of control. Finally, exploratory analyses were conducted to see if the relationship between locus of control and adjustment was

different for victims as compared to nonvictims. It was expected that survivors of childhood sexual abuse with an external locus of control would have more problems with depression, anxiety, hostility, and symptom severity than women with an external locus of control and no history of sexual abuse.

In order to pursue the above questions and overcome the limitations of previous research, the present study addressed three methodological issues that have been identified here as weaknesses in the current literature. First, assessing a college population, this study used a relatively larger sample size than previous investigations. Second, the present study used well standardized measures of locus of control and general adjustment to empirically test the relationship between locus of control, adjustment, and childhood sexual abuse in adult women. This is only the second available study examining locus of control and adjustment to sexual abuse. Finally, the present investigation used a clear and stringent definition of abuse obtained from a well-accepted measure of abuse history.

Method

Participants

Participants were 365 female undergraduate students. Students who served as subjects were recruited from

psychology classes for a study examining life experiences and adult adjustment. Class credit was received for participation in the study.

For the purposes of this study, childhood sexual abuse was defined as contact abuse only (excluding noncontact experiences such as exhibitionism) as assessed by the Life Experiences Questionnaire (LEQ, described below). In order to be considered sexual abuse, participants' abuse experience had to meet at least one of the following criteria: (1) abuse perpetrated by a relative, (2) greater than five years age difference between the victim and perpetrator, or (3) if less than five year age difference between the victim and perpetrator, threat or force was involved. In addition, women who self-identified an event as sexual abuse were included as victims even when the event did not meet one of the above three criteria.

The women who served as participants in this study ranged in age from 17 to 49 years, with an average age of 20 years (SD=3.98). The majority of these women reported that they had never been married (87.3%), whereas 5.6% were currently married, 2.3% were cohabitating, and 2.8% were either divorced, separated, or widowed. Of these women, 82.3% were Caucasian, 3.3% were African American, 1.1% were Hispanic, 4.1% were Native American, and 7.1% were Asian American. Socio-economic status (SES) was assessed using

father's occupation and education level (Myers & Bean, 1968). SES ranged from lower to upper class, with the average participant falling in the middle class.

Comparison of victims and nonvictims did not yield any significant differences in race or marital status. However, results did show a significant difference between victims and nonvictims on SES, $t(348)=2.25$, $p<.03$, with victims ($M=34.22$, $SD=15.10$) reporting lower SES as compared to nonvictims ($M=29.89$, $SD=14.63$). (Note. Higher SES scores are indicative of lower SES). Analyses also revealed a trend toward differences between victims and nonvictims on participants' age, $t(111.7)=1.83$, $p<.07$, with victims ($M=20.84$, $SD=4.83$) being older than nonvictims ($M=19.79$, $SD=3.67$).

A total of 83 victims were identified from the pool of 365 participants in this study. Of these 83 women, 57.8% experienced genital or nongenital fondling, 16.9% experienced oral/genital contact, 15.7% experienced anal and/or vaginal intercourse, and 9.6% experienced penetration by objects. (Note. Victims were categorized by their most serious experience so that percentages sum to 100). The majority of women reported extrafamilial abuse (59%) as compared to intrafamilial abuse (41%). In regards to the duration of the abuse, 34.1% reported only one incident, 42.7% reported abuse that lasted from one to twelve months,

6.1% reported abuse that lasted from one to two years, and 17.1% reported abuse that lasted longer than two years. Finally, 35.7% of the women reported that force or threats of force were used against them during their victimization experience.

Measures

Life Experiences Questionnaire (LEQ). The LEQ is a self-report instrument which includes questions regarding demographic information, childhood sexual experience, and other potentially traumatic events (e.g., childhood physical abuse). Childhood sexual abuse is assessed by a series of eight questions asking participants whether or not as a child (before age 17), they experienced a variety of sexual experiences. Specific follow-up questions are then asked about such experiences. The experiences in question include someone exposing themselves to the participant, fondling, oral-genital contact, and vaginal and anal intercourse or penetration. Subjects are instructed to exclude any voluntary sexual activities between themselves and a dating partner and any consensual sexual play with a peer as long as the partner, in either case, was no more than five years older than the subject. The criteria described previously are then used to identify women with a history of sexual victimization.

The LEQ is a revised version of the Past Experiences

Questionnaire (PEQ). Reliability data are currently being collected for the LEQ; however, two-week test-retest reliability of the PEQ has been reported previously (Messner, Shipp, Jackson, Edison, Townsley, Burke, Chandler, & Long, 1988) and is good. Reliabilities for items related to characteristics of abuse, including frequency and duration, age of onset of abuse, and time of the most recent abuse, are good ($0.69<\underline{r}<1.00$). Percent agreement on items related to identity of perpetrators and the nature of the sexual abuse is also good (60-100%).

Included in the LEQ is one item which asks women to indicate how much control they believed they had over the experience at the time it occurred. Women rate their amount of perceived control on a 5-point Likert scale ranging from "very little control" (1) to a "great deal of control" (5).

Rotter Internal-External Locus of Control Scale (I-E Scale) (Rotter, 1966). The I-E Scale is a 29 item self-report instrument which contains 23 forced-choice items and six filler items. Each item consists of two alternative choices which are labeled "a" and "b." All forced-choice items contain an internal and external item. The examiner's key reveals the external alternative for each item. The subject's score is obtained by totaling the number of external alternatives chosen. Higher scores indicate a more external locus of control, whereas lower scores indicate a

more internal locus of control. For the purposes of the present study, a median split procedure was used to create internal and external locus of control groups.

Studies on the reliability and validity of the I-E Scale report positive results. Rotter (1966) reported good internal consistency for I-E Scale with a split-half reliability ranging from .65 to .79 across four administrations. Test-retest reliability ranged from .49 to .83 across three administrations whereas discriminant validity was indicated by low correlations (e.g., -.22 to .01) with intellectual measures (Rotter, 1966).

Zerega, Tseng, and Greever (1976) investigated the test-retest reliability and concurrent validity of the I-E Scale with the MacDonald-Tseng Internal-External Locus of Control Scale as a criterion measure. Test-retest reliabilities yielded results ranging from .45 to .87. The stability of the I-E Scale was established over an eight-month time period that resulted in a correlation of .42 with the MacDonald-Tseng Scale.

Symptom Checklist-90-Revised (SCL-90-R) (Derogatis, 1977). The SCL-90-R is a 90 item self-report symptom inventory designed to identify psychological symptoms in psychiatric and medical patients and nonpatient groups. The SCL-90-R is designed to reflect nine primary symptom dimensions: depression, anxiety, phobic anxiety,

somatization, interpersonal sensitivity, obsessive-compulsive behavior, hostility, paranoid ideation, and psychoticism. In addition, it contains three indices of general distress: the global severity index, positive symptom distress index, and positive symptom total.

For the purposes of this study, raw scores on the global severity index, and the depression, anxiety, and hostility subscale scores were used as measures of adjustment. These specific subscales were selected, in addition to the general distress index, on the basis of their previously established relationship with childhood sexual abuse (see literature review).

The SCL-90-R is comparably brief in its administration when compared to other inventories such as the MMPI. The SCL-90-R takes approximately 12 to 15 minutes to complete and is appropriate for use with adults and adolescents age 13 years and older. Examinees are instructed to indicate for each item, "how much that problem has distressed or bothered you during the past seven days including today." Indications are made by choosing the corresponding numerical value from one of five alternatives: not at all (0), a little bit (1), moderately (2), quite a bit (3), and extremely (4).

Research suggests that the SCL-90-R is a reliable and valid inventory. Measures of factor internal consistency

range from alpha coefficients of .77 for Psychoticism to .90 for Depression (Payne, 1985). Payne also found test-retest reliability coefficients, at a one-week interval, ranging from .78 for Hostility to .90 for Phobic Anxiety. In addition, although no data are offered, Pauker (1985) suggests that the SCL-90-R is at comparable levels of concurrent, convergent, discriminant, and construct validity as other symptom inventories.

Procedure

All questionnaire data were obtained in group sessions conducted by psychology graduate students. After informed consent was obtained and confidentiality assured, participants completed the LEQ, I-E Scale, and SCL-90-R. The measures were administered to participants in a random order.

Results

In order to examine the locus of control of women with a victimization experience and to see if this differs from the locus of control of women without a victimization experience, a 2 (victim versus nonvictim) x 2 (internal versus external) $\underline{X}^2$ analysis was conducted. Results indicated that both internal and external locus of control were equally represented across both the victim ($\underline{N}$ internal=38, $\underline{N}$ external=46) and nonvictim ($\underline{N}$ internal=122, $\underline{N}$

external=163) groups, $\underline{X}^2$ (1)=0.16, n.s.

To explore whether or not the locus of control of victims is related to the level of control they perceived they had over the sexual abuse experience, a Pearson's $\underline{r}$ correlation coefficient was conducted. Results failed to demonstrate a significant relationship between these two factors, $\underline{r}$=0.01, n.s.

As a means of investigating the role of locus of control in predicting the adjustment of adult survivors of childhood sexual abuse, a series of analyses of variance were planned to test the main effects of victimization status and locus of control group and the interaction of these two variables. However, given that differences were found between victims and nonvictims on socioeconomic status (SES), and given a trend toward differences between victims and nonvictims on age, preliminary analyses were conducted to examine the relationship between the variables of interest in this study and these demographic variables. Results of correlational analyses between locus of control scale scores, measures of adjustment, and demographic variables are presented in Table 1. No significant correlations between any of the demographic variables and either locus of control or adjustment scores were found.

Use of an analysis of covariance (ANCOVA) procedure is often recommended when variables of interest in a study may

be related systematically, as initially appears to be the case here with victimization status and the demographic variables. However, an ANCOVA is only effective in situations where concomitant and dependent variables have a linear relationship (Hayes, 1988). Given that SES and age were not significantly correlated with any adjustment variables or locus of control in this sample, it was determined that use of an ANCOVA procedure was not necessary here.

To examine the role of victimization status and locus of control in predicting women's adjustment, an analysis of variance (ANOVA) was conducted for each of the 4 dependent measures: depression, anxiety, hostility, and global severity index (GSI) scores from the SCL-90-R. See Table 2 for the means and standard deviations of these adjustment variables across the locus of control and victimization groups.

Results of an ANOVA examining depression yielded significant main effects for both locus of control group, $F(1,361)=18.22$, $p<.0001$, and victim group, $F(1,361)=5.08$, $p<.02$. No significant interaction effect was identified, $F(1,361)=0.82$, $p<.36$. These results suggest that women with an external locus of control are more likely to have problems with depression as compared to women with an internal locus of control, and that victims of childhood

sexual abuse tend to experience more depression than nonvictims.

Results of an ANOVA examining anxiety also yielded significant main effects for both locus of control group, $F(1,361)=19.70$, $p<.0001$, and victim group, $F(1,361)=8.52$, $p<.004$. A significant interaction effect was also found between the two variables, $F(1,361)=4.19$, $p<.04$. These results suggest that women with an external locus of control have more problems with anxiety than women with an internal locus of control, and that victims are more likely to experience problems with anxiety as compared to nonvictims. However, these results further suggest that locus of control and victimization status interact to predict anxiety. Inspection of cell means suggests that victims with an external locus of control report much higher levels of anxiety than nonvictims with an external locus of control, whereas victims with an internal locus of control report only slightly higher levels of anxiety as compared to nonvictims with an internal locus of control.

Results of an ANOVA examining hostility yielded a significant main effect for locus of control group, $F(1,361)=10.45$, $p<.001$. Although the main effect for victim group was not found to be significant, $F(1,361)=1.30$, $p<.25$, the interaction effect between locus of control and victim group approached significance, $F(1,361)=3.25$, $p<.07$. These

results indicate that women with an external locus of control experience more feelings of hostility as compared to women with an internal locus of control. These results further suggest that locus of control and adjustment tend to interact to predict hostility. Such a trend indicates that victims with an external locus of control are more likely to have problems with hostility as compared to nonvictims whereas victims and nonvictims with an internal locus of control display only subtle differences in hostility.

Finally, an ANOVA examining the global severity index produced significant main effects for both locus of control group, $F(1,361)=22.15$, $p<.0001$, and victim group, $F(1,361)=5.92$, $p<.02$. The interaction effect was not found to be significant, $F(1,361)=2.12$, $p<.15$. These results suggest that women who have an external locus of control are more likely to experience more severe adjustment difficulties as compared to women who have an internal locus of control, and that victims are more likely to experience greater symptom severity as compared to nonvictims.

Discussion

The results of this study suggest that locus of control does not differ for women with a history of sexual abuse and women without such a history. Further, no relationship was found for women's perception of control over the

victimization experience and their current locus of control. The finding that locus of control does not differ in victims and nonvictims is consistent with the one previous study investigating this issue (Fromuth, 1983), and may suggest that a child's perception of control over one specific event, the victimization experience, may alone not be sufficient to predict later locus of control. Rather, it may be necessary to look at the larger context of the individual's life and the other life experiences that occur in order to understand the general development of an individual's locus of control.

However, it is also possible that a relationship does exist and remains yet identified. It is important to recognize that in this study victimization status was examined at a dichotomous level; women were categorized as having or not having a history of childhood sexual abuse. Closer inspection of victimization history may help show that factors such as the severity and chronicity of abuse may be more important in predicting locus of control. Future examinations of this relationship will be necessary to resolve this issue.

In addition, it is also possible that measurement issues in this study have prevented the identification of a relationship between the perception of control over the abuse experience and later locus of control. In this study,

the vast majority of women with a history of abuse reported that they felt a lack of control over the abuse (82.2% reported having little to very little control) at the time the experience occurred. Such a restriction in the range of responses may have prevented identification of the relationship between perception of control over the victimization and locus of control.

Results of this study do provide evidence that both victimization status and locus of control are important predictors of adjustment in adult women. First, findings support the hypothesis that victimization status plays an important role in predicting women's adjustment. Victims of childhood sexual abuse reported experiencing more depression and anxiety as well as greater symptom severity as compared to nonvictims. This finding adds to a growing body of literature which indicates that victims of childhood sexual abuse experience more problems with adjustment than nonvictims (Brown & Finkelhor, 1986; Bagley & Ramsey, 1986; Jackson et al., 1990).

In addition, results here suggest that locus of control plays a very clear and independent role in predicting women's adjustment. Specifically, victims as well as nonvictims with an external locus of control were found to report more problems with depression, anxiety, hostility, and symptom severity as compared to women with an internal

locus of control. These results not only confirm hypotheses made in the present study but are consistent with previous research which suggests that an internal locus of control is associated with fewer adjustment difficulties than an external locus of control (Anderson, 1977; Poll & Kaplan De-Nour, 1980).

By definition, an individual's locus of control is their own, personalized, generalized expectancy of reinforcement. Individuals therefore differ in the extent to which they believe that events in the environment are contingent on their behavior. According to theory it is by this law of averages or generalization gradient that individuals are categorized as either internal or external.

Simply defined, an internal locus of control is the view that, on the average, the outcome of events are viewed as contingent on one's behavior, whereas an external locus of control is one in which outcomes are attributed to issues peripheral to the self, such as luck, fate, or chance.

The results of this study suggest that victims as well as nonvictims benefit from an internal locus of control by having fewer problems with depression, anxiety, hostility, and symptom severity. It is possible that such benefits are due to qualitative differences in the types of decision-making processes and coping strategies used by internal individuals as compared to externals. Perhaps women with an

internal locus of control use specific types of strategies that lead to a less problematic environment and therefore decrease the likelihood that difficulties with adjustment will occur. For example, Feldman (1983) found that women who stayed in physically abusive relationships were more likely to have an external locus of control as compared to women who terminated such relationships. The latter group was found to have an internal locus of control. Similarly, Anderson (1977) found that internal individuals used more task-centered coping strategies as compared to externals who incorporated more emotion-focused strategies. As was the case in Feldman's (1983) study, Anderson found the internal individuals to report fewer difficulties with adjustment.

It is also equally possible that the direction of this relationship is reversed and that an individual's locus of control is, in part, determined by the types of adjustment experiences that he/she may have. It is theoretically possible, then, that victims of childhood sexual abuse as well as nonvictims experience problems with depression, anxiety, and other types of adjustment and then come to perceive outcomes in their environment as beyond their control. Such logic is illustrated by the depressed individual who, after repeated attempts, fails to improve his/her depressed mood, and comes to the conclusion that his/her mood is not under his/her control. Such an

individual may generalize the external perception to other facets of life.

Although the above adjustment differences between internal and external individuals were the case for both victimization groups in the present study, evidence also suggests that locus of control may be particularly important for survivors of childhood sexual abuse. Specifically, victims with an external locus of control not only report more anxiety but have a tendency to experience more feelings of hostility as compared to nonvictims with an external locus of control. Women with an internal locus of control report strikingly similar levels of anxiety and hostility regardless of victimization status. These data suggest that although an internal locus of control may protect or act as a buffer against adjustment difficulties, an external locus of control appears to place victims of childhood sexual abuse at an even greater risk of developing problems with adjustment. Perhaps one reason why an external locus of control may be particularly problematic for victims as compared to nonvictims is that it may act as a diathesis for the development of emotional and psychological difficulties. Such a view contends that locus of control exists prior to the victimization experience. Given the diathetic properties of locus of control, when the abuse is initiated, adjustment problems result.

It is also possible however, that the development of a particular locus of control style is actually a result of abuse, not a precursor. It is possible that a sexual abuse experience is, in itself, one type of event that can create a perception in the victim that she has little or no control over the outcomes to events in the environment. The occurrence of such an event may be enough to initiate the development of an external locus of control which later leads to adjustment difficulties. Previously reported results of this study, however, suggest that victimization status alone is not sufficient to understand or predict a woman's adult locus of control. Further, a woman's perception of control over the abuse experience does not appear to be related to her adult locus of control. These findings argue against the hypothesis that a particular type of locus of control is a direct result of the abuse experience. However, as previously discussed, it is possible that this relationship does exist and that the victimization experience may play a role in predicting adult locus of control.

Another explanation may be that it is not simply the abuse experience that leads to a specific type of locus of control but rather a series of life stressors that lead to the development of a particular locus of control. Previous literature in the area of childhood sexual abuse suggests

that victimization occurs within the context of many other negative life events (Long & Messman, 1994). In fact, victims have been found to report more negative and fewer positive life events as compared to nonvictims. Perhaps, then, abuse which occurs in the context of other negative life events, many of which may be uncontrollable, sets the stage for the development of an external locus of control. Thus, it is possible that this greater context of negative life events leads to an external locus of control that in turn leads to problems with adjustment.

Finally, it is also possible that the development of a particular locus of control style does not precede adjustment problems in women. Rather, it is possible that victimization may lead to adjustment problems, which in turn, lead women to perceive events in the environment as beyond their control. It may be that the development of problems like depression, anxiety, hostility, and symptom severity predispose women to develop a belief system in which events are perceived as outside of their control.

Although the temporal relationship between these factors is not clear, results of this study offer clear contributions to the literature, suggesting that locus of control is important in understanding the adjustment of survivors of childhood sexual abuse. However, there are also some limitations to the current study that can be

improved upon in future research. One such limitation is the use of retrospective reporting of abuse experiences. Such reports may be vulnerable to inaccurate or distorted recall. Prospective reports obtained directly from children and young adolescents could greatly benefit future research. Second, the power available to detect group differences in these analyses may be somewhat limited due to the sample size. Inspection of cell means suggests that a buffering relationship between locus of control and victimization status may exist for all aspects of adjustment. Future research should continue to investigate this relationship with larger samples as future studies may be able to more consistently demonstrate this relationship.

Third, the use of a college sample in the present study limits the generalization of these findings to the community and to clinical populations. College students tend to represent a fairly high-functioning group and are typically of fairly high socio-economic status. Somewhat different findings may be noted, if other samples, for example, clinical samples, are examined. Finally, it is possible that the consistency in results found across the adjustment variables in the present study is partially an artifact of measurement issues. As noted earlier, all four indicators of adjustment come from one measure, the SCL-90-R, and are in fact highly intercorrelated. It is possible, then, that

four separate measures of adjustment are not really being taken, but rather, one measure of general adjustment. It is recommended that future research attempt to replicate the present findings by using multiple measures of adjustment. Despite these limitations, though, findings from this study provide several important implications and generate new directions for future research and treatment.

In addition to what is currently practiced in the treatment of survivors of childhood sexual abuse, the present study offers further considerations for therapy. Given that locus of control has been found to be a good predictor of adjustment, it is recommended that therapists assess victims' level of perceived control and the congruence of this perception with the environment. Specifically, therapists who treat survivors of childhood sexual abuse can assist these women in developing more accuracy and skill in interpreting their level of control over variables in their environment. Cognitive therapy techniques may be beneficial in assisting women to more accurately identify situations over which they have control. Other researchers have suggested that individuals in a wide array of psychotherapy become more internal as they progress through treatment (Diamond & Shapiro, 1973; Eitzen, 1974; Lewis, Dawes, & Cheney, 1974). Helping survivors develop such a cognitive set will also likely lead to improved

adjustment.

In addition, therapists should carefully assess the skill levels of survivors and the actual level of control they may exert over their environment. It is possible that survivors may have limitations in their abilities to have their needs met in their environment. Therapists are encouraged to pay particular attention to any skill deficits and/or problematic behaviors that such women may experience and to incorporate techniques such as assertiveness training, social skills and communication training, and problem-solving training into the treatment regimen.

Finally, findings from the present study offer implications for future research. Results here suggest that locus of control plays an especially important role in predicting the adjustment of survivors of childhood sexual abuse. In order to gain a better understanding of this role, future research could investigate the cognitive and behavioral factors that may contribute to the development and maintenance of locus of control. Such factors may include other cognitive processing styles; esteem management, assertiveness, problem-solving, communication skills; and coping strategies. Exploration of these variables is encouraged in order to gain a better sense of the factors involved with locus of control as they pertain to an overall model of adjustment. Also, the direction of

the relationship between victimization, locus of control, and adjustment remains unclear. It is recommended that prospective research efforts be made in hopes of obtaining a clearer perspective on the role of locus of control in predicting adjustment in survivors of childhood sexual abuse. In addition, future studies could help in the clarification process by taking a more detailed look at the abuse experience. For example, exploring such factors as the severity and chronicity of the abuse may provide a broader understanding of the direct relationship between victimization status and locus of control.

References

Abramson, L.Y., Seligman, M.E.P., & Teasdale, J.D. (1978). Learned Helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 87, 49-74.

Adler, A. (1930). Individual psychology. In C. Murchinson (Ed.), Psychologies of 1930 (pp. 138-165). Worchester, MA: Clark University Press.

Anderson, C.R. (1977). Locus of control, coping behaviors, and performance in a stress setting: A longitudinal study. Journal of Applied Psychology, 62, 446-451.

Anderson, S.C., Bach, C.M., & Griffith, S. (1981). Psychosocial sequelae in intrafamilial victims of sexual assault and abuse. Paper presented at the Third International Conference on Child Abuse and Neglect, Amsterdam, The Netherlands.

Bagley, C. & Ramsey, R. (1986). Sexual abuse in childhood: Psychological outcomes and implications for social work practice. Journal of Social Work and Human Sexuality, 4, 33-47.

Bagley, C. & Ramsay, R. (1986). Sexual abuse in childhood: Psychological outcomes and implications for social work practice. Journal of Social Work and Human Sexuality, 4, 33-47.

Bandura, A. (1969). Principles of behavior modification. New York: Holt, Rinehart, & Winston.

Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.

Becker, J.V., Skinner, L.J., & Abel, G.G. (1983). Sequelae of sexual assault: The survivor's perspective. In J.G. Greer & I.R. Stuart (Eds.), The sexual aggressor (pp. 240-266). New York: Van Nostrand Reinhold Co.

Becker, J.V., Skinner, L.J. Abel, G.G., & Cichon, J. (1986). Level of postassault sexual functioning in rape and incest victims. Archives of Sexual Behavior, 15, 37-49.

Benassi, V.A., Dufour, C.L., & Sweeney, P.D. (1988). Is there a relation between locus of control orientation and depression? Journal of Abnormal Psychology, 97, 357-367.

Berliner, L. & Wheeler, J.B. (1987). Treating the effects of sexual abuse on children. Journal of International Violence, 2, 415-434.

Briere, J., & Runtz, M. (1986). Suicidal thoughts and behaviors in former sexual abuse victims. Canadian Journal of Behavioural Science, 18, 413-423.

Briere, J., & Runtz, M. (1987). Postsexual abuse trauma: Data and implications for clinical practice. Journal of Interpersonal Violence, 2 367-379.

Browne, A., & Finkelhor, D. (1986). Impact of Child Sexual Abuse: A review of the Research. Psychological Bulletin, 99, 66-77.

Burger, J.M. (1989). Negative reactions to increases in perceived personal control. Journal of Personality and Social Psychology, 56, 246-256.

Carlisle-Frank, P. (1991). Examining personal control beliefs as a mediating variable in the health-damaging behavior of substance use: An alternative approach. The Journal of Psychology, 125, 381-397.

Cohen, K. (1993). The relationship between childhood sexual abuse and eating disorders among college women. Unpublished masters thesis, Oklahoma State University, Stillwater, OK.

Conte, J.R. & Berliner, L. (1987). The impact of sexual abuse: A review of the research. Psychological Bulletin, 99, 16-77.

Courtois, C. (1979). The incest experience and its aftermath. Victimology: An International Journal, 4, 337-347.

Denney, D.R., & Frisch, M.B. (1981). The role of neuroticism in relation to life stress. In C. Mackay & T. Cox (Eds.), Response to stress: Occupational aspects (pp. 69-84). Guilford, England: IPC Science and Technology Press.

Derogatis, L.R. (1977). SCL-90-R: Administration, scoring, & procedures manual-II. Towson, MD: Clinical Psychometric Research.

Diamond, M.J., & Shapiro, J.L. (1973). Changes in the locus of control as a function of encounter group experience. Journal of Abnormal Psychology, 82, 514-518.

Donovan, D., & O'Leary, M. (1975). Comparison of perceived and experienced control among alcoholics and nonalcoholics. Journal of Applied Psychology, 89, 726-728.

Drauker, C. (1989). Cognitive adaptation of female incest survivors. Journal of Consulting and Clinical Psychology, 57, 668-670.

Eitzen, D.S. (1974). Impact of behavior modification techniques on locus of control of delinquent boys. Psychological Reports, 35, 1317-1318.

Feldman, S. E. (1983). Battered women: Psychological correlates of the victimization process. Dissertation Abstracts International, 44, 1221B.

Finkelhor, D. (1990). Early and long-term effects of child sexual abuse: An update. Professional Psychology: Research and Practice, 21, 325-330.

Finkelhor, D., & Browne, A. (1988). Assessing the long-term impact of child sexual abuse: A review and conceptualization. Hotaling, G.T., Finkelhor, D., Kirkpatrick, D.G., & Straus, M.A. (Eds.), Family abuse and its consequences: New directions in research (pp. 270-285). Newbury Park, California: Sage Publications.

Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. Journal of Personality and Social Psychology, 46, 839-852.

Fromuth, M.E. (1983). The long-term psychological impact of childhood sexual abuse. Unpublished doctoral dissertation, Auburn University, Auburn, AL.

Fromuth, M.E. (1986). The relationship of childhood sexual abuse with later psychological and sexual adjustment in a sample of college women. Child Abuse and Neglect, 10, 5-15.

Glass, D.C., & Singer, J.E. (1972). Urban Stress. New York: Academic Press.

Gold, E.R. (1986). Long-term effects of sexual victimization in childhood: An attributional approach. Journal of Consulting and Clinical Psychology, 54, 471-475.

Gomez-Schwartz, B., Horowitz, J.M., & Sauzier, M. (1985). Severity of emotional distress among sexually abused preschool, school-age, and adolescent children. Hospital and Community Psychiatry, 36, 503-508.

Goodwin, J., McCarthy, T., & Divasto, P. (1981). Prior incest in mothers of abused children. Child Abuse and Neglect, 5, 87-96.

Harter, S., Alexander, P.C., & Neimeyer, R.A. (1988). Long-term effects of incestuous child abuse in college women: Social adjustment, social cognition, and family characteristics. Journal of Consulting and Clinical Psychology, 56, 5-8.

Haugaard, J.J., & Reppucci, N.D. (1988). The sexual abuse of children: A comprehensive guide to current knowledge and intervention strategies. San Francisco: Jossey-Boss Publishers.

Hazzard, A. (1993). Trauma-related beliefs as mediators of sexual abuse impact in adult women survivors: A pilot study. Journal of Child Sexual Abuse, 2, 55-69.

Herman, J.L. (1981). Father-daughter incest. Cambridge: Harvard University Press.

Hutner, N.L. & Locke, S.E. (1984). Health locus of control: A potential moderator variable for the relationship between life stress and psychopathology. Psychotherapy and Psychosomatics, 41, 186-194.

Jackson, J., Calhoun, K., Amick, A., Maddever, H., & Habiff, V. (1990). Young adult women who report childhood intrafamilial sexual abuse: Subsequent adjustment. Archives of Sexual Behavior, 19, 211-221.

Janoff-Bulman, R., & Frieze, I.H. (1983). A theoretical perspective for understanding reactions to victimization. Journal of Social Issues, 39, 1-17.

Jehu, D. (1988). Beyond sexual abuse: Therapy with women who were childhood victims. New York: Wiley.

Jehu, D., Gazan, M., & Klassen, C. (1985). Common therapeutic targets among women who were sexually abused in childhood. Journal of Social Work and Human Sexuality, 4, 25-45.

Kaemmerer, W.F., & Schwebel, A.I. (1976). Factors of the Rotter internal-external scale. Psychological Reports, 39, 107-114.

Kaplan, H.S., Fyer, A.J., & Novick, A. (1982). The treatment of sexual phobias: The combined use of antipanic medication and sex therapy. Journal of Sex and Marital Therapy, 8, 3-28.

Kilman, P.R., Laval, R. & Wanlass, R.L. (1978). Locus of control and perceived adjustment to life events. Journal of Clinical Psychology, 34, 512-513.

Kobasa, S.C., Maddi, S.R., & Kahn, S. (1982). Hardiness and health: A prospective study. Journal of Personality and Social Psychology, 42, 168-177.

Lewis, P., Dawes, A.S., & Cheney, T. Effects of sensitivity training on belief in internal control of interpersonal relationships. Psychotherapy: Theory, Research, and Practice, 11, 282-284.

Litt, M.D. (1988). Cognitive mediators of stressful experience: Self-efficacy and perceived control. Cognitive Therapy and Research, 12, 241-260.

Long, P., & Messman, T. (1994). The role of major life events in the long-term adjustment of childhood sexual abuse victims. Paper presented at the annual meeting of the Association for Advancement of Behavior Therapy, San Diego, CA.

McCann, L., Pearlman, L.A., Sakheim, D.K., & Abrahamson, D.J. (1988). Assessment and treatment of the adult survivor of childhood sexual abuse within a schema framework. In S.M. Sgroi (Ed.), Vulnerable populations: Evaluation and treatment of sexually abused children and adult survivors (pp. 77-101). Lexington, MA: Lexington Books.

Meiselman, K. (1978). Incest. San Francisco: Jossey-Bass.

Messner, S., Shipp, D., Jackson, J., Edison, J., Townsley, R., Burke, M., Chandler, K., & Long, P. (1988). Reliability of adults' reports of childhood sexual abuse. Paper presented at the annual meeting of the Southeastern Psychological Association, New Orleans, LA.

Myers, J.K., & Bean, L.L. (1968). A decade later: A follow up of social class and mental illness. New York: Wiley.

Naditch, M. (1975). Locus of control and drinking behavior in a sample of men in army basic training. Journal of Consulting and Clinical Psychology, 43, 96.

Nowack, K.M., & Sassenrath, J.M. (1980). Coronary-prone behavior, locus of control, and anxiety. Psychological Reports, 47, 359-364.

Nowicki, S., & Hopper, A. (1974). Locus of control correlates in an alcoholic population. Journal of Consulting and Clinical Psychology, 42, 735.

Parkes, K.R. (1984). Locus of control, cognitive appraisal, and coping in stressful episodes. Journal of Personality and Social Psychology, 46, 655-668.

Pauker, J.D. (1985). Review of the SCL-90-R. In J.V. Mitchell, Jr. (Ed.), The Ninth Mental Measurements Yearbook, (pp. 1325-1326). University of Nebraska, Lincoln, NE., Buros Institute of Mental Measurements.

Payne, R.W. (1985). Review of the SCL-90-R. In J.V. Mitchell, Jr. (Ed.), The Ninth Mental Measurements Yearbook, (pp. 1326-1329). University of Nebraska, Lincoln, NE., Buros Institute of Mental Measurements.

Peters, S.D., Wyatt, G.E., & Finkelhor, D. (1986). Prevalence. In D. Finkelhor, S. Araji, L. Baron, A. Browne, S.D. Peters, & G.E. Wyatt (Eds.), A sourcebook on child sexual abuse. Newbury Park: Sage.

Peterson, M.P. (1993). Physical and sexual abuse among school children: Prevalence and prevention. Educational Psychology Review, 5, 63-86.

Peterson, C., & Seligman, M.E.P. (1984). Causal explanations as a risk factor for depression: Theory and evidence. Psychological Review, 91, 347-374.

Phares, E.J. (1978). Locus of Control. In H. London & J.E. Exner (Eds.), Dimensions of personality (pp. 263-304). New York: Wiley.

Poll, I.B., & Kaplan De-Nour, A. (1980). Locus of control and adjustment to chronic hemodialysis. Psychological Medicine, 10, 153-157.

Pryer, M., & Distefano, M. (1977). Correlates of locus of control among male alcoholics. Journal of Clinical Psychology, 33, 300-303.

Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs: General and Applied, 80, 1-28.

Rotter, J.B. (1975). Some problems and misconceptions related to the construct of internal versus external reinforcement. Journal of Consulting and Clinical Psychology, 43, 56-67.

Rotter, J.B. (1989). Internal versus external control of reinforcement: A case history of a variable. American Psychologist, 45, 489-493.

Rotter, J.B. (1992). Some comments on the "Cognates of personal control." Applied and Preventive Psychology, 1, 127-129.

Sedney, M.A., & Brooks, B. (1984). Factors associated with a history of childhood sexual experiences in a nonclinical female population. Journal of the American Academy of Child Psychiatry, 23, 215-218.

Seligman, M.E.P., Abramson, L.Y., Semmel, A., & von Baeyer, C. (1979). Depressive attributional style. Journal of Abnormal Psychology, 88, 242-247.

Strickland, B.R. (1978). Internal-external expectancies and health-related behaviors. Journal of Consulting and Clinical Psychology, 46, 1192-1211.

Taylor, S. (1983). Adjustment to threatening events: A theory of cognitive adaptation. American Psychologist, 38, 1161-1173.

Taylor, H. & Cooper, C.L. (1989). The stress-prone personality: A review of the research in the context of occupational stress. Stress Medicine, 5, 17-27.

Tsai, M., Feldman-Summers, S., & Edgar, M. (1979). Childhood molestation: Variables related to differential impacts on psychosexual functioning in adult women. Journal of Abnormal Psychology, 88, 407-417.

Tsai, M., & Wagner, N.N. (1978). Therapy groups for women sexually molested as children. Archives of Sexual Behavior, 7, 417-427.

Watkins, C.E. (1990). Psychiatric epidemiology II: The prevalence and aftermath of sexual assault. Journal of Counseling and Development, 68, 341-343.

White, R. (1959). Motivation reconsidered: The concept of competence. Psychological Review, 66, 297-330.

White, S., Halpin, B.M., Strom, G.A., & Santilli, G. (1988). Behavioral comparisons of young sexually abused, neglected, and nonreferred children. Journal of Clinical Child Psychology, 17, 53-61.

Valentine, L., & Feinauer, L.L. (1993). Resilience factors associated with female survivors of childhood sexual abuse. American Journal of Family Therapy, 21, 216-224.

Zerega, W.D., Tseng, M.S., & Greever, K.B. (1976). Stability and concurrent validity of the Rotter internal-external locus of control scale. Educational and Psychological Measurement, 36, 473-475.

Table 1

Correlations Among Locus of Control Scores, Demographic and Adjustment Variables

	LOC SCORES	AGE	SES	DEP	ANX	HOST	GSI
LOC SCORES[1]	-	-.12 *	-.01	.31*	.25*	.20*	.31*
AGE		-	.19*	-.02	-.01	-.07	-.04
SES[2]			-	.08	.04	.03	.07
DEP[3]				-	.78*	.66*	.92*
ANX[3]					-	.60*	.90*
HOST[3]						-	.72*
GSI[3]							-

[1]Higher LOC scores indicate a more external locus of control.

[2]Higher SES scores represent lower economic status.

[3]Higher adjustment scores (depression, anxiety, hostility, and global severity index) represent more adjustment problems.

*$p<.01$

Table 2

Group Means and Standard Deviations on Adjustment Variables

Adjustment[a] Variable	Locus of Control	Victim Group: Victims (N=83)	Victim Group: Nonvictims (N=282)
Depression	Internal	M=0.91 SD=0.63 (N=38)	M=0.79 SD=0.68 (N=120)
	External	M=1.37 SD=0.84 (N=45)	M=1.09 SD=0.73 (N=162)
Anxiety	Internal	M=0.55 SD=0.60	M=0.49 SD=0.58
	External	M=1.07 SD=0.92	M=0.68 SD=0.58
Hostility	Internal	M=0.50 SD=0.69	M=0.55 SD=0.67
	External	M=0.92 SD=0.87	M=0.67 SD=0.61
Global Severity Index	Internal	M=0.66 SD=0.48	M=0.60 SD=0.51
	External	M=1.08 SD=0.78	M=0.82 SD=0.49

[a] Higher scores reflect higher symptom levels.

APPENDIX

MEMORANDUM
215 North Murray Hall
Department of Psychology
Oklahoma State University

DATE: June 29, 1995

TO: Jennifer Moore, University Research Services

FROM: Trish Long, Ph.D., Assistant Professor, Psychology Department

RE: Addendum to project "Life Experiences and Current Adjustment"
IRB# AS-95-015

In October of 1994, I received IRB approval for the project entitled "Life Experiences and Current Adjustment," IRB# AS-95-015. One modification was made to this protocol in January, 1995. At this time I would like permission to add one additional self-report questionnaire to the packet of instruments which was previously approved.

The Rotter Locus of Control Scale (LOC) is a 29-item forced choice checklist which is used to identify an individual's orientation of control. An individual selects one of a pair of items to indicate his or her typical style of perceiving events. A score is then calculated to indicate if the person has an 'internal' or 'external' locus of control (i.e., whether the outcomes of events are dependent on his/her behavior or is more a function of external factors). The LOC is a well standardized, widely used questionnaire.

For purposes of this study, the LOC will be used to identify women's locus of control, and to determine the association of this factor with the experience of childhood sexual abuse and later psychological adjustment.

A copy of the LOC is attached.

I appreciate your assistance with these changes. If I can answer any questions or provide additional information, please contact me at 215 North Murray, Dept. of Psychology, or by phone at 744-6027. Thank you.

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 10-11-94 IRB#: AS-95-015

Proposal Title: LIFE EXPERIENCES AND CURRENT ADJUSTMENT

Principal Investigator(s): Trish Long, Terri Messman

Reviewed and Processed as: Modification

Approval Status Recommended by Reviewer(s): Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING.
APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.
ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval are as follows:

Modification received and approved.

Signature: _____ Date: July 3, 1995
Chair of Institutional Review Board

VITA

Chebon A. Porter

Candidate for the Degree of

Master of Science

Thesis: LOCUS OF CONTROL AND ADJUSTMENT IN ADULT SURVIVORS OF CHILDHOOD SEXUAL ABUSE

Major Field: Psychology

Biographical:

Education: Graduated from Miami High School, Miami, Oklahoma in May, 1989; received Bachelor of Science degree in Psychology from Oklahoma State University, Stillwater, Oklahoma in August, 1994. Completed the requirements for the Master of Science degree with a major in Psychology at Oklahoma State University in December, 1996.

Professional Memberships: American Psychological Association, Association for the Advancement of Behavior Therapy, Southwestern Psychological Association.