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Narratives of teenage addiction : a thematic unfolding of shared epistemology through multiple levels of cognitive development.

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NARRATIVES OF TEENAGE ADDICTION: A THEMATIC UNFOLDING OF SHARED EPISTEMOLOGY THROUGH MULTIPLE LEVELS OF COGNITIVE-DEVELOPMENT

A Dissertation Presented

by

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DEDICATION

This work is dedicated to my loving daughter, **Emily**.

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First, I am very grateful for the opportunity to have worked with Dr. Allen Ivey, my committee chair and advisor. His theoretical contributions to the field have provided my academic and clinical work with more clarity and focus. On a personal level, Dr. Ivey's encouragement and enthusiasm had kept me going during the most difficult of times. For this I owe him many thanks.

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ABSTRACT

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FEBRUARY 1997

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The United States continues to present the highest rate of illicit drug use among adolescents and young adults in the industrialized world. Despite increasing attention to the problem, the lack of a coherent theoretical framework from which to conceptualize adolescent substance abuse has limited our therapeutic response. The main difficulty in developing a systematic model of inquiry and practice relates to the complexity and multidimensionality of the addictive process.

This study investigated the issue of teenage substance abuse and addiction using an integration of cognitive-developmental and narrative theory. The dissertation was guided by the assumption that a clinically relevant understanding of the problem requires a holistic approach that explores the meanings of a person's lived experience rather than a reductionistic approach that identifies the complex interaction of external variables and precipitants. With this primacy on "local" knowledge, emphasis was placed on exploring the epistemology of addiction and how these meanings were conveyed through stories. Consequently, the fundamental task of the study was to identify the common themes in the stories of teenage drug users and integrate them into a local theory of adolescent addiction that would facilitate personally relevant treatment interventions.

The sample population consisted of twelve consenting young people with histories of substance abuse who were selected from a public high school and a residential rehabilitation facility. Each subject participated in a structured interview based on Allen Ivey's Developmental Therapy. This cognitive-developmental approach provided a useful framework from which to assess and organize the complex cognitive dimensions that comprised the adolescents' experience. Narrative methods, on the other hand, were used to elicit common themes in their stories. Based upon this combination of approaches, this dissertation presented a theory of adolescent substance abuse that was "grounded" in the interview data. The theory represented a sequence of phases in the addictive process that emerged from the sample group's common experiences. The treatment implications of this integrated approach to addiction theory was then discussed with an emphasis on developing relevant interventions based on treatment matching according to the person's cognitive-developmental profile and unique story.

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CHAPTER I

RATIONALE AND DESCRIPTION OF THE STUDY

Introduction

> Addiction takes on meaning in the context of culture and society and of what people think and feel about themselves.
>
> *Stanton Peele, 1989*

Since the late 1960's, epidemiologists have tracked a prolonged series of drug epidemics among the nation's adolescents and young adults (Johnston et al, 1992, 1995; NIDA, 1991). These findings coincide with downward trends in the overall health status of American teenagers for the past three decades. Suicide, pregnancy and exposure to violence, for example, have shown increasing rates among modern youth (Blum, 1987; Kazdin, 1993).

Until recently, however, adolescent health problems were viewed as singular issues with little research exploring their covariation. (Dougherty, 1993). Our national preoccupation with adolescent drug use especially reflects this narrow approach to a more encompassing health crisis of American teenagers. Conventional drug crusades, for example, focus on the decision-making capacity of the vulnerable young consumers. They are told to "Just say no!". Yet the cultural and developmental dynamics that contribute to the constellation of adolescent health problems have not been adequately addressed.

History, however, provides valuable lessons as to the necessity of taking a more systemic perspective on teenage drug use. In fact, research on the first so-called drug crisis in Western culture (England's "Gin Mania", 1729-1751) revealed that the afflictions of crime and disease that plagued the working poor were not due to excessive gin consumption as commonly accepted but rather attributable to the oppressive living conditions associated with early capitalism and industrialization. (Vogt, 1990). Indeed,

the history of past drug epidemics reveals a tendency to seapegoat disadvantaged and disenfranchised groups. (Vogt, 1990; Beschner & Friedman, 1986; Peele, 1985)

In extending the historical analogy of "gin mania" to today's drug epidemics, it is therefore important to acknowledge the phenomenon of oppression as an implicit cultural reality. References to adolescents as a marginalized group, for example, are commonly found in modern social critique (Gillis, 1981; Friedenberg, 1959; Kett, 1977). These accounts draw attention to the precarious role of the adolescent in modern society as characterized by alienation, disempowerment and a transitional status lacking clear and meaningful rites of passage. It is from this critical perspective that one may infer a direct relationship between the tentative social position of American youth and their declining health status.

Significantly, the effects of marginalization are even apparent within the field of adolescent drug abuse research itself. While there is a tremendous amount of research conducted in the area, the perspectives of adolescents themselves are largely ignored. (Glassner & Loughlin, 1987) Accordingly, there is a paucity of research that rigorously explores the unique ecology of the adolescent's "lived" experience. Instead, research trends typically employ reductionisitic methodologies to isolate causal factors without fully comprehending their contextual significance. This investigative short-coming constitutes the adolescent as a passive respondent to social and physiological forces rather than as an active constructor of meaning.

Consequently, this dissertation sought to present a theory of adolescent substance abuse based on how young people actively construct meaning from their experiences. This process involved using a cognitive-developmental approach to elicit an epistemology of addiction. This epistemological framework was then conveyed in narrative form because stories may function to empower and give voice to the marginalized experience of youth in today's culture - a reality that appears to correspond to the ongoing dilemma of

teenage substance abuse. From this perspective, stories would also appear to serve a therapeutic role.

Statement of the Problem

Adolescent drug abuse and addiction continue to present as a national preoccupation. As one investigator aptly stated, "One of the early indications that research on a social problem has come of age is the quantity and quality of the explanations for it." (Lettieri, 1985;p.9) However, despite the proliferation of new research, the literature concerning the causes, consequences and treatment efficacy of adolescent substance abuse remains inconclusive. (Baumrind & Moselle, 1985; Dryfoos, 1990) The lack of a comprehensive and coherent theoretical framework from which to conceptualize the various issues has kept the substance abuse field in a "preparadigmatic" stage. (Shaffer, 1977; 1985)

The main difficulty in developing a systematic model of inquiry and practice relates to the complicated array of factors involved in the phenomenon of addiction. For the purposes of this study, the word addiction is considered interchangeable with other popularly used terms including alcohol and other drug abuse, chemical dependency, substance abuse and compulsive drug use. Addiction, however, is the preferred term because it encompasses a more complex set of processes that can best be understood from a cognitive-developmental perspective. With this in mind, Donovan and Marlatt (1988) provide a working definition of addiction that captures this essential complexity:

> "An addiction is seen as a complex, progressive behavior pattern having biological, psychological, sociological and behavioral components. What sets this pattern apart from others is the individual's overwhelmingly pathological involvement in or attachment to it, subjective compulsion to continue it and reduced ability to exert personal control over it..."

> "...neither physiological nor social, cognitive or psychological factors alone are sufficient to explain addiction. Rather, addiction appears to be an interactive product of social learning in a situation involving physiological events as they are interpreted, labeled, and given meaning by the individual" *(Marlatt, 1988, p. 6-7.)*

Allen Ivey's Developmental Counseling and Therapy (DCT) provides a metatheoretical approach from which to systematically integrate the diverse components of the addictive process (Ivey, 1986). To briefly summarize, DCT is a cognitive-developmental model of theory and practice based on Piagetian learning stages (Piaget, 1963). From a metatheoretical perspective, DCT suggests that human experience can be interpreted according to a developmental sequence of cognitive orientations that proceed from sensory awareness and emotionality to the abstractions of systemic constructs of meaning. The current variety of addiction models may in fact be positioned along this developmental continuum.

While DCT offers a metaperspective from which to order the multiple dimensions of addiction, it also emphasizes the unique epistemological process of the individual. Accordingly, human beings are seen as actively creating and constructing their own personal realities (Goncalves & Ivey, 1990). From this constructivist perspective, DCT can adequately address the contexts of "lived" experience and how the person interprets its meanings.

By giving primacy to personal epistemology, this study addresses a current void in teenage drug abuse research where the adolescent life experience is not seriously considered. The absence of young people's "stories", spoken in their own language, appears to confirm the earlier observation of the marginalized adolescent. This dissertation, moreover, will postulate a direct link between the cultural status of adolescents and their susceptibility to addiction and drug using behavior.

This investigation will thus employ a narrative perspeetive in tandem with a eognitive-developmental one for the purpose of elieiting the stories and personal eonstructions of teenage drug users. In this manner, DCT ean aeeount for the multidimensionality of teenage addiction whereas a narrative perspective reveals how the diversity of meanings are integrated in a eoherent way.

This dissertation is guided by the following assumptions: First, addiction is a eomplex phenomenon that requires a metatheoretieal framework from whieh to meaningfully organize the multitude of variables and dynamies that eomprise the experienee. A eognitive-developmental approaeh offers a viable framework from which to systematieally integrate the various eomponents of addietion by identifying development and epistemology as the basis for eoherenee.

Seeondly, framing addietion from a eognitive-developmental perspeetive is also eongruent with the epistemologieal tasks that are eharaeteristie of adoleseence. The seareh for identity and meaning, for example, are projeets that eorrespond to the cognitive features of addietion. More importantly, exploration of the eognitive eonneetion between adoleseent and addietive experienee may thus provide further understanding as to the unique suseeptibility of adolescents to the addietive proeess.

Thirdly, the epistemological underpinnings of adoleseent addietion are primarily revealed through narrative struetures. Speeifieally, stories emphasize human intentionality and ehange, essential features of human experienee that may otherwise be overlooked by traditional means of inquiry. This makes the narrative an appropriate medium from which to study developmental phenomena and the life-eyele.

Lastly, in so far as stories refleet the unfolding of a personal epistemology, they provide the opportunity for personally relevant treatment interventions or "treatment matehing" (Ivey, 1986; Mee-Lee, 1995; Mattson & Allen, 1991). However, whereas treatment matehing is typieally determined by external attributes sueh as demographies, this study assumes that treatment is most effeetive when interventions eorrespond to the

person's unique epistemological style, or in other words, their way of understanding the world.

Background

This section will briefly describe the basic principles of both Developmental Therapy and narrative psychology. Emphasis will be placed on how the integration of these orientations offer a unique and promising perspective to the study of adolescent substance abuse and addiction.

The Nature of Developmental Therapy: A Brief Overview

Developmental Therapy is a cognitive-developmental approach to counseling based on adaptations of Platonic philosophy and Piagetian psychology. (Ivey, 1986) It has relevance for the entire life span of human development. According to Ivey, " DCT rests on the assumption that types of consciousness identified by Plato and Piaget are repeated again and again throughout the life span, not just in children but also in adolescents and adults" (Ivey, 1991).

As a system of inquiry , DCT assigns importance to the cognitive interpretations that the person gives to events. Accordingly, DCT maintains that a person's experience can be interpreted within a developmental sequence of four basic epistemological stages including 1) the Sensorimotor, which relates to sensory and bodily understanding; 2) The Concrete Operational, which grounds meaning in a linear description of concrete, situational events; 3) the Formal Operational, which analyzes self-reflective patterns of thought from multiple perspectives and 4) the Dialectic/Systemic, in which conceptual patterns are integrated into even more complex systems.

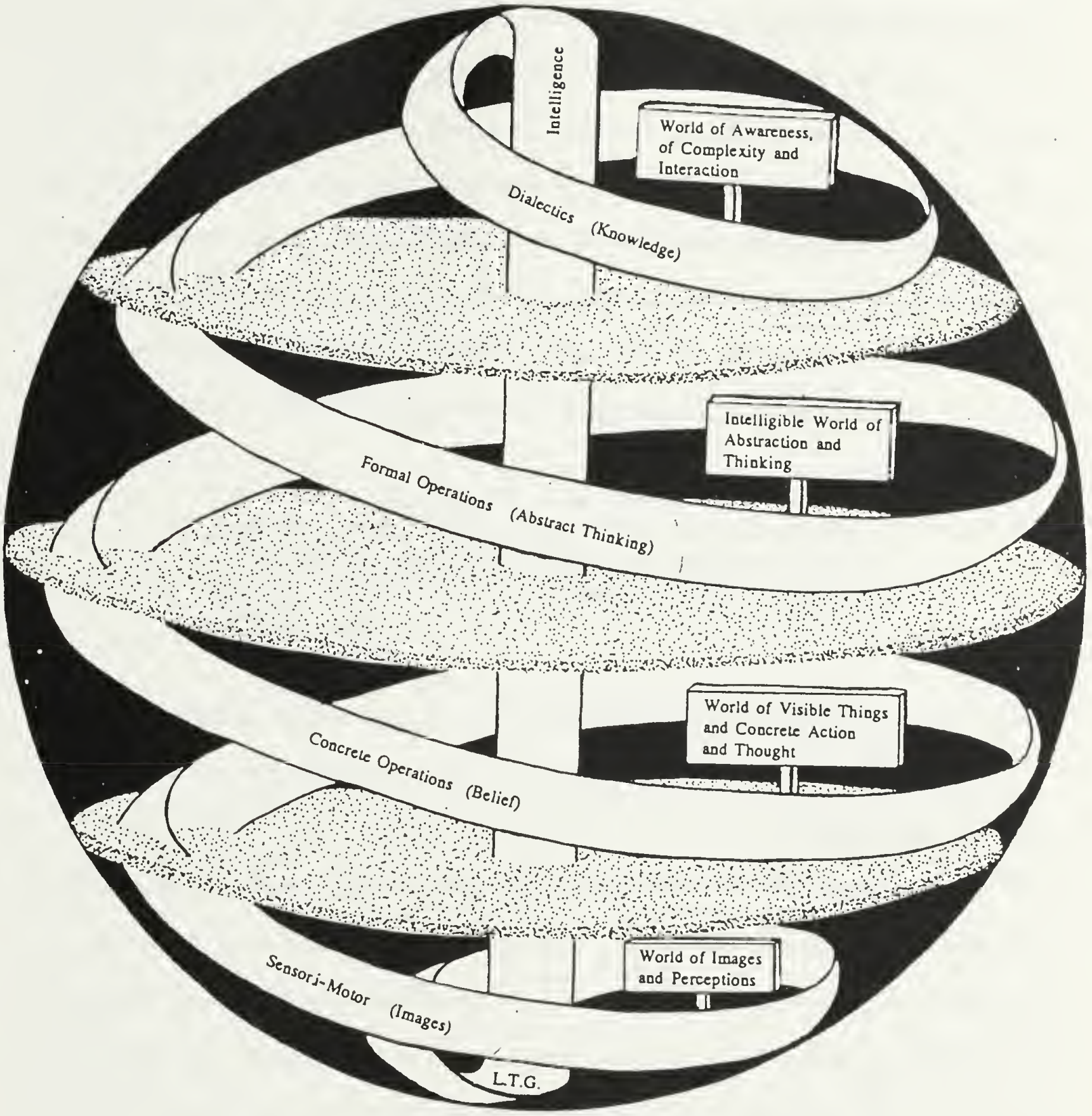
While progression through each stage might indicate a higher level of cognitive organization, DCT emphasizes a holistic approach to development rather than a hierarchically-valued one. It follows then that adaptive individuals should potentially

function within the entire range of cognitive orientations with no one mode deemed "better" than the other. Rather, each perspective represents a unique style of understanding with both its strengths and limitations. For example, an advantage of sensorimotor cognition involves the ability to experience the world directly in the "here and now". Limitations of this style include a tendency toward magical thinking and an inability to self-reflect. In any event, given a multiply determined problem such as addiction, DCT would encourage that all four modes of epistemology be explored in order to develop both a comprehensive theoretical model and system of treatment intervention.

In addition to its function as a holistic, organizational model, DCT also emphasizes the dialectical process of cognitive development. Ivey's spherical model presents a dynamic view of development whereby growth and awareness (or intelligence) are facilitated through ongoing dialogue with the environment from the four cognitive vantage points. (see Figure 1.1) Here it is important to add that these dimensions of reality are simultaneously present and that development proceeds in spiraling fashion. New levels of awareness are reached and then deconstructed as one moves back to the beginning of the developmental cycle. The co-construction of meaning that underlies therapeutic dialogue essentially follows this recursive process.

Narrative Psychology: A Brief Overview

Renewed interest in a narrative approach to psychology has emerged over the last decade. Counseling, therapy and even the research interview have gained recognition as legitimate forms of story-telling. (White & Epston, 1990; Mishler, 1986; Sarbin, 1986; Bicver et al, 1995; Zimmerman & Dickerson, 1994, and Parry, 1991). Clients come to therapists who try to draw out stories and collaboratively seek to change the meanings in their life through conversation. In this manner, therapy becomes a process through which stories are constructed and deconstructed leading to new and healthier ways of interpreting and changing one's life.



Note: All dimensions of development are active simultaneously, but one aspect may be the central point of focus at one point in time. An adequate foundation of skills and knowledge is required at each level before a solid transformation to the next stage is possible.

This spherical model was originally drawn by Lois T. Grady and is used here by her permission. Source: Ivey (1986), p. 24

Figure 1.1. A Spherical Model of Development

The adaptation of narrative theory to psychology derives from a convergence of post-modern trends in the fields of literary theory, sociology, philosophy and linguistics. In essence, these disciplines questioned the legitimacy of scientific positivism as an appropriate paradigm for the human sciences. To describe briefly, positivism reflects the dominant world-view of the modern natural sciences. It is based on the assumption that truth and knowledge are objects of discovery. The scientist's role is thus to explicate the universal truth conditions (e.g. facts) and general laws that underlie an objective reality. In its application to modern psychology, Giorgi (1970) offered this appraisal of the natural scientific attitude in his seminal work, Psychology as a Human Science.

> "In essence, the approach of psychology conceived as a natural science is characterized as being empirical, positivistic, reductionistic, quantitative, genetic, predictive, and posits the idea of an independent observer" *(Giorgi, 1970; pp. 61-62).*

Central arguments against the use of the natural scientific paradigm will be briefly summarized here followed by corresponding rationales for a narrative approach.

First of all, critics claim that the current orientation of the human sciences lacks relevancy to the "lived" experience of people and how they actually make meaning of the events of their lives (Giorgi, 1970). Empirical science, for example, is an explanatory enterprise concerned with identifying laws of causality. Accordingly, reductionistic methodologies are employed to isolate causal factors of a phenomenon without fully comprehending their contextual significance. This level of abstraction entails use of a privileged conceptual language that is far removed from how people live and communicate meaning. Narratives, however, more closely resemble how experience is conveyed in everyday life. Indeed, narrativists assert that the story is the "natural psychological unit" through which people express their many levels of engagement in the world (Mishler, 1986). Along these lines, narratives deal with issues of human intentionality and

therefore provide a different structure from which to explain causality (Bruner, 1986). Narrative causality, for example, relates to the process of making moral choices whereas scientific causality reveals a more external logic.

Another limitation of the scientific approach is that it doesn't adequately account for the dichotomy between the universal and the particular. The addiction field, for example, contains both "grand" theories aimed at identifying universal dynamics of addiction as well as "mini" theories that construe the addictions as singular phenomena (e.g. cocaine addiction, heroin addiction etc.). Neither approach, however, mediates between contextualized meanings at the personal level and the universality of shared meanings at the cultural level. Stories, on the other hand, serve a heuristic function in that they provide a compromise between uniqueness and universality. Shared social themes shape and are shaped by individual stories in ongoing dialogue.

In addition, the recursive function of narratives counter the synchronic, ahistorical conception of knowledge as construed by the positivistic approach. Accordingly, narrativists maintain a relational perspective as opposed to a neutral stance in which meaning-making is an evolving process that occurs in dialogal fashion between the narrator (e.g. scientist) and the social world of which he or she is a part. In fact, there are references in the literature that characterize research and theorizing as forms of "conversation". Narrative discourse, moreover, is grounded in a social, cultural and historical context that necessarily constrains the truth claims of an involved scientist. Here knowledge is limited by the favored metaphors that reflect the life-world of the scientist. In this sense, modern psychology remains bound to technological representations.

More importantly, by translating its own limited perspective into universal truths, the paradigm of an empirical psychology suppresses the possibility of other narratives. Post-modern critics have challenged this privileged perspective of normative constructions of knowledge as exclusionary since it doesn't reflect the experience of

traditionally marginalized groups. In contrast, one of the virtues of a narrative approach is that it validates and empowers those typically left out of the process of creating knowledge.

Adolescence and Addiction: Convergent Epistemologies

A major assumption of this investigation is that adolescents are uniquely susceptible to the addictive process. In general, the research attributes this susceptibility to a wide array of social, developmental and societal variables including, for example, peer influence (Oetting & Beauvais, 1987 a & b; Brook et al, 1992; Kandel, 1985), identity development (Spotts & Shontz, 1985), and a culture lacking in meaningful rites of passage. While these issues certainly contribute to the phenomena of teenage drug use, this study sought to understand the problem through the unifying perspective of epistemology. That is, the investigation is founded upon the fundamental hypothesis that the experience of both the adolescent and the addict are shaped by similar assumptions about the interpretation of self and world. This section will identify these common epistemological assumptions and how they converge to create the adolescent's susceptibility to drug use.

First of all, a review of the literature on adolescent development indicates that the emergence of adolescence entails a dramatic shift in cognitive functioning and how the young person construes meaning. Adolescence as a developmental stage, for example, has been conceptualized as a period of "epistemological crisis" (Gilligan, 1988). Transformations in cognitive functioning present new challenges in terms of how young people both construct an identity and consolidate a coherent philosophy of the world.

The work of Jean Piaget especially highlighted the epistemological tasks of adolescence and how they interact with other developmental functions (Piaget, 1963; 1980; Inhelder & Piaget, 1958). Within his framework cognitive-developmental stages, Piaget equated adolescence with the transition from Concrete to Formal Operational

thought. This shift was characterized by a new capacity for abstract thinking which precipitated a paradigm change where old constructions of knowledge gave way to new philosophic orientations. Newly acquired cognitive functions further served a fundamental role in the adolescent's search for meaning and discovery of an identity. In this sense, Piaget considered the adolescent a philosopher in the traditional sense with all its inevitable trappings. Consequently, the adolescent in search of self and truth was vulnerable to the same epistemological errors and contradictions that troubled the modern philosopher-scientist.

Indeed, the "adolescent predicament" (Friedenberg, 1959) of epistemology can be identified as a logical consequence of the dualistic philosophy that has dominated Western thought since Descartes. Since a complete exploration of the philosophic arguments are beyond the scope of this paper, the problems of adolescent epistemology will be summarized metaphorically through its analogy to mirror imagery. Specifically, this section will demonstrate that the epistemological crisis of adolescence is rooted in the same problematic dualities of subject-object and mind-body upon which modern scientific inquiry is founded.

Subjectivity and the Metaphysics of Reflection

Within the developmental literature, the adolescent's emerging capacity for abstract cognition marks the discovery of the subjective self (Kohlberg & Gilligan, 1972). This is manifest by the primacy of mind and a reconstitution of reality as an extension of subjective experience. Accordingly, the concrete certainties of childhood knowledge, conventionally based on an external, objective grasp of reality, give way to a more relativistic and imaginary expansion of possibilities. Like the eager philosopher, the adolescent is now capable of envisioning world-views and constructing coherent theories about them. However, it follows that young thinkers also commit the fundamental error of the modern scientist who cannot distinguish his or her encompassing subjectivity from

the perceived objects of inquiry. In this way, adolescent thought conforms to the Western philosophic tradition of the mind being the mirror to nature. Developmental theorists have thus aptly described adolescent cognition as being egocentric and solipsistic. (Elkind, 1967; Piaget, 1967; Kohlberg & Gilligan, 1972) Piaget provides a more concise summary of this phenomenon.

> Adolescent egocentricity is manifested by belief in the omnipotence of reflection, as though the world should submit itself to idealistic schemes rather than to systems of reality. It is the metaphysical age par excellence; the self is strong enough to reconstruct the universe and big enough to incorporate it. *(Piaget, 1967; p. 64).*

Piaget's description of the adolescent's subjective epistemology has several implications for the adolescent's unique susceptibility to drug use. Essentially, these relate to issues of methodology or how the young person empirically tests and validates his or her subjective and idealistic conceptions of self and world. First, in keeping with the visual metaphors of epistemology, the adolescent's "omnipotence of reflection" captures the grandiosity of all scientists bent on apprehending the world within one, logically coherent system. Citing Erikson (1968), for example, Gilligan describes the adolescent's "penchant for absolute truths and totalistic solutions" as a source of adolescent self-destruction. She further identifies the adolescent's "proclivity to end all uncertainty and confusion by seizing control and attempting to stop time or eliminate the source of confusion in others or oneself" (Gilligan, 1988). More significantly, this description allows for the introduction of a cognitive-based hypothesis of teen drug use which asserts that drugs have a heuristic appeal for adolescents seeking to resolve the contradictions and complexities of their epistemological crisis. (Baumrind & Moselle, 1985). Specifically, it will be argued that drug use interferes with the complex cognitive tasks by which adolescents authentically submit their subjective way of knowing to more rigorous reality tests. This process of experimentation by which the adolescent searches

for an identity and confirms his or her position in the world is generally referred to in the developmental literature as a moratorium (Erikson, 1968). The young person is afforded the opportunity to test his or her hypotheses with a reprieve from the world of adult commitment and responsibility.

Visionary Gnosis and the Drug Experience

For many adolescents, drug use inevitably plays a role in the experimental process of the moratorium by reinforcing the adolescent's adherence to a kind of subjective absolutism. Specifically, drug-induced states encourage a gnostic epistemology, or a way of knowing based on revelation, intuition and vision rather than cognition and rationality (Adler, 1972). It involves a transformation of egocentric validation strategies from the Cartesian "I think" to the Romantic "I feel" as characterized by Rousseau's legacy of the adolescent ideal. More importantly, drug inspired gnosis has heuristic value in that it bypasses the complex cognitive tasks of resolving competing truth claims by indulging the adolescent in an experience of wholeness. (Baumrind & Moselle, 1985) In this manner, validation of one's epistemological position is achieved seductively through the senses where "the intense part is more valued than the whole" (Adler, 1972).

Aside from facilitating the obvious philosophical errors, adolescent drug use from a cognitive perspective also inhibits developmental progression from concrete to formal operational thinking by failing to stimulate the growth of formal operational schemata whose potential function depends on a dialogue with the environment. (Baumrind & Moselle, 1985) Consequently, repeated drug use fosters over-simplification of the adolescent's epistemological tasks and begins to take on the perseverative quality of concrete operational dynamics. This renders the adolescent an empiricist in the narrow sense that validation of his or her hypotheses are achieved through repeated experimentation where the same desired and observable sensory effects of drug use are

experieneed. Perhaps the comfort of empirical certainties provide some clue as to why teenagers are particularly drawn to drug use.

With this in mind, the subjective epistemology of adolescenee presents as a mierocosm of the inherent limitations of Western philosophie tradition upon which it is founded. The emerging post-modern movement, for example, challenges the idea that knowledge and truth are derived from the mind's accurate representations of reality. Similarly it disputes the visual metaphor of knowledge or gnosis which posits knowledge as a product of revelation and discovery as opposed to a construction derived from dialogue and language (Rorty, 1979).

Bateson's Epistemology of Addiction

In his seminal essay, The Cybernetics of Self : A Theory of Alcoholism Gregory Bateson (1972) provided additional perspective to the convergent epistemologies of the adolescent and the addict. Describing alcoholics as philosophers, for example, Bateson conceptualized addiction as a consequence of a mistaken, dualistic epistemology. Accordingly, Bateson asserted that alcohol addiction is perpetuated by the alcoholic's adherence to a narrow world view and a constricted sense of causality which correspond to the errors of the Western philosophic tradition. More specifically, the alcoholic divides his or her world into a lethal struggle between conditions of sobriety and intoxication. From this dualistic perspective, the alcoholic theorizes that he or she drinks because life is difficult and there is something "wrong" about a sober existence. Intoxication, however, provides a "partial and subjective short-cut to a more correct state of mind". (Bateson, 1972; p. 309)

Interestingly, this description may also represent the adolescent's idealism and penchant for "totalistic" solutions and premature closure described earlier. Like the alcoholic in search of an epistemological "short-cut", adolescent experimentation with

drugs may be viewed as a heuristic device toward a more correct epistemology and self-identity.

The convergence of adolescent and addictive epistemologies is further identified by Bateson's description of "alcoholic pride". According to Bateson, the notion of pride relates to the alcoholic's willful challenge to resist a drink. In this manner, the alcoholic posits him or herself in a symmetrical relationship with a fictitious "other" which takes the form of the "bottle". Here Bateson observed that alcoholism is placed outside the self and is manifested by an escalating test of self-control. That is, the alcoholic repeatedly places him or herself at risk to drink. Because initial achievement and success at resisting a drink destroys the challenge, the alcoholic raises the ante by taking greater risks until finally surrendering to the addiction and hitting "rock bottom".

On a parallel level, the adolescent is similarly motivated by pride and risk. Adolescent epistemology has traditionally been linked to the autonomous challenge to define an identity and test the limits. This challenge also implies a symmetrical realtionship with a real or fictitious "other". For the adolescent, this "other" may commonly assume the form of parents, society and conventional values. In this manner, the young person in pursuit of an identity is driven by the mandate, "I am me when I am not you." Indeed, much of so-called teenage rebellion and flaunting of convention may be understood from this counter-dependent position.

However, in like manner to the alcoholic, this challenge may often result in dangerous and catastrophic consequences. The adolescent, for example, may test the very limits of his or her mortality. Thus whereas the alcoholic may say "I can resist drinking", the adolescent may say "I can resist death". The following description of alcoholic pride clearly resonates with the omnipotence of adolescent experience.

> The principle of pride-in-risk is ultimately almost suicidal. It is all very well to test once whether the universe is on your side, but to do so again and again, with increasing stringency of proof, is to set out on a project which can only prove that the universe hates you. (Bateson, 1972; p. 322)

According to Bateson, resolution of this vicious cycle requires a paradigm change where "pride" gives way to the acknowledgement of one's place in the larger order of things. This shift to a more correct epistemology usually takes place by "hitting rock bottom". As the battle of wills becomes fruitless, the addict or adolescent comes to the inescapable reality that the system is bigger than he or she.

Its important to conclude here that the "insane premises" of the alcoholic as Bateson described them are implicitly reinforced by culture. This is not given enough attention in Bateson's analysis. Indeed, the dualistic thinking that traps both the addict and adolescent derives from the fundamental schisms in modern culture that pit, for example, the individual against society, subject versus object and split mind from body.

Though Bateson brilliantly captures the relationship between addiction and our epistemological delusions, his emphasis on the systemic notion of mutual causality denies the power relations of the larger system with which one must integrate. Such a view, however, passively accepts the inevitability of social oppression and further implies that change depends on altering one's internal script of reality to provide a better "fit" rather than challenge dominant cultural assumptions. Herein lies the epistemological dilemma of the addict and adolescent. The desire to discover one's connectedness to the larger order of things involves a utopian bias that fuels young people's misguided attempts to find themselves through drugs or exploitative religious cults. Accordingly, the metaphysics of reflection and visionary gnosis discussed earlier are mere artefacts of alienation in a culture that has abdicated its role in affirming young people's identity. While the traditional emphasis on self-discovery and search for meaning curiously transforms the estrangement

of adolescents into a virtue, it also forms the basis of their susceptibility to addiction. A new paradigm is thus required that can directly confront these underlying cultural realities.

Purpose of the Study

The main purpose of this study was to systematically explore the multiple levels of cognitive development that comprise the experience of adolescents and young adults who are addicted to drugs and alcohol. As previously mentioned, the investigation was founded on the assumption that a cognitive-developmental approach provides a more viable framework from which to meaningfully sort out the complex issues related to teenage drug use. This was accomplished through the application of cognitive-developmental interview and classification methods developed by Allen Ivey.

Whereas DCT was shown to account for the multidimensionality of teenage addiction, narrative techniques were then used to reveal how the diversity of meanings are integrated in a coherent way. This study sought to construct a comprehensive theory of teenage drug addiction based directly on the "stories" of young people. Specifically, by integrating narrative and cognitive-developmental approaches, the following questions were addressed.

1) How does the experience of addiction for each adolescent translate into the four cognitive-developmental levels? Is each mode of cognition represented by a distinct set of metaphors or narrative themes? If so, how do they meaningfully relate to the narrative as a whole?

2) Are there common themes in the stories for each cognitive-developmental level across subjects?

3) What are the implications for treatment in finding commonalities in the narratives of teenage addiction?

Significance of the Study

This section will briefly identify the specific implications of the study for the field of adolescent substance abuse, for the conventional psychology of adolescence and for the field of qualitative methodology in general.

As previously mentioned, a proliferation of research on teenage substance abuse has emerged during the last decade. These studies span across an extensive range of disciplines, modalities, levels of analysis and theoretical perspectives. The sheer complexity of the field has thus made it difficult to derive a paradigm that is both theoretically consistent and clinically useful. Developmental therapy potentially offers a coherent metatheoretical framework from which to systematically organize these diverse orientations. While providing guide-lines to an eclectic treatment approach, DCT may also be viewed as an alternative approach to treatment in its own right.

In this manner, following DCT assessment techniques, treatment strategies can be devised that correspond directly to the individual's cognitive-developmental profile. This would render treatment more personally relevant than standardized programs that continue to have popular appeal.

Within the realm of adolescent psychology, this study will also provide a challenge to mainstream assumptions about adolescent development and cultural roles. More specifically, the epidemic of teenage substance abuse will be viewed in part as a consequence of traditional ideologies and conceptions of adolescent experience. In this sense, the dissertation will contribute to an emerging post-modern perspective of youth.

Lastly, the study is intended to illustrate the potential advantages of integrating cognitive-developmental and narrative methods for the study of complex phenomena. The combination of these methods presents an opportunity to research areas of human experience such as epistemology that are otherwise inaccessible as a result of methodological constraints.

Outline of the Remainder of the Dissertation

The remainder of the dissertation will be divided into five chapters.

The next chapter will discuss the major theoretical orientations and research trends that comprise the literature on adolescent substance abuse. First, the difficulties in developing an integrative and coherent paradigm for teenage drug addiction will be discussed along with their clinical implications. Secondly, a review of relevant empirical findings will be organized into four categories including 1) Epidemiology, 2) Etiology and Consequences, 3)Prevention and 4) Treatment. Finally, future possibilities for a paradigm change in the field will be explored in light of promising new research trends.

The third chapter will outline the specific research methods to be used in the study. This primarily includes a description of the procedures used for data collection and analysis. The rationale for incorporating methods grounded in cognitive-developmental and narrative psychology will be further discussed.

Chapter four will present the results of data analysis. These results will be translated into a theoretical formulation of teenage substance abuse. Research results and conclusions will be summarized and discussed in view of the relevant literature. Chapter five will discuss the implications for treatment using a case study from the sample.

The final chapter will present a summary of the study.

CHAPTER II

THEORETICAL AND EMPIRICAL FOUNDATIONS

Introduction

In this chapter, the complexity in the field of teenage drug addiction will be reviewed. Allen Ivey's Developmental Therapy will be presented as a unifying framework from which to organize the diverse components of addiction. This will be followed by a discussion of selective themes from the narrative psychology literature. To conclude, major trends in the empirical literature on adolescent drug use will be reviewed and discussed in terms of their relevance to the major assumptions of this paper.

This chapter is divided into four major parts. The first part will present an overview of the difficulty in developing paradigms of addiction. Attempts toward the construction of metatheoretical frameworks will be described with specific attention to biopsychosocial models. In part two, Developmental Therapy (DCT) will be presented as a useful metatheoretical perspective for the assessment and treatment of the addictions. This section will also compare DCT with the biopsychosocial paradigm. Part three will present relevant themes drawn from the field of narrative psychology. Lastly, part four will concentrate on the major empirical and research trends in the field of teenage drug use. Since the literature is voluminous and diverse, the review will be broken down into the areas of 1) Epidemiology, 2) Etiology and Consequences, 3) Prevention and 4) Treatment.

Paradigms of Addiction

As stated in the previous chapter, the addiction field is highly complex. Theory and research reflect an amalgam of competing philosophies, methodologies and explanations. As a result of this complexity, research concerning the causes, consequences and treatment efficacy of adolescent substance abuse remains inconclusive

(Baumrind & Moselle,1985; Shaffer, 1985; Dryfoos, 1990). This lack of scientific consensus has contributed to a state of disorganization in the field and an absence of a dominant paradigm.

A primary source of ambiguity and confusion lies in the multitude of disciplines that share in the conceptualization of the problem. Major roles, for example, are assigned to the fields of medicine, public and mental health, education, law and politics. Each perspective asserts its own attitudinal bias toward how addictions should be defined and therefore treated. Alcohol abuse, for example, is most often associated with a medical model that necessitates a rehabilitative response, whereas, drug abuse frequently entails a punitive one (Miller, 1987). The effect of this kind of discrepancy is that there is not a universally accepted definition of drug addiction nor common agreement as to the criteria that distinguishes substance abuse, addiction and compulsive drug use (Kalant, 1989; Long & Scherl, 1984).

Overall, the diversity in the field makes it difficult to derive a coherent and comprehensive theory of addiction. Attempts to order the literature into basic frames of reference are not even consistent. This difficulty has been aptly described as a "crisis of categories" (Shaffer, 1985). Consequently, the literature offers several approaches that strove to make sense of the multiple variables related to addiction. Newcomb and Bentler (1988), for example, described theories that focus on the etiology of addiction versus those that attend to its consequences. Etiological theories attempt to identify the variables that influence drug using behavior among youth whereas consequence theories attempt to explain how drug use impacts upon experience from social, developmental and health perspectives.

A more rigorous approach classifies theories according to their relative emphasis on different domains of reality. In this manner, theoretical analysis is grouped in terms of whether it focuses on the dynamics of self, others, society or nature (Lettieri, 1985).

Within this scheme, "self" theories would emphasize psychodynamics and "nature" theories would stress genetic and biological influences.

Other differences are characterized by dichotomous trends toward the construction of "grand" theories aimed at identifying universal dynamics or an opposing movement toward construing the addictions as singular entities each with their own etiology, maintenance functions and treatment priorities (Miller, 1987). The emerging diagnostic sophistication of the biological and behavioral sciences, for example, had compartmentalized the addictions into separate symptom clusters that were characteristic of the particular "object" of addiction (e.g. "cocaine addiction" or "alcohol addiction"). This reductionistic approach had a fragmentary effect on the research where each addictive drug was investigated in relative isolation (Donovan & Marlatt, 1988).

During the past decade, research involving the cross-addictions had revived interest toward a comprehensive approach that identifies common themes and dynamics among the addictions (Miller, 1987; Miller & Heather, 1986; Orford, 1985; Peele, 1985). However, a major problem with constructing a global theory of addiction resides in the multiplicity of preferred levels of analysis. In this vein, each discipline would tend to confine research to the characteristics of a drug, pattern of behaviors, individual or cultural dynamic and manipulate them into holistic models that would account for the range of addictive phenomena. For example, Wise and Bozarth (1987) argued that a unitary theory of addiction must meet homologous criteria. That is, the diversity of addictions must be directly linked to a common biological mechanism regardless of their varying behavioral manifestations. In presenting evidence for a general theory of addiction based on the ability of many drugs to cause psychomotor activation, Wise and Bozarth asserted that the addictions derive from a common ancestry in brain function related to the activation of dopaminergic pathways. The researchers further maintained that the behavioral effects of each addictive drug were secondary to their shared biological roots. Thus even though stimulants and barbiturates produce contrasting overt reactions, they

fit a homologous definition of addiction because of their similar biological mechanisms of action (Wise & Bozarth, 1987).

Whereas the Psychomotor Stimulant Theory presented a narrow, unidimensional perspective for a unitary theory of addiction, "grand" theories of addiction are generally founded upon analogous explanations. Accordingly, these theories developed assumptions and predictions based on common behavioral patterns and a similar phenomenology of the addictive process (Stall & Biernacki, 1986; Cummings et al, 1980; Orford, 1985; Nathan, 1980; Van Kaam, 1971; Wallace, 1977). The common phenomenology of addiction presented a broad-based view of the addictions that included both consumed (e.g. drugs and food) and "process" addictions such as gambling and sex (Miller, 1987).

Though the search for unitary dynamics actually marked the beginning of theoretical work in the field, earlier studies were biased toward an emphasis on intrapsychic and personality dynamics (Freud, 1905; Rado, 1933). Postulations of an "addictive personality" type still command popular support despite questionable heuristic and therapeutic value (Spotts & Shontz, 1985).

Recent study of the cross-addictions, however, has focused on the behavioral dynamics of the addictive process. This includes the phenomena of craving, compulsion, tolerance and withdrawal. (Donovan & Marlatt, 1988) More importantly, the emphasis on common processes has enhanced the development of integrative theories and models of addiction that take into account the interaction of complex variables. In identifying the essential features of a successful theory of addiction, for example, Peele (1985) asserted that one must integrate pharmacological, experiential, cultural and personality variables. Similarly, the domain model as conceived by Huba and Bentler (1982), proposed that drug use and its consequences can be explained by the interaction of four general "domains" of involvement, the biological, the intrapersonal, the interpersonal and the

sociocultural. These categories provide a guide-line for the purpose of predicting and hypothesizing the different pathways of drug abuse.

Another attempt to integrate the various perspectives of addiction was suggested by Brower et al (1989) who organized the field into basic models and integrative models. Basic models were guided by a unitary focus of etiology and practice. These included the traditional moral model which is based on the premise of individual responsibility for choices and actions; the learning model which emphasizes changing maladaptive learning patterns; the disease model which focuses on the biological determinants of addiction; the self-medication model highlights the importance of attending to co-existing mental disorders and the social model which focuses on the environmental influences of addiction.

Integrative models, on the other hand, are multi-focused and combine features from the other basic models. Brower and his colleagues cite three examples of integrative models including the Alcoholics Anonymous model which is a combination of the moral and disease models; the dual diagnosis model which integrates aspects of the self-medication and disease models; the multivariant model which emphasizes the interaction of multiple causes and the biopsychosocial model which will be explained more fully in the next section as a prototype for integrative models.

More importantly, the advent of integrative models of addiction allows the practitioner the flexibility to provide intervention based on prescription tailored to individual needs rather than conceptual conformity (Shaffer, 1985; Brower et al, 1989). From this perspective of "technical eclecticism", the practitioner can choose among the "menu" of basic models and determine which integration strategy is deemed most relevant. Integration can also be achieved at the theoretical level ("theoretical eclecticism") where explanatory features of each model can be combined to promote a coherent theoretical framework.

The increased sophistication of statistical multivariate methods has reinforced the awareness that addiction is a multi-determined problem. This had constituted a dramatic paradigm shift from unitary conceptions of addiction to integrative models and multi-factorial theories. Indeed, according to one theorist, "Like the shift from Copernican to Galilean astronomy or Newtonian to Einsteinian physics, simple explanations have tended to give way to multivariate perspectives" (Shaffer, 1985; p. 68). The biopsychosocial model of addiction will be presented in the next section as a promising version of the emerging multivariate perspective.

In sum, this section described the challenge of developing comprehensive, coherent and integrated models for the study of the addictions. The trend toward developing eclectic theories has come more recently with the increased understanding of the common phenomenology and behavioral dynamics shared among the addictions. Several attempts to organize the multidimensionality of addiction were cited from the research, yet no one model appears to effectively capture the polymorphism of the addictive experience.

Metatheoretical Perspectives: The Biopsychosocial Model

The emergence of comprehensive, theoretical frameworks of addiction reinforced the reality that addiction is a multiply determined process. Among the models briefly identified, the biopsychosocial model represents a prototype for a metatheoretical paradigm of the addictions that integrates theory and practice (Donovan & Marlatt, 1988; Wallace, 1993; Ewan, 1983; Tartar, 1983; Baer, 1991). Applied originally to general issues of health and illness, the biopsychosocial approach was based on systems theory and the related assumption that an individual's health condition resulted from the interaction of multiple variables and systems (Schwartz, 1982). For example, "...biological and behavioral stresses always interact with each other to produce particular constellations of signs and symptoms in particular individuals" (Schwartz, 1982; p. 1042).

In its application to the addictions, the biopsychosocial perspective emphasizes the importance of assessing the multiplicity of interactive variables that contribute to the person's unique experience of addiction. These variables derive from the three significant domains of biology, psychology and sociality. Given this range of determinants, the biopsychosocial approach thus entails a more extensive process of assessment. The clinician must incorporate multiple assessment procedures in order to identify how the different systems of involvement interact. Multiple systems assessment, moreover, was based on the "triple-response mode" paradigm of the emotions in which their complexity was attributed to the interaction of cognitive, behavioral and physiological systems (Lang, 1977; Kratochwill & Mace, 1983).

A major difficulty cited in the assessment process, however, relates to integrating seemingly discrepant information derived from each system into a coherent clinical picture (Donovan & Marlatt, 1988). For example, a lack of correspondence may be noted between physiological phenomena and the client's self-reports. While this discrepancy may be explained as a result of the client's tendency toward denial and defensiveness, it may also be a consequence of the client's cognitive-perceptual failure to understand his or her own internal cues. A similar impediment to a coherent clinical picture may result from "response specificity" by which the individual may respond predominantly and consistently to various stimuli at one particular level of functioning (Epstein, 1976). In this manner, a physiological effect may be most salient for an addicted person whereas a cognitive response would be more prominent for another. In any event, "the task of the clinician, then, is to determine the unique contributions made to the addictive behavior by each system, the way the different systems interact, and the system making the greatest contribution to the behavioral disorder" (Donovan & Marlatt, 1988; p.17).

Another significant feature of the biopsychosocial model is the "treatment matching hypothesis". (Donovan & Marlatt, 1988; McLellan & Alterman, 1991; Mee-Lee, 1995; Mattson & Allen, 1991) Treatment matching follows the assessment phase

and requires that the clinician develop treatment strategies that directly correspond to several dimensions of assessment. For example, matching can occur in accordance with the client's level of psychosocial and cognitive functioning (Finney & Moos, 1986) or with the level of severity of their addiction. (Mee-Lee, 1995) A more detailed discussion of treatment matching will be presented at the end of this chapter.

The role of cognition is another relevant feature of the biopsychosocial model. This includes the function of cognitive factors as precipitants to addiction; their role as mediating responses that reinforce addictive behavior and their involvement in the treatment process. (Donovan & Marlatt, 1988) More importantly, however, the biopsychosocial perspective encourages a deeper, interpretive understanding of addiction within the clinical realm. Accordingly, the clinician's task is to promote a comprehensive and coherent understanding of addiction by identifying "cognitive maps" of how the particular biological, psychological and social factors influence the client's overall experience. (Wallace, 1993) This may include, for example, assessing a client's genetic susceptibility to addiction while at the same time exploring intergenerational family dynamics.

Consequently, there are several advantages of the biopsychosocial perspective of addiction for theory and practice. First of all, this approach is a viable attempt to embrace the complexity of addiction. It does so by integrating the three significant domains of biology, psychology and sociality. Secondly, this integrative approach is inclusive rather than exclusive and thus encourages an interdisciplinary contribution from all the varied disciplines involved in the phenomena of addiction. Thirdly, the biopsychosocial model emphasizes the importance of tracking interacting variables along several dimensions of analysis. This leads to a more sophisticated and comprehensive assessment and also creates multiple intervention opportunities. From this encompassing perspective, important social and cultural influences in the addictive process are considered (Wallace, 1993). This is especially important in exploring the issue of teenage

susceptibility to substance abuse. Lastly, as earlier mentioned, the biopsychosocial model provides a cognitive framework for interpreting the multiplicity of interacting variables so that they are coherent and makes sense to the individual.

The biopsychosocial model also has its limitations. A major criticism concerns the potential pitfalls of its eclectic perspective. That is, in trying to uncover as many combinations of domains and their variables as possible, the clinician might overlook the most relevant factors in the selection process (Baer, 1991). The difficulty of paring down the magnitude of interacting determinants and making clinical choices can be summarized as follows, "Once we attend to interactions, we enter a hall of mirrors that extends to infinity" (Cronbach, 1975; p. 119). Given the multitude of possible pathways to identify and integrate, moreover, assessment can be both cumbersome and uneconomical (Baer, 1991).

These issues suggest that the biopsychosocial model requires an organizing principle with which to select the most clinically useful configuration of variables. Indeed, as Wallace (1983) inquired, "How many variables drawn from each of the domains of biology, psychology, and culture be conceptualized such that coherent, meaningful, and scientifically useful multivariate models can be conceived, developed and tested?" (p. 484). This question will be addressed later in this chapter through a review of Developmental Therapy and narrative psychology.

To conclude, this section introduced the biopsychosocial model as a prototype for a metatheoretical paradigm for the addictions that integrates both theory and practice. By integrating the three significant dimensions of biology, psychology and sociality, this model offers a promising approach to organizing the complexity of addiction. In contrast to other multivariate perspectives, the biopsychosocial approach emphasizes the role of cognition and interpretation in the integration of the addictive experience. However, like other eclectic models, the biopsychosocial paradigm lacks clear guidelines for determining which combination of factors are most relevant for clinical consideration.

Developmental Therapy

Developmental therapy is a cognitive-developmental approach to theory and practice founded upon the integration of Platonic and Piagetian learning stages. A core principle of the developmental therapy model asserts that development follows a dynamic and recursive course whereby growth and awareness (or intelligence) are facilitated through ongoing dialogue with the environment from a coherent progression of four basic cognitive orientations. Accordingly, development proceeds in spiraling fashion from the world of images and perceptions (Sensorimotor) to the world of visible things and concrete action (concrete operational) to the intelligible world of abstraction and thinking (formal operational) and finally to the complexity of dialectical interactions and systems of thought (Dialectic/Systemic). These epistemological dimensions are simultaneously present with development following a spiraling course where new levels of awareness are reached and then deconstructed as one moves back to the beginning of the developmental cycle. With each new state of awareness, the individual integrates the total experience of past, present and future (Ivey, 1986).

Though DCT was developed as a unitary theory within the broad domains of counseling and therapy, it has been specifically applied as a metatheoretical perspective from which to understand a variety of complex issues including depression (Rigazio-DiGilio, 1989); personality disorders (Ivey, 1991) and sexual abuse (Boyer, 1995).

A review of its central principles indicates why DCT is a promising approach for the study of the addictions. First of all, DCT functions as an organizing framework from which to compare the existing models of addiction and how they relate to one another. In this manner, the spectrum of addiction theories and research can be ordered according to their epistemological vantage point. Sensorimotor theories, for example, might include Berejot's Addiction to Pleasure Theory or Prescott's Somatosensory Affectional Deprivation (SAD) Theory. (Lettieri, 1980) These theories emphasize the emotional

components of addiction and substance abuse. Next, theories that correspond to a concrete operational perspective might integrate the social learning theories of addiction. Formal operational theories, on the other hand, might include Greave's Existential Theory of Drug Dependence (Lettieri, 1980) and Kaplan's Self-Derogation Theory. (Kaplan, 1985) Lastly, dialectic/systemic theories would incorporate the family systems approach to addiction.

At another level of organization, DCT embraces the complexity of self and thus may account for how the addictive process manifests itself within the sequence of cognitive-developmental stages for each individual. For example, a single person can maintain an addiction through the sensation of being "high" at the sensorimotor level; through peer rituals at the concrete operational level; by efforts to discover an identity at the formal operational level and by following family generational rules at the dialectic/systemic level.

The concept of constructivism is also a fundamental principle of DCT. The constructivist position asserts that people actively create and construe their own realities. (Kelly, 1955; Mahoney, 1988) With this in mind DCT highlights the dynamic interaction of the four major epistemological orientations that underlie each person's journey to self-understanding. Constructivism has significant implications for the addiction field because it poses a direct challenge to traditional medical model conceptions of addiction which tend to overemphasize the role of physiological effects as opposed to the cognitive process through which individuals label and interpret the physiological effects of drugs.

Recent trends in the literature, in fact, indicate that the concept of addiction has entered a post-modern phase in which constructivist ideas have challenged the conventional disease model of the addictions (Peele, 1985, 1989; Fingarette, 1989; Shaffer, 1985). This emerging perspective contends that addiction is a multiply determined process that is mediated by the meanings that one assigns to complex life events as opposed to the direct result of a singular biological mechanism or behavioral process.

Moreover, since individuals are seen as active participants in their addiction rather than passive reactors, issues of personal responsibility are central to the entire process. Indeed as Peele summarizes, "Addiction is an experience that people can get caught up in but that still expresses their values, skills at living and personal resolve - or lack of it. The label addiction does not obviate either the meaning of the addictive involvement within people's lives, or their responsibility for their misbehavior or for their choices in continuing the addiction" (Peele, 1989; p. 3).

Consequently, by providing an epistemological framework from which to understand how people make sense of the complex life events that comprise addiction, DCT also implicitly contains the possibilities for active change in the addictive process.

Lastly, DCT presents a unitary theory of development whereby an individual moves through a coherent sequence of cognitive stages toward a continual enterprise of self-knowledge. This perspective provides a relevant framework for exploring the developmental tasks of adolescence especially the search for meaning and identity. Indeed, as Ivey explained, "Once one has arrived at knowledge (episteme), further knowledge and experience tend to "deconstruct" through noesis (intelligence). New developmental tasks await. It can be argued that the core of our being is the search rather than the finding" (Ivey, 1986; p. 23).

To sum, developmental theory provides a systematic approach from which to organize the multidimensionality of addiction. From this perspective, the complexity of addiction is manifested by the various epistemological orientations from which people interpret their involvement rather than their being subject to the clustering of an indeterminate array of causal factors.

While DCT facilitates the sequential structuring of a phenomenon into its respective cognitive-developmental categories, its ability to provide a truly coherent theoretical approach would be enhanced by a more complete integration with narrative theory. The next section will specify the advantages of using a narrative mode of inquiry.

Narrative Psychology

This section will selectively review the literature on narrative psychology in terms of issues relevant to teenage addiction. Emphasis will be placed on a narrative understanding of adolescence. Specific themes that will be discussed include the empowering function of stories, the correspondence between narrative and developmental issues, the role of narrative in the formation of identity and the importance of adventure in the development of life stories.

First, there is a common observation in the literature that adolescents have been unable to narrate their own stories (Dickerson & Zimmerman, 1992; Zimmerman & Dickerson, 1994; Biever et al, 1995; Gilligan, 1982; Gillis, 1981; Kett, 1977). Zimmerman & Dickerson (1994), for example, assert that adolescents live lives that are "not completely storied". That is to say, their lives are shaped by the dominant group narrative about them articulated by adult culture. Accordingly, adolescent experience has been described as "... a conception of behavior imposed on youth, rather than an empirical assessment of the way in which young people actually behaved" (Kett, 1977; p.243).

Social historians and critics have similarly commented that modern formulations of adolescent experience conform to archetypal accounts about the awkward travails of puberty and generational conflicts (Freidenberg, 1959; Gillis, 1981). These stories, moreover, reflect a monolithic view of adolescence with few accounts that articulate the diversity of youth cultures (Kett, 1977; Gillis, 1981). It is important to note that this stereotypical or "totalizing" conception of adolescence is self-fulfilling in the sense that the young person's repertoire of behaviors actually conforms to the constraints of the dominant narrative frame. In trying to become their own "narrator" and protagonist, for example, adolescents rebel against their subjugation to the normative, cultural narrative by adhering to the same cult of deviancy that adult stories have already prescribed for them (Zimmerman & Dickerson, 1994). Here it follows that "Narratives are often created by

people seeking to make meaning out of deviations from what the culture (or their experience) considers normal or ordinary" (Zimmerman & Dickerson, 1994; p.236).

In any event, narrative discourse mediates between the fate of the individual and the larger order of things (Rosenwald & Ochberg, 1992). The young person's loss of narrative voice thus speaks to the marginalized status of adolescents in modern culture. With this in mind, the narrative psychology literature generally purports the empowering effect of stories. Parry (1991), for example, suggests that narrative approaches to therapy help people provide their own definitions to life events and thus leaves them with more of a sense of being in control of their lives. Along these lines, White and Epston (1990) discuss the process of "re-authoring" in which people are encouraged to create alternative stories to the problematic ones they brought into therapy. Other clinicians add that by listening to the stories that adolescents tell about themselves, therapists can identify and make use of their strengths and resources (Biever et al, 1995).

Moving to a developmental perspective, study of the human life course has been described essentially as a narrative project (McAdams, 1985; Gergen & Gergen, 1986). Indeed, people naturally impart unity, direction and coherence to the course of the human life-span. Paradoxically, conventional theories of adolescent development, by constraining diverse phenomena to a fixed set of normative tasks, actually leave much of adolescent life-experience as unstoried. Gilligan (1988), for example, observed that the developmental ideals of independence and autonomy defined by the mainstream tradition, did not accurately reflect the stories of adolescent girls. This "tyranny" of developmental norms, however, can be resolved if developmental theorists explicitly acknowledge the primacy of narrative influences that guide their theories. More specifically, developmental theory is guided by what Gergen and Gergen (1986) describe as an implicit evaluative endpoint. This is simply defined as the main goal around which developmental events are organized. Accordingly, Piaget's learning theory is described as a progressive narrative because its evaluative endpoint is the attainment of abstract cognition (Gergen &

Gergen, 1986). A regressive narrative on the other hand, would mark developmental movement away from the valued endpoint. The medieval Christian view of human development, for example, was based on the loss of innocence and the fundamental movement towards a condition of human depravity (Muus, 1988).

Consequently, it would be important for theorists of adolescent development to make explicit the evaluative endpoint of their theories because they behold significant social implications. As a case in point, Erikson's (1968) theory of identity development, by placing a high value on the young person's autonomous search and experimentation of identity, masks the reality of a culture that has abdicated its responsibility for guidance, direction and the rites of passage that makes identity more easily attained.

In keeping with the issue of identity development as a marker event of adolescence, narrativists emphasize the role that drama, adventure and risk play in this developmental task (Scheibe, 1986). One identity theorist, for example, suggested that identity cannot be altered by remaining passive (Baumeister, 1986). The narrative view of identity provides insight into the risk-taking and omnipotence that characterizes adolescent experience. Accordingly, the young person's experimentation with new ideologies, appearances and behaviors may be viewed as an attempt to re-author one's life in a developmental sense. From this perspective, "activities of risk provide occasion for the generation and testing of the self in the development of the self-narrative." (Scheibe, 1986:137). This role of adventure and risk, however, takes on added importance in a culture where positive validation of teenagers is generally lacking. Without appropriate social guidelines and adequate opportunities for challenge, modern adolescents have thus had to rely on more dangerous and solitary methods of risk and experimentation including specifically, drug and alcohol abuse. Here the young person's narrative task translates into what has been described as a "personal fable", or the belief that one is indestructible (Elkind, 1967).

Interestingly enough, this omnipotence is parallel to the epistemological errors ascribed to adolescent cognition described in the last chapter.

To conclude, a narrative perspective offers a promising new way of looking at the problem of teenage drug abuse. Accordingly, "A sense of the psychological consequentiality of risk and uncertainty emerges more clearly from literary sources than it does from the social psychological laboratory" (Scheibe, 1986: 134).

Empirical and Theoretical Research on Adolescent Addiction

The rest of this section will concentrate on the major empirical findings and research trends in the field of teen drug use. Since the literature is voluminous and diverse, the review will be broken down into the areas of 1) Epidemiology, 2) Etiology and consequences, 3) Prevention and 4) Treatment.

Epidemiology

Several questionnaires and surveys have been developed to gather information about the prevalence of drug use among American teenagers. For the past two decades, for example, the National Institute on Drug Abuse (NIDA) has sponsored two research projects that furnish reliable epidemiological data. First, the National Household Survey on Drug Abuse provides valuable information about the demographic correlates, attitudes and consequences associated with illicit drug use. (NIDA, 1990) Using data from annual in-person interviews from a representative sample of U.S. households, this survey reports on drug use that does not usually get detected by medical and legal institutions. A major limitation of this survey, however, is that it does not access youth living in transitional environments such as college dorms, jail, homelessness and therapeutic settings. The project sponsors also recognize that the survey is limited by its cross-sectional, synchronic perspective of societal drug use. (NIDA, 1990). As a result,

important individual, developmental factors contributing to drug use may not be considered.

The Monitoring the Future survey is another research project that provides information on the drug use patterns, life-styles and values of youth. Given annually to a representative sample of 8th, 10th and 12th grade students, this survey employs follow-up studies to track drug use trends of selected individuals through young adulthood (Johnston et al, 1992). Accordingly, the survey's main advantage is its incorporation of longitudinal data gathered from college students who usually escape the attention of National Household Surveys. At the same time, however, the survey does not account for high risk youth such as high school drop-outs whose response would likely elevate the current percentages of overall drug use within that age group.

Various screening and assessment instruments have also been used to provide information about teen drug use among clinical and high-risk populations. The clinical value of these questionnaires, however, are dubious because they were primarily intended for adults and further lack established norms for adolescents (Farrell & Strang, 1991).

Nevertheless, epidemiological research is especially relevant to this dissertation because it draws out the broader, cultural narrative that binds drug use to adolescent life experience. In tracking drug use trends among American adolescents and young adults from 1975-1991, for example, Johnston et al (1992) concluded that the United States has the highest rate of illicit drug use among young people in the industrialized world. Initiation to drugs continues to take place primarily during adolescence and at increasingly earlier ages. More recent research also indicates a resurgence of drug use since 1991 that followed a gradual period of decline since the late 1980's (Johnston et al, 1994). This increased pattern of drug use, moreover, was found to be related to the decline of the perceived danger of drugs.

Other trends indicate that during the past 30 years, adolescents are the only sub-group in the United States who have not shown improvement in their overall health status

(Blum, 1987). These trends coincide with the historical literature on drug crises that attribute drug epidemics to the scapegoating of disadvantaged and marginalized groups (Vogt, 1990; Beschner & Friedman, 1986). This view is compatible with trends of modern social critique that posit adolescents as an oppressed group (Gillis, 1981; Kett, 1977; Goodman, 1956; Friedenberg, 1959). In fact, the ongoing drug epidemic has been linked to the increasing alienation of youth, to the ineffectiveness of societal institutions that serve youth, to the lack of viable economic opportunities for young people, and to a culture that is increasingly focused on instant gratification (Johnston, 1991).

Within the adolescent population, empirical research also reflects the diversity of drug use experience related to gender, race and ethnicity. For example, it is reported that males are more likely to use most illicit drugs at higher and greater frequencies than females. Gender differences are also observed in terms of drug preference with females showing greater prevalence of stimulant and tranquilizer use than males (Johnston et al, 1992). Other results indicate that teenage drug use is not a monolithic phenomenon but that the rate of use for some drugs differs significantly along racial, ethnic and gender lines whereas for other drugs no significant difference is reported (NIDA, 1990). These convergent and divergent patterns of drug use among different groups are important in that they reveal both shared and dissimilar cultural realities.

Etiology and Consequences

Identifying etiological pathways to teen drug use has been a major concern of researchers because of their direct relevance to prevention and treatment strategies. The difficulty, however, of specifying the antecedents to drug use is emblematic of the complexity and ambiguity that encumbers the field as a whole. Recognizing the multiplicity of developmental influences that interact with teen drug use, investigators therefore urge caution in making spurious, causal assumptions (Peele, 1986; Glassner & Loughlin, 1987; Newcomb & Bentler, 1988). With this in mind, main findings related to

the causes and consequences of adolescent drug use will be briefly summarized here with corresponding references to empirical studies.

First, cumulative research suggests a distinction between the etiological pathways of drug use and drug abuse (Long & Scherl, 1984; Robins & Pryzbeck, 1985; Hawkins et al, 1986; Dryfoos, 1990). Robins (1984), for example, concluded that heavy drug users were more predisposed with anti-social personality traits than occasional users. In longitudinal studies, moreover, Brook et al (1982) found that peers exert a significant influence in the initiation of "gateway" drugs such as alcohol and marijuana whereas psychological traits mediate the transition to the chronic use of other illicit drugs. These type of studies reoriented research priorities toward the identification of high risk factors that would make some adolescents more vulnerable to drug abuse than others.

Secondly, the literature reflects a consensus that the phenomena of drug use cannot be studied apart from the "developmental trajectory" that defines adolescent life experience (Glassner & Loughlin, 1987; Newcomb & Bentler, 1988). Kandel's (1985) empirical research on identifying culturally determined stages of drug use among youth helped lay the groundwork for the developmental perspective. Specifically, her findings delineated a sequence of four distinct stages of drug use that progress in severity from the initiation to "precursor" drugs such as cigarettes and alcohol to the chronic use of illicit or hard drugs. Progression to each stage was contingent upon a different set of evolving psychosocial factors. Other researchers have verified this basic pattern of drug use further claiming that the progression of drug use is predictable regardless of ethnic, gender and geographical differences (Voss & Clayton, 1987).

The recognition that drug use is a developmental phenomena that is intrinsic to the issues of adolescence led to further exploration of psychosocial correlates. Using longitudinal designs, Jessor & Jessor (1977), for instance, reported that drug use was one of several related problem behaviors associated with the negotiation of transitions in adolescence which they denoted as "transition proneness". Accordingly, they determined

that drug use correlated with other "transition marking" behaviors such as early onset of sexual activity to form a syndrome of problems.

Related to the notion of normative, developmental stages, the age of initiation to drug use has been consistently linked as a predictor of subsequent drug problems (Rachal et al, 1982; Kandel, 1982; Hawkins et al, 1986; Donnermeyer & Huang, 1991). Robins & Pryzbeek (1985), for example, found that youngsters who began using drugs before age 15 demonstrated a particularly high risk of severe drug disorders.

Numerous studies also address the social determinants of drug use, especially the relative influence of family and peers. Based on a longitudinal analysis of peer friendships, for example, Kandel (1985) found that peers significantly influence initiation into "precursor" drugs such as marijuana and alcohol whereas parental influences (e.g. attitudes, modeling behaviors) effect movement to later stages of illicit drug use. Other studies indicate that family factors determine the choice of drug used whereas friends dictate the intensity level of drug use (Brook et al, 1982). In developing their "Peer Cluster Theory", Oetting and Beauvais (1987) assert that interaction with drug-using peers who share similar value systems is the dominant variable that determines drug use in adolescence. However, there is also evidence to support that the influence of peer drug use as a risk factor could be offset by the formation of strong bonds to the family and school (Hawkins et al, 1986; Brook et al, 1990). While the quality of familial attachment was determined to effect teen drug use, other studies also show a consistent correlation between the drug using behavior of parents and their offspring (Kandel, 1982; Malkus, 1994).

In addition to social determinants, there have been numerous attempts to identify personality factors in the etiology of teenage substance use. Ever since Freud's dictum "only the addiction prone become addicted", the search for an "addictive personality" type has commanded popular support (Freud, 1905; Rado, 1933; Valliant, 1980). More specifically, the psychoanalytic literature has attributed addiction to a "narcissistic crisis"

(Dodes, 1990), a paranoid process (Meissner, 1980) and attempts to alleviate chronic anxiety states (Wurmser, 1987). In the same vein, Spotts and Shontz (1984) used a case study approach of chronic drug users to conclude that the individual's choice of drug is an enactment of archetypal personality themes. Other research supports a strong relationship between substance abuse and "disorders of the self". (Brown, 1992)

Longitudinal studies, however, have not discovered a consistent personality profile that correlates with the development of substance abuse (Farrell & Strang, 1991). Attempts to isolate behavioral traits associated with substance abuse have been more successful. Several researchers, for example, have confirmed that anti-social behavior in adolescence strongly correlates with drug and alcohol abuse (Nathan, 1988; Labouvie & McGee, 1986; Valliant, 1983). In longitudinal studies Valliant (1983) found that anti-social behavior in adolescence was the main predictor of alcohol abuse. Brook et al (1992), moreover, identified unconventionality and childhood aggression as predictive of later drug use in adolescence. Swaim et al (1989) similarly identified high trait anger as a main correlate to teen substance abuse.

Etiological research has also focused on the biological determinants of substance abuse. Research involving twin, family and adoption studies, for example, demonstrate a genetic contribution to addiction (Shuckit, 1983; Goodwin, 1985). Genetic predisposition, moreover, as determined by discoveries such as the isolation of a dopamine (D2) receptor for alcoholism have provided essential information in the assessment of vulnerability to substance abuse (Blum, 1990). The burgeoning literature on the genetic determinants of alcoholism, however, indicate the possibility that there are subtypes of alcoholism with different genetic etiologies (Wilson & Crowe, 1991). Given the complexity of the disease, it is further suggested that these etiological pathways are governed by polygene clusters rather than single gene patterns of inheritance.

From another perspective, in their research on neurotransmitters in the brain, Wise and Bozarth (1987) asserted that the diverse range of addictions may be directly linked to

a common biologieal mechanism related to dopamine reinforeement systems. Emphasizing the relationship between risk-taking and drug abuse, Krasnegor (1988) speculated that risk-taking behavior may have a common neurological basis related to the effects of developmental stress in adolescence and its effects on the endorphin system. While biologieal research is eertainly promising, it remains diffieult to isolate biological factors from intervening social and environmental factors precipitants of substance abuse.

Consequenees of Drug Use

In comparison to etiology, there is little research on the consequences of adolescent drug use. Claiming that most researeh tends to focus on the acute, short-term health hazards of drug use, Newcomb and Bentler (1987) studied the health effeets of various drugs over a 4 year period. Contrary to popular belief, they found that cigarette smoking produced more harmful effects to young people than illicit and other "hard" drugs.

Given the narrative foeus of this dissertation, however, the literature on how drug use impaets upon the developmental eourse of adolescence is especially relevant. Accordingly there are two conflicting views regarding the role of drug use on the developmental process. First, research outeomes indicate a trend toward "preeocious" development in whieh heavy drug use positively correlates to early involvement in marriage and work. This premature entry into adulthood, moreover, typically resulted in divorce and job instability (Neweomb & Bentler, 1989).

A seeond perspeetive has emerged in which drug use by teens is observed to stunt the developmental process. Proponents of "developmental lag" thus elaim that drug use interferes with the eognitive and interpersonal tasks of adolescence by impeding identity development, the transition to formal cognition and efforts to emancipate (Baumrind & Moselle, 1985). Studies on the effeets of marijuana use particularly supports the view that chronic use faeilitates the avoidanee of working through developmental issues

regarding sexual decisions and the challenges of growing up (Hendlin & Haas, 1985; Brook et al 1989). Nevertheless, the distinction between the two developmental perspectives may be tempered by longitudinal studies that indicate that many young people "mature out" of heavy substance use as they assume adult responsibilities (Donovan & Jessor, 1983).

Other research regarding the consequences of drug use focuses on the "perceived harm" of various drugs and how this correlates to patterns of drug use among youth. This type of information is provided by National Surveys sponsored by the National Institute on Drug Abuse (NIDA). In identifying the prevalence rates of cocaine use, for example, Johnston et al (1992) found that cocaine use declined as young people became more aware of its dangerous effects. As will be discussed in the next section, attention to the perceived risks and consequences of teenage drug use is especially important in the development of prevention strategies.

Prevention

Prevention research reflects the diversity of assumed pathways to drug abuse and thus provides analysis along a wide spectrum of intervention strategies. The "disease" model, for example, organizes the focus of prevention in terms of the agent or drugs themselves; the environment or social milieu which fosters drug using behavior and the host or individual drug user. (Bukoski, 1991) Because it is generally agreed that efforts to inhibit the supply of drugs have proved unsuccessful, prevention initiatives have been directed to the social and psychological factors that contribute to illicit drug use. Accordingly, four approaches to demand reduction are generally recognized in the literature.(Botvin, 1986; Norman & Turner, 1993). First, the knowledge or information approach is aimed at deterring young people from using drugs by providing information about the dangerous consequences of drug use. Secondly, the social influences approach trains young people to withstand peer and media pressure to use drugs. Third, the social

competency approach develops the requisite interpersonal, decision-making and problem-solving skills that would inhibit the attraction of drugs as a coping device. Lastly, the alternatives model approach seeks to involve youth in non-drug activities such as recreation in order to prevent boredom, promote self-esteem and provide young people with more responsible roles (Norman & Turner, 1993).

Research indicates that a combination of approaches was found to be most effective. In a meta-analysis of 143 adolescent drug prevention programs, for example, Tobler (1986) found that peer-oriented programs emphasizing both social influence and life skills was the most effective approach in curbing drug use. In another meta-analysis of school-based prevention programs Bangert-Drowns (1988) confirmed the efficacy of involving peers in the prevention process yet cautioned that typical school-based programs were only minimally effective.

Given the multiple pathways to drug abuse, researchers suggest that prevention programs would be enhanced if they addressed a wider spectrum of risk factors (Bukoski, 1991). This may include, for example, a greater emphasis on environmental variables such as community and school influences (Botvin & Wills, 1985; Perry & Murray, 1986). In fact, in a review of prevention efforts in the 1980's, Norman and Turner (1993) concluded that emphasis should be placed on addressing the societal problems that make adolescents susceptible to drug abuse. There is similar acknowledgment in the literature that prevention be directed toward high risk youth since there is little research on the transitional processes from experimental use of drugs to abuse (Wodarski & Smyth, 1994).

Moreover, several researchers agree that prevention initiatives must be individually tailored to accommodate developmental contingencies and individual differences as to the many reasons why young people use drugs (Battjes & Bell, 1985; Kumpfer et al, 1990; Felner et al, 1991; Cleaveland, 1994). Different prevention strategies, for example, have been proposed for boys and girls as a result of the different

developmental issues and tasks that they negotiate (Norman & Turner, 1993). By taking such factors into account, cognitive and behavioral approaches have shown initial success in preventing teenage smoking (Schinke & Gilchrist, 1984; Botvin & Wills, 1985). In a one year follow-up evaluation of junior high school students Botvin et al (1990) were able to generalize the efficacy of a cognitive behavioral approach to other drugs.

Other efforts have emphasized the role of moral development in the prevention of drug use. Mohr et al (1987), for example, provide empirical evidence that teenagers may reason at lower levels of morality regarding drug use than they do about other issues. In any event, by assigning the complexity of influences to the young person's interpretive experience, a cognitive developmental approach is most compatible with the assumptions of this dissertation.

Treatment

Experts concur that research on treatment issues for teen substance abuse is still in its infancy (Hester & Miller, 1988; Catalano et al, 1991; Brown et al, 1994). In a comprehensive review of the research evaluating the effectiveness of adolescent drug abuse treatment programs, Catalano et al (1991) drew the following conclusions. First, some treatment is better than no treatment at all. Secondly, a comparison of treatment methods does not show one as more consistently effective than another. Third, post-treatment relapse rates remained high (35-85%) for participants in the evaluated programs. In another study of relapse rates, the Chemical Abuse Treatment Outcome Registry (CATOR) of 1989 surveyed 2,424 teens from inpatient treatment programs and found that 60 to 80 percent of the sample resumed drug use within twelve months of treatment (Harrison & Hoffman, 1989).

The observance of high relapse rates among adolescents suggests that events following treatment may influence outcome more than the actual treatment methods themselves. Accordingly, Brown et al (1994) assert that a greater understanding of the

post-treatment course of teenage substance abusers would lead to more effective intervention. Specifically, their research points out that improved functioning in several domains of the adolescent's life are strong correlates of successful outcome following treatment. Other research similarly suggests that adequate social resources and self-esteem are important correlates to teenage recovery (Richter et al, 1991).

Generally, investigators attribute the ineffectiveness of treatment to programs that employ adult criteria to adolescent populations and to uniform, standardized programs that don't take into account individual styles and differences that impact on drug use (Bell, 1990; Hester & Miller, 1988; Marlatt, 1988). Developmental issues are also a significant consideration for the treatment of adolescent substance abusers. Citing the importance of identifying the specific function that alcohol has for the person, for example, researchers indicate that adolescents drink for different reasons than adults and therefore require different interventions (Baer, 1991). Along these lines, adolescents were also found to be influenced by different post-treatment factors than adults in the recovery process (Brown et al, 1994).

In support of making treatment relevant to individual needs, several empirical studies based on adult populations indicate that clients who are selectively matched for treatment have significantly better outcomes than those who are not (McLellan et al, 1983; Hester & Miller, 1988). Briefly defined, "Patient-treatment matching is a method of choosing between alternative treatment options based on particular patient characteristics that interact differentially with interventions to produce more beneficial results than if "matching" had not been done" (Mattson & Allen, 1991; p.33).

Several dimensions of client variables considered for treatment matching are found in the literature. First, in terms of demographics, matching interventions according to gender was recommended because of the different developmental pathways of boys and girls (Norman & Turner, 1993). Other researchers indicated that age is an important variable and suggest that treatment should address the "age of departure" from normal

development where teenage substance abusers would benefit from being taught age-specific skills that were lost through a drug-induced developmental lag (Golden & Klein, 1987).

Demographic considerations similarly raise the issue of multicultural themes in treatment matching. Rowe and Grills (1993), for example, point out that the underlying epistemological assumptions behind traditional treatment and recovery programs are not congruent with the needs of the African-American community. Empirical research on therapeutic communities, moreover, calls into question the relevance and effectiveness of majority instituted programs in their application to racial and ethnic minorities (DeLeon et al, 1993). In their research on chemically dependent teens in outpatient settings, Friedman and his associates (1986) found that being White was one of the main factors related to positive treatment outcome.

Other important client characteristics for matching include the severity of the individual's substance abuse (Mee-Lee, 1995); evidence of psychopathology as is the case with dual diagnosed patients (Mattson & Allen, 1991), and the unique social and personal characteristics of the client such as cognitive style, intelligence and degree of social support (Mattson & Allen, 1991).

Cognitive style is a client variable that is of particular relevance to this study. Studies have found positive outcomes associated with matching clients according to their level of cognitive functioning (McLachlan, 1972; 1974). Specifically, clients whose conceptual level was congruent with their therapists' approach did better than those whose cognitive level was not (McLachlan, 1974).

In fact, other researchers have advocated careful assessment of both therapists' and patients' belief systems for the purpose of creating a compatible therapeutic alliance (Brower et al, 1989). Along these lines, Brinkman (1982) developed a model that matches treatment orientation according to how clients make attributions regarding their substance abuse problems. For example, individuals who perceive their problems as a disease

(external locus of control) would necessitate a different intervention than for those who frame their abuse of drugs as a lack of will-power (internal locus of control).

As a major framework for this study, Ivey's Developmental Counseling and Therapy (DCT) elaborated on the therapeutic potential of matching treatment according to the cognitive developmental level of the client. In summarizing the counselor's orientation, Ivey concluded that "One must enter the way of knowing the world of the other - the other's epistemology - if one is to produce impact and change" (Ivey, 1986; p.139). Furthermore, by introducing the notion of developmental movement, DCT offers a promising approach to accommodate the epistemological shifts that characterize adolescent cognition thus making treatment relevant from a developmental perspective. This is particularly important in the realm of teen substance abuse treatment where the heavy use of drugs has been identified as interfering with normal developmental processes (Baumrind & Moselle,1985).

To summarize this overview of the literature, the major empirical findings and research trends will be organized according to their primary cognitive-developmental focus. Table 2.1 provides a cognitive map of the research issues that correspond to the major domains of the addiction literature discussed in this section. The epidemiological studies were not included because they were not relevant to this type of cognitive analysis. Given the voluminous amount of research in the field, moreover, some research areas did not receive enough coverage to insure full representation along the cognitive-developmental spectrum. Research issues, however, that might warrant further exploration were put in parentheses for those domains where there was not representation from the literature and therefore not meant to be exhaustive.

Chapter Summary

This chapter reviewed some of the major theoretical issues and empirical findings in the literature on adolescent substance abuse. Particular focus was placed on the

difficulty of organizing the complexity and diversity of factors and determinants related to the phenomenon.

From a theoretical perspective, efforts toward developing a comprehensive paradigm of the addictions were discussed. The biopsychosocial model was identified as a promising eclectic paradigm because unlike other multivariate approaches, it stressed the importance of assessing how multiple interacting factors contribute to the person's unique experience of addiction. Its main limitation, however, was that it lacked clear and concise guidelines as to how the clinician was to assess the most relevant configuration of variables for intervention.

Next, Ivey's Developmental Therapy (DCT) was presented as a comprehensive and unitary metatheoretical paradigm from which to organize the multidimensional aspects of addiction. With its emphasis on epistemology, this model used cognitive-development as a guide to integrate theory and practice. However, while DCT provided a systematic foundation for an eclectic approach to the addictions, it was suggested that its ability to lend coherence to the multiple influences of addiction would be enhanced by its integration with narrative theory. By preserving the integrity of lived-experience, narrative theory was seen as a compatible holistic approach.

Additionally, a narrative orientation was described as effectively capturing the specific developmental and social issues of adolescent experience.

The last section of this chapter presented an overview of the major theoretical and empirical literature. The diversity of the research was organized according to cognitive-developmental orientations in Table 2.1.

Table 2.1 A Cognitive-Developmental Organization of the Research

DCT Level	Etiology	Consequences	Prevention	Treatment
Sensorimotor	Sensory-based theories Prescott, 1980; Berejot, 1980; Solomon, 1980; Siegel, 1989	Health hazards Newcomb & Bentler, 1987 Perceived harm Johnson et al, 1992	Scare tactics aimed at sensorimotor level	Stress reduction models
Concrete Operational	Peer influence Oetting & Beauvais, 1987 a-b; Kandel, 1985; Brook et al, 1982 Initiation studies Rachel et al, 1982; Kandel, 1982; Przybeck, 1983; Donnermeyer & Huang, 1991	Developmental "lag" Baumrind & Moselle, 1985; Hendlin & Haas, 1985; Brook et al, 1989	Social competency Norman & Turner, 1993; Botvin & Wilson, 1985 Information Approach Botvin, 1986 Cognitive-Behavioral Approach Schinke & Gilcrest, 1984	Behavioral modification strategies
Formal Operational	Personality factors Freud, 1905; Rado, 1933; Valliant, 1980; Dodes, 1990; Meissner, 1980; Farrell & Strang, 1991; Van Kaam, 1971; ; Kaplan, 1985; Greaves, 1980	Disorders of the self Brown, 1992	Developmental matching Battjes & Bell, 1985; Kumpler et al, 1990; Feher et al, 1991; Cleaveland, 1994	Treatment matching Mattson & Allen, 1981; Mee-Lee, 1985; Hester & Miller, 1988; Ivey, 1986; McLellan et al, 1993 Cognitive Theory models
Dialectic/Systemic	Family-related factors Kandel, 1982; Malkus, 1994; Hawkins et al, 1986; Brook et al, 1980 Cultural factors Johnston, 1991; Peele, 1985	Drug epidemics Vogt, 1990; Beschner & Friedman, 1986; Peele, 1985; Johnston, 1991	Community and school influences Perry & Murray, 1986; Botvin & Wills, 1985 Societal issues Norman & Turner, 1993	Multicultural critiques Rowes & Grills, 1993; DeLean, 1993 Intergenerational therapy models

CHAPTER III

RESEARCH METHODOLOGY

Introduction

The intent of this chapter is to explain the methods and procedures used to construct a theory of teenage drug addiction. More specifically, the emergent theory was based directly on common themes in the stories of adolescents with acknowledged histories of substance abuse. As this chapter will explore in further detail, the theory was developed by integrating narrative and cognitive-developmental methods. This chapter is divided into seven sections including this introduction. The second section restates the fundamental research questions addressed in the study. The major rationales and arguments for using this particular methodology will be summarized in section three. The fourth section described sample selection and composition. The fifth section introduces the interview format and data collection tools. The overall research design and data collection procedures are presented in section six. This section also describes the procedure for translating the data into a theory of teenage addiction. A chapter summary will be presented in the last section.

Research Questions

This study sought to systematically and coherently organize the multiple levels of cognitive development that comprise the experience of adolescents and young adults engaged in substance abuse. This process culminated in a theory of adolescent addiction grounded in the narratives of the teenage subjects. The following research questions were addressed:

> 1) How does the experience of addiction for each adolescent translate into the four cognitive-developmental levels of DCT? Is the experience of addiction characterized by a

predominant cognitive-developmental mode? How does each mode of cognition meaningfully relate to the narrative as a whole?

2) Are there common themes in the stories for each cognitive-developmental level across subjects?

3) What are the implications for treatment in finding common narrative themes of teenage addiction?

Rationale for Methodology

This section will briefly introduce the major research perspectives used in the investigation. These include Developmental Counseling and Therapy (DCT), narrative psychology and Grounded Theory. The integration of these perspectives follows a logical sequence that will be outlined in greater detail in the research design. This section, however, will describe the unique contribution that each perspective provides to the organization and analysis of the data.

Developmental Counseling and Therapy (DCT): Organizing Complexity

As stated previously, the problem of teenage substance abuse and addiction is a complex phenomenon that requires a multidimensional approach. Although eclectically-oriented theories like the Biopsychosocial Model have been developed to account for the multiplicity of variables involved in the addictive process, they do not present clear guide-lines or criteria for organizing them into a coherent framework that translates into effective therapeutic practice. Similarly, eclectic models often have difficulty selecting the most relevant among a myriad of participating factors.

This investigation, however, posits the person as the focal point for organizing theory and practice. Coherence is implicit in the way the person interprets, construes and actually lives his or her experience. Ivey's Developmental Counseling and Therapy (DCT) was chosen as the primary approach to the study of teenage addiction because it

provides a rigorous and systematic framework from which to organize the person's interpretive experience. Accordingly, the complexity of determinants, dimensions and factors that comprise the phenomenon of addiction can be meaningfully arranged along DCT's cognitive-developmental continuum. For example, the mood-altering effects and implications of drug use can be explained at the sensorimotor level whereas the societal conditions that contribute to a culture of addiction can be explored from a dialectic/systemic orientation.

Given the fact that the complex experience of addiction can be ordered according to cognitive-developmental orientations, the next task is to establish coherence relations between these orientations. In this manner, DCT provides a developmental sequence of structural relations that links the cognitive-developmental modes. Starting at the sensorimotor level, for example, cognition moves from the basic elements of experience (e.g. feelings, thoughts, behaviors) to their linear relatedness at the concrete operational domain; to their patterned arrangement at the formal operational level and then to their integration into systems at the dialectic/systemic orientation. Significantly, this developmental sequence meets the criteria for narrative form because it manifests both connectedness and movement between the cognitive-developmental orientations.

Narrative Perspectives: Establishing Coherence

Having just recognized an implicit narrative structure, the next phase of inquiry requires a shift from a structural to a textural perspective. Given the person as the focal point of inquiry, coherence relations are further established by introducing textuality, defined as the vantage point for an analysis of the human narrative (Goncalves, 1990). For the purposes of this investigation, textuality refers to the stories and detailed accounts of lived-experience.

As a review of the methodology will demonstrate, imbuing the cognitive-developmental framework of DCT with textuality is a fundamental task of this

investigation. This phase of the research, identified in the research design as narrative transformation, provided coherence to the interview data. Specifically, this entailed the development of story-lines. To briefly describe, story-lines relate to the unfolding of core themes and client issues through the multiple levels of cognitive-development. The continuity of these core themes results in an isomorphic arrangement along the range of cognitive-developmental orientations. Figure 3.1 demonstrates an example of a story-line based on validating an identity. Each cognitive-developmental orientation contributes to the story from its own unique vantage point.

Grounded Theory: Facilitating Integration

The last phase of the research involves constructing a theory of teenage addiction. This project is based on the guiding assumption that theory building, like therapy, is an evolving discourse or narrative. A grounded theory approach was used in this study because of its compatibility with, and similarity to a narrative mode of inquiry. Grounded theory is a qualitative methodology that was developed by the sociologists Glaser and Strauss (1967) as an alternative approach to traditional modes of theorizing. Accordingly, traditional paradigms were criticized for their emphasis on large scale or "grand" theories that while attempting to explain multidimensional phenomena, lost touch with the realities of local knowledge, or lived-experience. Referring back to the second chapter, a similar argument was expressed against "grand" theories of addiction. Grounded theory methods, on the other hand, focus on developing a deeper understanding of a phenomenon that is "grounded" in the actual data as opposed to meeting the criteria of an apriori set of theoretical propositions. Accordingly, the grounded theory emerges directly from the complexity of the data rather than suppressing complexity to fit the constraints of a paradigm.

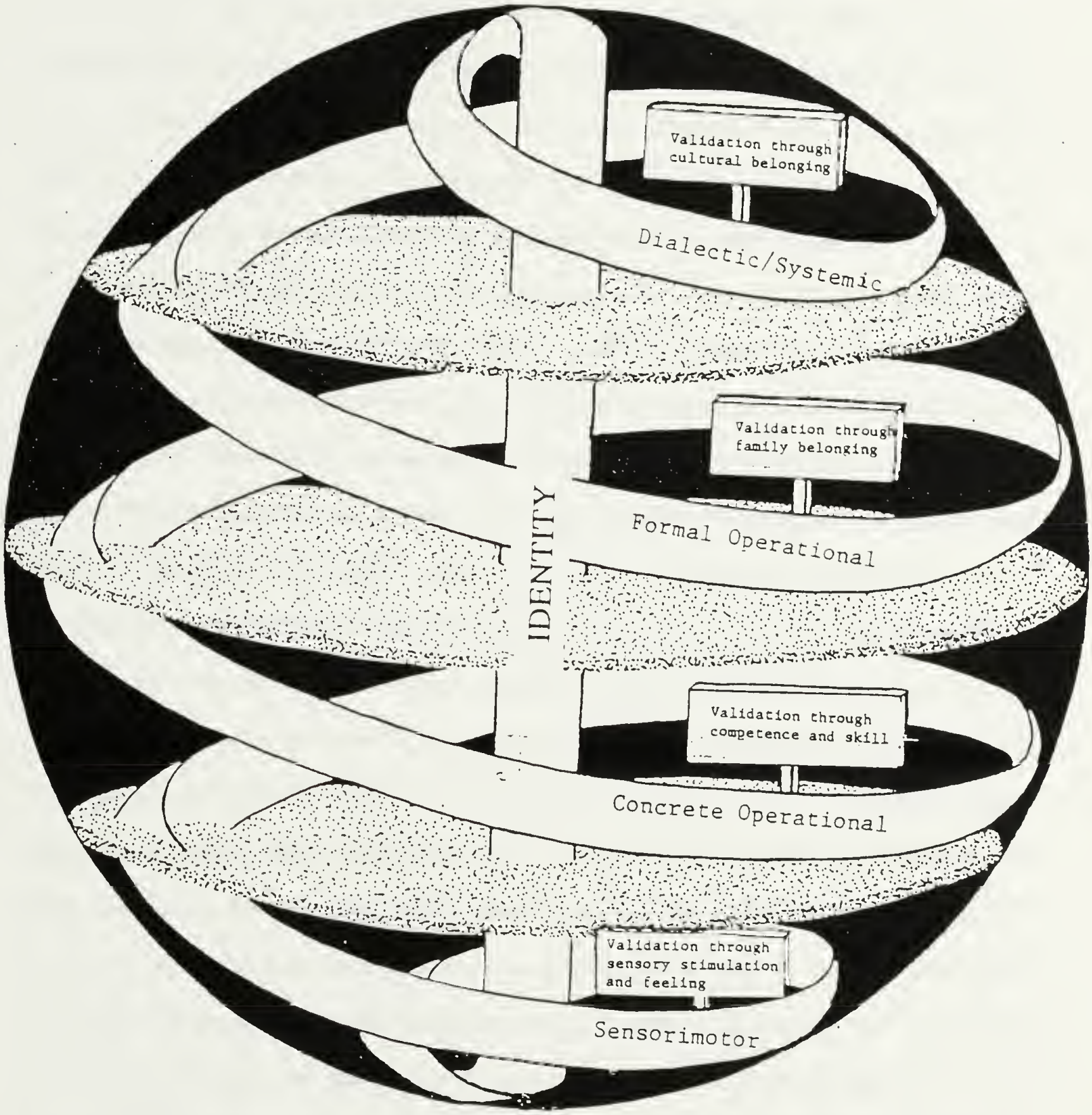


Figure 3.1. A Cognitive-Developmental Story-line of Identity Validation

In a progression somewhat similar to DCT, grounded theory moves through a sequence of data interpretation that flows from facts and categories into the higher abstractions of core categories, story-lines and conceptual themes (Strauss & Corbin, 1990; Strauss, 1987; Glaser & Strauss, 1967). In like manner to a narrative approach, grounded theory methods are based on establishing connections and story-lines between all the various categories that emerge from the data. The theory is the end-product that reflects the final integration of convergent story-lines. The specific steps used in the grounded theory approach will be elaborated on later in the research design.

In terms of the eclectic methodology used in this investigation, grounded theory facilitates the dialectical integration between DCT's structural complexity and the narrative requirement of coherence. These qualities of theory construction appear to exist in a dynamic tension that is represented by the grounded theory approach.

To conclude, this section will discuss the relative advantages of using grounded theory methods in the study of teenage addiction. First of all, by attending to local knowledge, grounded theory creates the opportunity to explore areas of human experience that would have normally been inaccessible (Osborne, 1992). For example, it was observed in the first chapter that the perspectives of adolescents have been neglected in the research of teenage substance abuse (Glassner & Loughlin, 1987). Secondly, grounded theory is expressed in natural language which renders knowledge more accessible rather than privileged. Thirdly, a grounded theory approach encourages an "open attitude" that seeks to generate multiple perspectives instead of trying to fit the data into a monopolistic framework. This flexibility invites continual revision of the theory as new information or data is obtained. Lastly, grounded theory follows practical and clinically useful guide-lines for validity. Accordingly, validity is established by how relevant and applicable the theoretical narrative is to an individual who may share a similar set of circumstances. From the standpoint of this study, for example, one may ask what a

teenage drug addict can learn and apply from listening to the stories of other teenage drug addicts?

Description of the Sample Population

The population for this study consisted of twelve consenting adolescents and young adults selected equally among a public high school and a hospital-affiliated residential rehabilitation facility. Both settings are located in Western Massachusetts. A documented history of substance abuse was the major criterion for selection. The purpose of dividing the sample into different settings was to obtain a wider range of responses along the cognitive-developmental spectrum. For example, it was hypothesized that subjects attending a treatment facility would demonstrate a different cognitive profile than those in a public high school because of the intensity of both their substance abuse and corresponding treatment. Particularly, adolescents in rehabilitation may have more access to a treatment language that reflects formal operational insight.

In terms of demographics, the sample was divided equally by gender and fell between the ages of fourteen and nineteen. All twelve subjects were white Caucasians which appeared to reflect the demography of their home communities. In terms of educational status, all but one subject who had dropped out were in the process of continuing their high school education.

Information regarding the sample's history of drug and alcohol use indicated that all subjects had engaged in polydrug use. Accordingly, the entire sample reported smoking cigarettes by Grade 6 followed by later alcohol use. Eighty percent of the sample admitted to have smoked marijuana and used LSD at some point in their life.

Instrumentation

The following section briefly describes the instruments used in this study.

The Standard Cognitive-Developmental Interview

The Standard Cognitive-Developmental Interview (SCDI) is an interview format based on the prineiples of Developmental Counseling and Therapy (DCT) discussed previously. Accordingly, the interview is designed to systematically access the subject's cognitive style in relation to a specific issue through a standard sequence of cognitive-developmental questioning. (See Appendix A) These questions were intended to elicit responses in the subject's natural language and to facilitate developmental movement through the four basic epistemological orientations.

The SCDI is divided into two phases. First, the assessment phase of the interview is open-ended and is designed to elicit the overall style in which the person conceptualizes the issue he or she chooses to discuss. This phase of the interview begins with an open question that eneourages the subjeet to elaborate on an issue related to the research topie. After a 50 to 100 word response is obtained, the person's predominant mode of cognition is identified in terms of one of the four developmental learning stages.

In the seeond phase, or treatment phase, the subject is led through a questioning sequenee that facilitates exploration of the issue from each cognitive orientation. Each orientation is represented by a series of questions designed to elieit the subjeet's verbal cognitions for that level. The main purpose of the treatment phase is to explore the phenomenon from a variety of epistemological vantage points. A sample question from eaeh stage would look as follows:

Sensorimotor: "How are you feeling?"

Concrete Operational: "Could you give me a specific example?"

Formal Operational: "What is the feeling you have conneeted with these examples?"

Dialeetie/Systemic: "Given what you have said about your family, friends, yourself and your situation, how might you make sense of all these ideas as a whole?"

Administration of the SCDI

Each interview took approximately 45 minutes to 1 1/2 hours to complete. The interviews were tape recorded and then transcribed by a professional transcriptionist. Recommended procedures to protect subjects were strictly adhered to. This included provisions to insure confidentiality by altering identifying information (See Appendix).

During the interview, the Intervicwer followed the SCDI format of questioning. Adjustments to the questioning sequence were used occasionally to elicit further information as well as to clarify the subject's responses. In the assessment phase, the interviewer began by asking an open-ended question related to the issue of drugs and alcohol. After a 50 to 100 word response was obtained from the subject, the interview entered the treatment phase with a summarization of the subject's response from the assessment phase. Next, the intervicwer followed the sequential order of cognitive-dcvclopmcntal qucstions.

The Standard Cognitive-Developmental Classification System

Thc SCDCS is an instrument designed to rate responses elicited from the Standard Cognitivc-Developmental Interview (Ivey & Rigazio-DiGilio, 1987). It categorizes subjcct vcrbalizations into the four main dimensions of cognition-development. (e.g. Sensorimotor/Elemcntal; Concrete Operational/ Situational; Formal Opcrational/Pattcrn and Dialectic/Systemic) Thesc categories are furthcr sub-divided into early and late level indicators (Rigazio-DiGilio, 1989). In this study, however, subject responses were classified into the main dimcnsions of cognitive-development.

Rating Procedures for the SCDCS

First, cach subject's response from the assessment phase of the interview was ratcd to determine their initial predominant cognitive-dcvelopmental levcl. This was accomplished by using thc holistic scoring procedure by which the rater assigned the

major cognitive-developmental category that predominantly corresponded to the subject's verbal response as a whole (Ivey, 1991). Thus even though a subject would reveal multiple levels of cognitive-development following the open-ended assessment inquiry, the rater selected the category that best represented the cognitive dimension of the overall response.

The next step involved rating subject statements from the treatment phase of the interview. In this segment, the rater employed a statement by statement scoring procedure through which each subject was assigned one of the four major cognitive-developmental categories (Rigazio-DiGilio, 1989). Here it is important to note that if several dimensions of cognition were found embedded in a lengthy response, each thought was recorded as a distinct unit of meaning. This process required that the rater exercise clinical judgment based on the SCDCS scoring criteria (Ivey, 1991).

Self-Administered Survey

Following the interview process, each subject completed a self-administered survey designed to gather information about their background, prevalence of substance use and their attitudes toward related topics. Because the survey is part of an ongoing, nation-wide research project, it was not possible to identify the survey. However, the research team did grant permission of its use for the purposes of describing the sample population for this study. Thus the primary intent of using the survey was to provide accessory information from the sample group that would further contextualize the interviews. For example, having knowledge of the sample's average age of initiation to drugs would directly relate to the developmental themes elicited from the interviews.

Lastly, it is important to note that the surveys were completed anonymously without cross-reference to individual interview protocols. Rather the information from the surveys were integrated and analyzed in terms of emergent themes that would amplify

the meaning of the narratives. Additionally, the surveys were not reviewed until all the interview data was completely analyzed so as to minimize interpretative bias.

Research Design

The intent of this section is to present an outline of the overall research design. Procedures used for data collection and analysis will be elaborated on based on the integration of DCT, narrative and Grounded theory methods.

Data Collection

The assessment phase involved the data collection proeedures described earlier.

Step 1: Subjects were interviewed using the Standard Cognitive-Developmental Interview format described earlier.

Step 2: The self-administered survey on drug use habits and attitudes was completed by each subject to provide background information.

Cognitive-Developmental Structuring

This phase involved using the Standard Cognitive-Developmental Classification rating procedures to assess and organize each subject's cognitions.

Step 3: Interview transcripts were read in full to get a sense of each subject's story.

Step 4: Each subject response was assigned one of the four basic cognitive-developmental categories. (e.g. Sensorimotor (SM); Concrete Operational (CO); Formal Operational (FO) and Dialectic/Systemic (DS)).

Sample responses for each cognitive level:

Sensorimotor: "I feel all wound up inside"

Concrete Operational: "I drank because my friends were doing it"

Formal Operational: "I have a tendency to make poor choices"

Dialectic/Systemic: "I am repeating the same mistakes as my dad"

Step 5: The coded responses were abstracted from the interview protocol and grouped according to their respective mode of cognition in the order that they appeared. The subject's natural language was preserved throughout the developmental sequence.

Narrative Transformation

This phase involved the transition from a structural to a narrative treatment of the data. Accordingly, the responses that were assigned to cognitive-developmental categories were translated into psychologically relevant themes yielding a personal narrative for each subject along the four dimensions of cognitive-development. Specifically, the data was condensed into more concise themes or "meaning units" each of which expressed a central idea. In this manner, irrelevant or redundant statements were sifted out while relevant themes were organized according to the narrative principles of connectedness, coherence and directionality (Gergen & Gergen, 1986).

Step 6: The coded responses were checked for redundancy and translated into "meaning units" that express a central idea.

Step 7: The meaning units were arranged into narrative form resulting in a story within each cognitive domain for each subject. Again, all efforts were made to preserve the natural language of the respondent.

Theoretical Construction

In this phase, the focus moved from narrative description to theoretical conception using grounded theory techniques. Its important to mention that this phase of data analysis did not adhere strictly to the procedural guide-lines of the grounded theory model because of the eclectic methodology used in this research design. Indeed, the data was subjected to prior treatment through DCT and narrative modes of analysis.

To summarize the process, the grounded theory approach employed a sequence of data analysis in which the stories of the twelve subjects were broken down into categories which were then re-ordered and combined through successive levels of conceptualization. This process culminated in a theory of teenage addiction founded on common themes among the narratives. Additionally, as the data was being coded and sorted into categories, the relationships among these categories were continually re-defined until a story-line emerged that integrated the various core categories into a cohesive conceptual framework. The development of a theoretical story-line occurred through a trial and error process whereupon reviewing each segment of the data, the researcher would ask, "What is this and what phenomenon does it relate to?" (Miller, 1995, Osborne, 1992).

Although the process of grounded theory building is objective in the sense that the theory emerges from the data, a grounded theory perspective accepts the influence that the researcher exerts on shaping the integration of the data through his or her theoretical sensitivity. Theoretical sensitivity refers to the professional knowledge and experience that the theorist brings into the process (Glaser & Strauss, 1967). This perspective is what the logico-scientific paradigm would dismiss as interpretive bias. However, an expert in the field of addiction might better inform the integration of data than a researcher whose skills are limited to textual analysis.

The sequence of steps that comprise the research design will now be elaborated on in more detail. Figure 3.2 provides a summary of the grounded research method with examples from the actual data.

> Step 8: In a process defined as open coding, each individual narrative was broken down, line by line, into labeled categories that represented a distinct idea or meaning. This procedure "fractures" the narrative into a collection of categories.

The main objective of open coding is to open up the inquiry in a way that invites multiple interpretive pathways (Strauss, 1987). This procedure resulted in twelve individual

protocols that contained an assortment of categories for each cognitive-developmental orientation. To illustrate open coding, the following line was abstracted from a protocol and coded:

	Category
"Drugs medicate the pain emotionally and physically":	Self-medication

Step 9: The categories that were opened up in the last step were then condensed into core categories indicating a movement toward a higher level of conceptualization. Each core category presented a central theme around which subsidiary categories from all the protocols were related. These core categories were represented along the entire cognitive-developmental range. An example is provided below.

Categories	Core Categories
Self-medication Getting high Avoiding anger	Functions of Drug use

Overall, thirteen core categories were identified in the data.

Step 10: The core categories were further condensed into a tight conceptual framework by a process of selective, or level coding. Strauss (1987) offers a succinct definition of selective coding. "Selective coding pertains to coding systematically and concertedly for the core category. The other codes become subservient to the key code under focus" (p. 33).

Selective coding thus requires that the researcher explicate a story-line that integrates the core categories according to a central phenomenon. The central phenomenon undergirds the conceptual framework of the theory and evolves from the repeated comparison of categories that are evaluated in terms of their "goodness of fit" to the story-line. A simple description of the process was provided by Gilgun (1992). "The grounded theory process is like a funnel, beginning by observing many possible

themes to develop and gradually focusing on a particular theme or set of themes" (p. 116). Figure 3.2 demonstrates the sequence of coding that culminates in the theory.

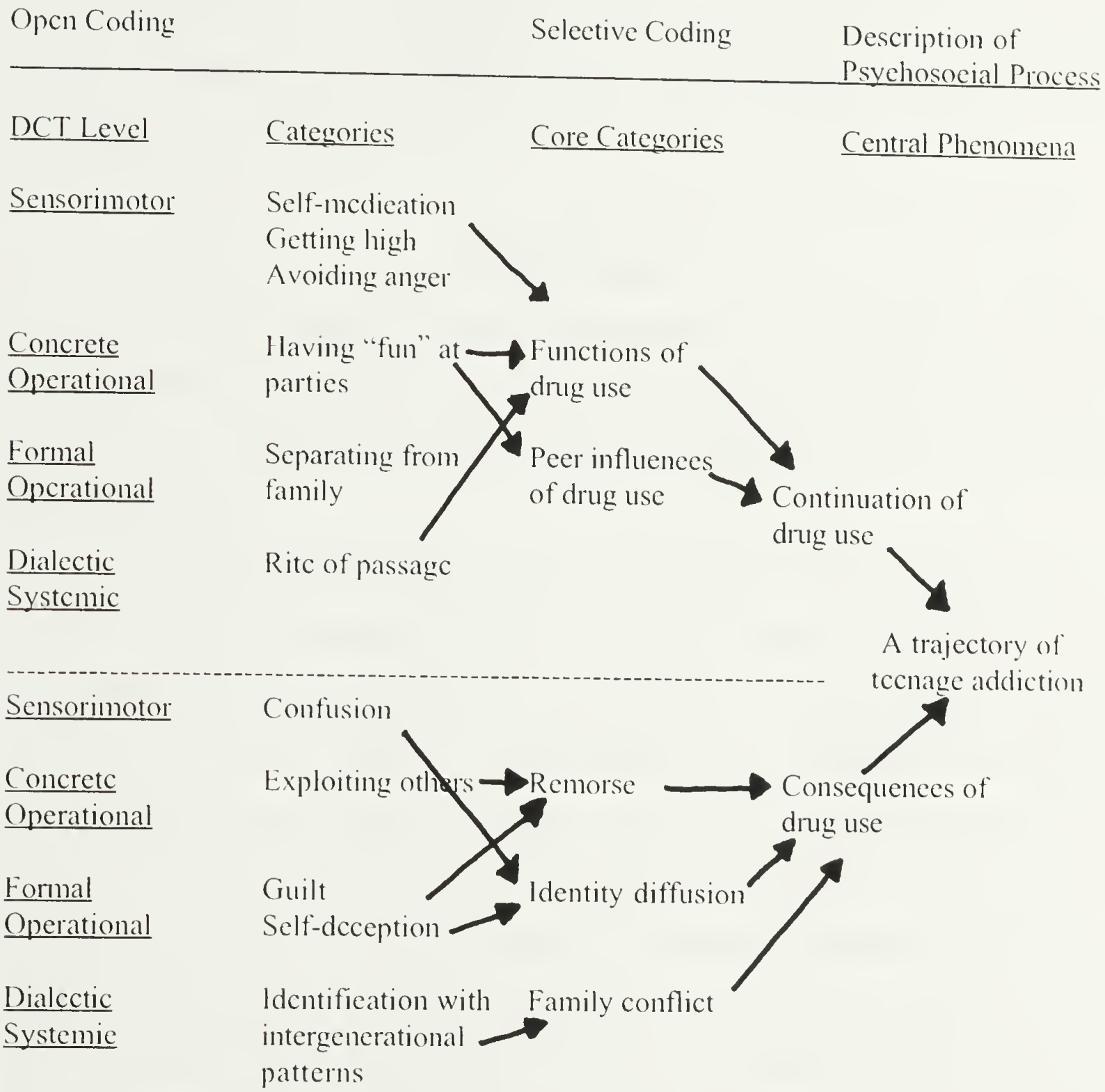


Figure 3.2 An Example of Grounded Theory Analysis Across Cognitive-Developmental Levels

Step 11: In the final step of the grounded theory method, a descriptive narrative about the central phenomenon was developed. This was presented as a meta-story of addiction that reflected common themes in the stories of the twelve subjects across the four major cognitive-developmental domains of DCT.

Since grounded theory is an action-oriented model, it is important that the theory, like a good story, demonstrates movement and change. Consequently, the theory was presented in a narrative sequence of phases that comprised a "basic psychosocial process" of teenage addiction (Strauss & Corbin, 1990). This theory is presented in the next chapter.

Chapter Summary

This chapter introduced the methods and procedures used to develop a theory of teenage addiction. More specifically, the research design followed a logical sequence of procedures that integrated methods from cognitive-developmental, narrative and grounded theory orientations.

In explaining the rationale for using this combination of methods, each perspective was described as contributing a general function to the research. For example, Ivey's Developmental therapy was designated as a useful framework to organize the complexity of addiction. Narrative theory, on the other hand, provided coherence to the data that gets fractured through structured analysis. Lastly, grounded theory facilitated the integration of both the structural and textural modes of data analysis. Grounded theory, moreover, was cited as providing advantages over conventional paradigms of theorizing. These include its emphasis on the in-depth analysis of lived-experience which normally gets suppressed by traditional methods; an open and flexible attitude that seeks to generate multiple perspectives and its use of accessible language. Grounded theory also provides criteria for validity that are clinically applicable.

Following the discussion of the methodology, a research design was outlined that incorporates the three main research orientations. A summary of the research design is found in Table 3.1. Lastly, the research questions that influenced the study pertained to finding common themes in the stories of young people who struggle with substance

abuse. It was intended that the outcome of this research would yield useful clinical applications for the assessment and treatment of adolescent substance abuse.

Table 3.1: Summary of the Research Design

Phase	Research Tasks	Steps/Procedures
I.	Data Collection	1. Standard Cognitive-Developmental Interview (SCDI) 2. Self-administered Survey
II.	Cognitive-Developmental Structuring	3. Full reading of interview protocols 4. Use of Standard Cognitive Developmental Classification System (SCDCS) to code responses 5. Abstract coded responses and organize into respective DCT levels
III.	Narrative Transformation	6. Translate coded responses into meaning units 7. Translate meaning units into a story for each subject
IV.	Theoretical Construction	8. Grounded theory - open coding 9. Grounded theory - developing core categories 10. Grounded theory - selective coding 11. Description of theory in narrative terms

CHAPTER IV

RESULTS AND DISCUSSION

Introduction

The purpose of this study was to systematically explore the multiple levels of cognitive-development that comprise the experience of adolescents and young adults who are addicted to or abuse drugs and alcohol. In this chapter, the cognitive-developmental dimensions of addiction will be presented in narrative form and organized into a theoretical framework using grounded theory methods of interpretation. The study was particularly interested in the following questions.

1) How does the experience of addiction for each adolescent translate into the four cognitive-developmental levels? Is each mode of cognition represented by a distinct set of metaphors or narrative themes? If so, how do they meaningfully relate to the narrative as a whole?

2) Are there common themes in the stories for each cognitive-developmental level across subjects?

3) What are the implications for treatment in finding commonalities in the narratives of teenage addiction?

This chapter will be divided into two parts. First, the cognitive-developmental profile of the sample will be identified and then discussed in terms of its relevancy to the phenomenon of addiction. In the second part, a grounded theory of teenage addiction will be presented as a result of the combined data analysis and interpretation using DCT, narrative and grounded theory methods. The theory will be evaluated in terms of the focus questions and further discussed in consideration of the relevant literature that was earlier reviewed.

Cognitive-Developmental Profiles

Though individuals generally express a mixture of the four major cognitive-developmental styles, it is possible to assess a client's predominant orientation by their initial response to the Standard Cognitive Developmental Interview's (SCDI) opening question: "To begin with, I would like you to respond to a statement that I hope will stimulate you in some way. I would like you to say as much as you can about what happens for you when you focus on the words drugs and alcohol." This assessment question was designed to evoke the clients' initial conceptualization of their issues. The predominant cognitive-developmental level of the sample is broken down in Table 4.1.

Table 4.1 Predominant Cognitive-Developmental Level of the Sample

Cognitive-Developmental Category	No. of Subjects	%
Sensorimotor	6	50
Concrete Operational	4	33
Formal Operational	1	9
Dialectic/Systemic	1	9

The results of assessing the predominant cognitive-developmental level of the sample must be interpreted with caution since the opening interviewer statement of the SCDI was altered from a focus on family to the cue words drugs and alcohol. Consequently, it is possible that the sensorimotor emphasis in the sample might reflect popularized sensory associations elicited from the words drugs and alcohol as opposed to actual distinctions in cognitive-developmental functioning. Similarly, for people who are heavy users, perhaps sensory issues are particularly salient. This suggests that people's prevailing cognitive-developmental style may shift according to their experience or degree of severity with different issues. For example, the same person who demonstrates a predominantly sensorimotor approach to drug and alcohol use may be assessed at the formal operational level when the focus is on family. In any event, it would be interesting

to see at what cognitive level a non-drug using group would conceptualize the phenomena of drugs and alcohol.

Before further analysis, however, it is important that these observations of cognitive-developmental profile should be interpreted with caution given the small sample size. Further research in this area would be enhanced by using a larger sample size and more clinically definitive assessment measures.

A more relevant consideration for this study is whether the predominant cognitive-developmental level is a reliable indication of where the person may be specifically entrenched in the addictive process. That is, since addiction encompasses several cognitive dimensions, is it then possible to identify one mode that exerts a stronger influence to the person's experience of addiction? This question implies that drug and alcohol use may serve a central function for the life of the individual. From this perspective the clinician might assess whether self-medication (Sensorimotor); peer pressure and rituals (Concrete Operational); identity development (Formal Operational) or family roles and dynamics (Dialectic/Systemic) play a more central role in maintaining one's addiction.

From another point of view, one might ask whether the predominant cognitive-developmental level correlates to the extent and severity of a person's drug and alcohol use. For example, would chronic substance abusers demonstrate a lag in their cognitive-developmental growth or do they over-rely on just one cognitive perspective?

In regards to the representation of the four cognitive-developmental orientations among the sample, only two subjects out of twelve did not offer a dialectic/systemic response. This confirms the multidimensionality of complex issues like addiction as well as the fact that people are indeed a mixture of cognitive styles.

In terms of gender, there did not appear to be any significant differences in cognitive-developmental profiles. However, as will be discussed later in the chapter, gender differences were found in the content areas of addiction-related themes.

The overall cognitive-developmental profile of the sample did indicate differences related to setting. For example, although two subjects from the inpatient treatment facility did not provide dialectic/systemic responses, the overall level of cognitive abstraction seemed more fully developed and elaborate in this group than in the public high school. This observation is counter-intuitive to the hypothesis that teens who are chronic or heavy users of drugs and alcohol would be expected to be developmentally stuck. Here it is important to point out however, that the inpatient group was drug free for variable periods of time when interviewed and that they were also exposed to an intensive treatment regimen that would both elicit personal insights and acquaint them with the privileged language of treatment and recovery.

Theory

In this section the grounded theory of teenage addiction will be presented. This theory evolved from the systematic integration of cognitive-developmental and narrative methods of data analysis and interpretation. The theory is "grounded" in the sense that it is founded upon the complexity of localized data that emerged from the lived experience of a particular group of adolescents as opposed to an apriori, uniform set of assumptions. A grounded theory approach was deemed relevant to this study because of its emphasis on both the complexity and movement of human experience. These are essential features of a narrative perspective. In this approach, people are the starting point rather than theory.

More specifically, the theory presented in this chapter describes a progression of teenage addiction that begins with an initiation process and continues along a path to the possibilities of treatment and change. Each step in the path was derived from common themes in the narrative-interviews based on methods described in chapter three. In addition, a simultaneous progression occurs along the cognitive-developmental spectrum where each phase of the addictive process unfolds into the four stage cognitive-

developmental sequence. A discussion of significant themes and findings will follow the presentation of the theory.

Lastly, the integration of narrative-interviews through the grounded theory method constitutes the meta-story of teenage addiction. Rather than reflect a generalized set of universal facts, the meta-story contains the "multiplicity of voices" derived from the sample. The essence of the meta-story is captured by the following description: "As in a musical polyphonic composition, a particular idea or theme (e.g. aggression, love, jealousy) has not a fixed, self-contained unchangeable meaning. Instead, by leading the theme through the various voices, its many-facetedness and potentials can be brought to expression." (Hermans & Kempen, 1993; p.42)

Vicious Cycles: A Grounded Theory of Teenage Addiction

The experience of teenage addiction follows a self-defeating trajectory that begins with an Initiation process and then proceeds with a Continuation phase in which drug and alcohol use is reinforced by its perceived benefits. Next, the escalation of drug and alcohol use leads to negative Consequences that precipitate even further use as a means in which to cope with the resultant negative effects. Eventually, the consequences become severe enough to elicit a movement toward Treatment and Change.

Each phase of this progression intersects with the four stage sequence of cognitive-development to consolidate the experience of addiction yet at the same time provides the possibilities for therapeutic change along the developmental spectrum.

Initiation

Sensorimotor. A person's first experience with drugs and alcohol may evoke curiosity and anticipation about their physiological and mood altering effects. Typically, the initial experience is disappointing because feeling "high" is not immediately experienced. Not being able to experience the anticipated high may cause anxiety and a

sense of personal failure. As one 17 year-old girl lamented, "I thought there was something wrong with me".

Concrete Operational. Initiation to drugs and alcohol follows a progression from the use of "gateway drugs" such as tobacco, alcohol and marijuana during junior high school which then advances to the use of "hard" drugs such as LSD, crack and cocaine during the high school years.

Family and peers have a major influence on the initial use of drugs and alcohol. Family influence was gauged by the level of parents' involvement with their teenage children. The continuum of involvement ranged from benign neglect and lack of awareness (e.g. unsupervised "latch-key children"), to tolerance of experimentation and then less typically to actual encouragement of drug and alcohol use by older siblings and relatives. Likewise, peer influence existed along a continuum from passive involvement (e.g. "You pick up drinking and drugs from being around your peers") to peer pressure (e.g. "My friends started me doing every drug I've done").

Formal Operational. Peer and family influences are further seen within the context of self-identity. Accordingly, the initiation to drugs and alcohol is associated with the desired images of being "cool" and mature. Older peers and family members may be viewed as role-models. In describing her initiation to drugs, for example, one subject reported that "my brother has influence on me because he was older and I wanted to be more mature. I thought that I was always more mature than most people in my grade because I've always been exposed to older people which is cool." Interestingly enough, no one made reference to role-models who would influence the abstinence from drug and alcohol use.

Dialectic/Systemic. There is recognition that alcoholism, for example, is passed down through generations. Accordingly, the adolescent views him or herself as a part of the intergenerational cycle of addiction. This may be accompanied by fears of extending this progression to younger siblings.

In other respects, there is little reference or awareness of the cultural influences involved in the initiation to drug and alcohol use except for one young person's attribution of his parents' initiation to drugs as a phenomenon of the "hippie" culture of the 1960's.

Continuation

Sensorimotor. At this level, one may be attuned to the sensory cues and "triggers" that precipitate the urge to use drugs and alcohol. These include seeing drug paraphernalia and other visual cues; smelling the aroma of smoke in the air and participating in or observing conversations about drugs and alcohol.

In addition, several sensory effects of drugs and alcohol reinforce its continued use. For example, one seeks the pleasure of getting high and experiencing elevated mood states. In the same vein, drugs make life interesting and provide sensory stimulation to an existence that is otherwise perceived as boring. Here the anticipation of unpredictable outcomes and effects of drug use may arouse the excitement of risk-taking.

Though drug and alcohol use may evoke euphoric feelings, they also mask physical and emotional pain and provide a means with which to avoid or escape unpleasant realities.

Concrete Operational. Drug and alcohol use function as a teenage ritual that provides the focal point for social activity. According to one subject, "I do drugs all the time ...its a weekend thing." Drugs and alcohol use are associated with parties, hanging out and even illegal activities. Substance use is also a requirement for entry into certain peer groups. These groups often define the customs of drug-using behavior. The

potential rejection by peers makes it hard to quit. This may be experienced differently by gender. Conformity, for example, appeared to be a motivating factor for adolescent girls' continued use. As one girl proudly explained, "My friends think the same way as I do about everything." Teenage boys, on the other hand, are afraid to quit for fear that their masculinity will be challenged by their peers or as one young man put it, fear being called a "wimp". Lastly, the habitual use of drugs and alcohol may come under the tutelage of older family members.

Formal Operational. From this cognitive perspective, rituals of drug and alcohol use are conceptualized in the broader context of an adolescent rite of passage. In this manner, drug and alcohol use play a mediating role in how the young person negotiates developmental tasks and the vicissitudes of life transitions. Specifically, repeated drug use functions as a vehicle to achieve a definitive separation from a family that is frequently beset by conflict and strife. However, strivings for independence are accompanied by a desire to be nurtured and retrospective appeals for parents to provide more structure and limits. This even included a suggestion by one young woman that her parents collect urine samples. Possible hypotheses offered by the subjects in response to their parents' failure to intervene more assertively are that teenagers grow out of it and that it would be hypocritical for some parents to set limits due to their own substance abuse histories.

Dialectic/Systemic. Two mutually related themes were observed at this level of understanding. First, a process of identification with addicted parents was established in some cases. This provided the possibility for the young person to externalize the problem of addiction as a generational disease and thus allow for a more empathic view of their parents. Yet secondly, there was also an acknowledgment that identification has its limits as in the words of this 17 year-old who viewed the intergenerational theory of

alcohol use with a more critical eye. (e.g. "My grandfather drank but the reason he drank may not be the same reason my father drank. My father drank but that's not the reason that I drink".)

Consequences

Sensorimotor. Thinking either becomes dominated by an obsession to get high or wasted or else by confusion and an inability to reflect. As one boy observed, "Life is like a blur". Additionally, continued use of drugs and alcohol elicits noxious physical feelings including nausea and black-outs. One may also feel a sense of disgust when observing friends passing out and vomiting.

Repeated drug use also evokes dysphoria with metaphors related to death, Hell, falling and being trapped within one's own world. Feeling guilt and a painful remorse for one's actions are later manifestations of sensorimotor consequences.

Fear and concern are expressed that others may become violent and out of control when under the influence with actual accounts of sexual assault, fighting and drunk driving. There is also concern of losing control of oneself through self-destructive and criminal behavior.

Concrete Operational. Obsessive thinking is a particular consequence for those addicted to crack. This leads to a constant struggle to keep one's mind off of drugs. Along these lines, one's activities and behavioral repertoire is confined to the compulsive and daily use of drugs and alcohol.

Socially, relationships becomes secondary to the need for crack. Asserted one young woman, "All I wanted was me and crack." Eventually, friends and family become exploited and treated like "crap". For example, the compulsive drive to obtain drugs may cause one to steal from the family, take advantage of peers and indulge in criminal activity like B & E's (breaking and entering).

Overall, life becomes increasingly difficult to manage as the consequences of drug use escalate. Concrete consequences may include getting suspended from school, getting fired from work, getting kicked out of home and getting arrested for illegal activity. Emotional consequences may include guilt, distrust and depression. These downward trends often correspond to a progression to more addictive drugs like crack and cocaine which contribute to an aura of omnipotence and grandiosity. This renders the young person seemingly invincible to the eventual destruction of his or her life. This led one subject to conclude, "Its insane to do the same thing and expect different results". At this point, quitting seems impossible.

Those not yet caught in this downward spiral are still able to exercise judgment in terms of safety and self-control.

Formal Operational. As a drug related lifestyle becomes further entrenched, one struggles to integrate two disparate perceptions of self, the addicted personality and the pre-addicted personality. Resolution of this dilemma is sought through a process of self-deception and denial of information that runs counter to a more idealized sense of self. Guilt becomes a gnawing issue.

Consequently, the task of negotiating an identity becomes increasingly difficult as one's actions in the world are constricted to the pursuit of drugs as opposed to the self-validation that derives from the empirical testing of one's hypotheses about life. This creates an inner sense of emptiness or as one young woman aptly stated, "I have a lot of questions and no answers."

Most significantly, the diminished self-concept and dysphoria resulting from heavy drug use, hidden behind an omnipotent facade, triggers the vicious cycle that is characteristic of teenage addiction. Here the young person tries to alleviate the negative feeling states and self-perceptions through even more drug and alcohol use. This pattern tends to escalate and repeat itself. This vicious cycle was particularly evident among the

sample of youth in rehabilitation. Despite individual differences on the specific triggers and manifestations of this cycle, there was general agreement that these self-defeating patterns would have led to dire consequences such as death were it not for outside intervention.

Dialectic/Systemic. Intergenerational histories of alcoholism and the danger of identifying with alcoholic parents were identified. There was a desire not to become like them. The fear of passing drug and alcohol use to younger siblings was also a concern.. Lastly, the issue of cultural relativism was brought out by one person who indicated that her family exaggerated the negative consequences of her situation because they lived in a different generation.

Attitude Toward Treatment and Change

Sensorimotor. Entrenchment in the addictive process is associated with a perceived lack of control over the ability to stop using drugs and alcohol. Similarly, feelings of hopelessness set in as one perceives oneself as unavailable for help (e.g. "chemicals clogged my mind and were telling me, 'I don't need you'"). However, once treatment is obtained, a sense of relief may be experienced, like a "weight" being taken off. For those not yet caught in the cycle of addiction, the negative physical effects of drugs and alcohol provide an opportunity to question further use and perhaps seek help.

Concrete Operational. Several factors at this level influence intervention, treatment and change. These include 1) an awareness of hitting bottom as life conditions become intolerable 2) external intervention such as court involvement 3) degree of parental support and 4) realization that the costs of drug and alcohol use may outweigh the benefits.

Factors that inhibit intervention, treatment and change include 1) a perception among the high school sample particularly, that they don't need to change their drug and alcohol use because they haven't experienced harmful effects either physically, emotionally or consequentially, 2) peer pressure and influence to maintain drug and alcohol use, 3) a reactive posture toward advice and feedback that reflected a kind of pseudo-independence and 4) ineffectual parental response and limit setting.

Formal Operational. Making empathetic connections with others who have similar histories of substance abuse was an important aspect of the treatment process. This enhanced trusting relationships and lent credibility to both helpers and peers. On the other hand, guidance from traditional authority figures was perceived with more skepticism. Accordingly, it was important that those soliciting advice knew where the teens were "coming from".

Achieving a broader temporal perspective also appeared to be an important correlate to change. This included a critical review of one's past accompanied by a deeply felt sense of remorse for causing others pain. Similarly, there was a sense of regret that intervention did not happen earlier enough. The future on the other hand was perceived proactively with recognition that commitment to recovery may be a life-long process, that one must take necessary risks to change and that it is important to make amends to others and regain their trust. One subject sadly observed that "I'm going to change because I don't want to hurt people anymore. There are a few supportive people who would be disappointed if I relapsed."

Dialectic/Systemic. The rehab subjects were aware of the need to follow-up their treatment. Recognizing their addiction as a long-term struggle, they were able to identify community-based resources such as Alcoholics and Narcotics Anonymous. They also expressed the importance of strengthening their commitment to work, school and their

families. Overall, they shared a more hopeful attitude toward the future. The high school students on the other hand, minimized the influence that drugs and alcohol had on their other life-spaces. Similarly, their sense of temporality seemed more limited to the present.

Discussion

The discussion section will focus on drawing out themes from the grounded theory or meta-story. These themes will unfold according to the four "chapter" sequence of the addictive experience that was presented in the theory (e.g. Initiation; Continuation; Consequences and Attitude Toward Treatment and Change). Each phase of the meta-story will be reviewed in terms of the relevant theoretical and empirical research in that area.

Initiation

In a narrative sense, initiation has the connotation of marking the beginning of a new chapter in one's life. Adolescence as a developmental stage has traditionally been construed in this manner. Rousseau, for example, who is generally credited with defining the ideology of modern adolescence, had described this period as a "rebirth" (Muus, 1986). From this viewpoint, the development of rites of passage to mark the young person's initiation to adulthood remains a significant practice in many diverse cultures. With the lack of clear and definitive rites of passage to mark the entrance into adulthood, adolescents in modern American culture have thus had to develop their own rituals.

In this study, initiation specifically refers to the beginning of one's substance abuse career. This event, however, does converge with the developmental transition to adolescence. In fact, since the adolescent who has never experimented with drugs or alcohol may be considered "statistically deviant" in our culture (Baumrind & Moselle, 1985), one can argue that drug and alcohol use qualifies as a rite of passage for American

youth. As analysis of the trajectory of teenage addiction will bear out, initiation to drugs and alcohol is inseparable from the more encompassing issue of the developmental emergence of adolescence.

The converging themes of initiation that unfolded in the grounded theory, can be understood in the binding context of identity. Attempts to affix an identity were implicit in the entire range of cognitive-developmental orientations. At the sensorimotor level, for example, the curiosity and anticipation about the sensory effects of drugs can be interpreted as an integral part of the experimental process that the young person employs to test an identity. From the sensorimotor domain, this means trying out different feeling states. In this manner, drug experimentation occurs within an anticipatory framework in which the young person has ideal expectations of pleasure and getting high. When this experience was not immediately achieved, several teens in the study reported feeling deficient. This observation points to a general dilemma of adolescent cognitive experience in which the young person must cope with the discrepancy between the ideal and the real. Resolution of this discrepancy is typically achieved through experimentation and reality testing, processes which are intrinsic to adolescent life experience.

More significantly, the anticipatory images and expectations associated with drug use have been shown to effect the rate of drug use among teenagers. Recent studies, for example, attribute the surge in adolescent drug use to a decline in their perceived harmfulness (Johnston, 1994). The softening of health concerns has been coupled with media images that associate drug use with recreational pursuits, social competence and identification with success.

The manipulation of positive imagery and exploitation of adolescent identity concerns is especially evident in teenage smoking. As one researcher summarized, "cigarette smoking is continually associated with social success, sexual attractiveness, a healthy demeanor, exciting sports activities, a cool and tough image for boys, a slender

body and liberated spirit for girls, autonomy and independence for both sexes and so on. What else could an American adolescent want?" (Johnston, 1995)

Since tobacco is a significant precursor drug in the progression to illicit drugs, interventions should focus on preventing the young from starting. Indeed, as the results of this study's survey indicated, the participants followed the same developmental progression from cigarettes to "hard" drugs as found in the empirical research. Table 4.2 displays the initiation of the sample to various substances by school grade. In almost all cases, cigarette smoking preceded marijuana use. This finding was also consistent with the research which posits a high degree of correlation between cigarette smoking and marijuana use. (Johnston, 1995) For the most part, the sample did not judge marijuana as having harmful effects.

Table 4.2 Initiation to Drug and Alcohol Use by School Grade (Substances)

Subject	Cigarettes	Alcohol	Marijuana	LSD	Crack	Cocaine	Inhalants.
1	<6	<6	9	10	9	10	9
2	<6	8				9	
3	<6	<6	<6	9		12	<6
4	<6	<6	<6	9	8		8
5	<6	8	8			11	11
6	<6	<6	9				
7	<6	7	8	8	12	<6	9
8	<6	9	9	9	9	9	
9	<6	7	7	8	9	9	8
10	<6	<6	<6	8			7
11	<6	7		12	12	12	10

As discussion of initiation to drug use moves to the concrete operational level, themes appeared to center upon the influence of peers and family. Since the conception of identity at this cognitive-developmental orientation lacks yet a sense of personal agency, it made sense that the initiation process was attributed to outside social influences. For example, the teens in this study tended to perceive their initiation to

drugs in terms of peer pressure as opposed to an autonomous choice to participate in drug-related activities with like-minded individuals. One subject explained, for example, that "My friends started me doing every drug I've done." In actuality, research on peer factors suggest that adolescents gravitate to peer groups who share a common set of values or behaviors. (Oetting & Lynch, 1994) It also seems that young people's drug habits are reinforced by the gesturing and social ritual that accompanies peer group drug use. In any event, strong peer ties in early adolescence is generally a good predictor of drug use. (Donnermeyer & Huang, 1991).

Family influences from a concrete operational perspective were likewise associated with a lack of personal agency and responsibility. The sample group, for example, conceived family influences in the external sense of how much supervision and structure they provided. The most interesting observation was that in retrospect, many of the interviewees had wished that their parents had become more actively involved in setting limits and discouraging their drug use. One subject summarized this sentiment by saying that she wished her mother would have "put her foot down".

At the formal operational level, peers and family influenced initiation through a process of identification by which the young person associated drug use with maturity and a "cool" image. This also involved an anticipatory posture toward how one would like to be. Studies do in fact indicate that parental substance abuse is a major precipitating factor in teenage drug use. (Kandel, 1982; Malkus, 1994)

At the dialectic/systemic level, it is interesting to point out that although there was recognition that one's initiation to drug use was linked within an intergenerational family context, there was little expressed insight into cultural and societal influences. This observation is consistent with the ahistorical attitude that has become characteristic of modern adolescence. Specifically, it speaks to the discontinuity and detachment that correspond to the decontextualizing trends in modern culture. These include the absence

of meaningful rites of passage for youth, a "here and now" perspective and an emphasis on individual autonomy.

From a narrative standpoint, the decontextualizing trends in modern culture can be understood as a manifestation of narrative smoothing. In this manner, the cultural background gives way to the unfolding drama of the individual, much like a figure-ground relationship. Here the self is cast in more heroic terms as an autonomous entity that transcends its grounding in a repressed historical reality.

From a cognitive-developmental perspective, on the other hand, a viable explanation for the absence of dialectic/systemic functioning may be that this type of abstract thinking is beyond the scope of many individuals. Accordingly, they are not able to or have not been educated to discern a link between their present drug use and cultural influences.

Continuation

Continuation refers to the factors and circumstances that contributed to the adolescent's ongoing involvement with drugs and alcohol. At the sensorimotor level, sensory cues or "triggers" appeared to play a role in maintaining the urge to use. These included the perception of high-risk external stimuli (e.g. the aroma of pot). High-risk stimuli can also be internal such as emotional factors like depression and boredom. In any event , triggers tend to be very individualized and relate to the personal meaning or experience that the person associates with the particular stimulus.

Triggers form the initial step in the cognitive model of relapse by activating drug-related beliefs and cognitive distortions that reinforce one's reason to use. (Beck et al, 1993) For example, one teen responded in the interview that "getting stoned opens up my mind a little more".

Since high-risk stimuli do precipitate the chain of events leading to relapse or continued use, intervention is therefore focused on increasing one's awareness of these

triggers so that exposure to high-risk situations can be avoided or that the person will respond less reflexively to them.

The theory demonstrated that affective modulation appeared to be a major sensorimotor factor that reinforced continued drug use. This included both the pursuit of euphoric feeling states and the desire to medicate physical and emotional pain. These processes appear to be bound by a similar reinforcement system that may be central to the phenomenon of addiction. Psychobiological research, for example, posits that intoxication and the motivation to alter states of consciousness relate to biological drives. (Siegel, 1989) In fact one theory of drug abuse hypothesizes that drug-dependent individuals lack the natural ability to create a state of euphoria. (Greaves, 1980) These individuals were reported to engage in the passive strategy of drug use in order to attain these pleasurable feelings. The main premise of this perspective was that most conceptions of addiction tended to minimize the role of dysphoric feeling in the addictive process. Later research, however, supported a self-medication model of addiction. (Khantzian, 1985) Essentially, the self-medication model asserts that chemically dependent individuals use drugs in order to alleviate the pain and stress of mental disorders such as depression and other psychologically related symptomology. (Brower et al, 1989)

Along these lines, the self-medication paradigm can be adapted to explain teen drug abuse in terms of coping with the developmental stresses that characterize the difficult transition of adolescence. Psychobiological research on teenage stress, for example, suggests that risk-taking activity such as drug use shares a common biological mechanism associated with stress reduction. (Krasnegor, 1989) In a similar but less pathological view, drugs also function to alleviate boredom and passivity.

In sum, the motivation to alter feeling states either by inducing euphoria or suppressing dysphoria is implicit in the grounded theory of teenage addiction. This investigation will further demonstrate that these affective processes are fundamentally

interrelated. Accordingly, the opponent-process theory of addiction (Solomon, 1980) provides insight into the dynamics of the pleasure/pain dichotomy. In brief, the theory asserts that our brains are organized to inhibit affective arousal whether it be pleasurable or aversive. Following affective stimulation, there is movement toward restoring the original state of physiological and psychological homeostasis. Pleasure and pain, moreover, are linked by a process defined as "hedonic contrast". This involves tolerance to drug-induced euphoria followed by the aversive conditions of withdrawal and craving. Eventually, a situation is created where the removal of the aversive effects becomes just as reinforcing as the initial euphoria. In other words, people become addicted to the experience of pain relief. Solomon (1980) thus aptly described the opponent-process theory as "the costs of pleasure and the benefits of pain".

Within the experience of adolescence, it is suggested here that risk-taking follows a similar process of reinforcement. Indeed, risk-taking conforms to a vicious cycle similar to that of addiction whereby boredom or stress sparks the desire for more stimulating adventures. The resulting thrills become habituated and thus prompts the search for greater thrills and risks. These adventures, moreover, often lead to stressful consequences which precipitate the original motivation for altered states in the first place.

Having provided a scientific rationale for the homeostatic functions of addiction and risk-taking, the opponent-process phenomenon can be explicated within a narrative framework. This perspective is compatible with the psychoanalytic depiction of adolescent development as a progressive narrative characterized by the opposing movements of progression and regression. (Gergen & Gergen, 1986; Blos, 1979) Blos's developmental theory of adolescence, for example, highlights psychological regression as a prerequisite for the formal movement of the adolescent ego toward maturity. (Blos, 1967) In narrative terms this developmental process embodies the notion of adolescence as a romantic saga where the protagonist goes through a series of progressive and regressive periods from banishment to heroic return. (Gergen & Gergen, 1983) The metaphor is

especially appropriate in describing the adolescent's solitary search for truth and identity. In further comparison to the dynamic tension of the opponent-process theory, a narrative perspective considers both repose and adventure as inherently unstable states. Here it follows that the dialectical progression of these states contributes to the construction of the self-narrative. In constructing an identity, for example, the adolescent vacillates between the lofty idealism of the subjective navel-gazer to the exploits of the impatient adventurer. (Scheibe, 1986) This process, moreover, represents the dualistic epistemology of adolescent thought described earlier.

The concrete operational story of the continuation phase emphasizes the role of peer influences in drug and alcohol use. Empirical research has consistently supported a strong relationship between teenage drug use and peer-related factors. (Kandel, 1985; Oetting & Beauvais, 1987 a-b,1987; Brook et al, 1990) However, in contrast to the conventional belief in the relentless pull of "peer pressure", the research recognizes that drug using adolescents tend to gravitate to other drug using peers who share similar beliefs and behavioral characteristics. This observation dispenses with the notion of the young person as a passive victim of social forces. From a narrative view, this posits the adolescent as an active participant who makes moral choices.

The next significant theme in the theory describes the use of drugs as a focal point for teenage social activity. This phenomenon is best explained by life-style theories of adolescent substance abuse. (Oetting & Beauvais, 1987 a-b; Jessor & Jessor, 1977; Glassner & Loughlin, 1987) Essentially, these theories view drug use within a more encompassing context of social worlds and peer cultures, each with their own set of beliefs and patterned behaviors. Specifically, drug use may be seen as a significant factor in an overall life-style of deviance. Indeed, many of the adolescents interviewed in this study reported concomitant anti-social behaviors such as truancy and stealing. Once involved in a deviant peer group it is apparently difficult to quit drug use. In her longitudinal study of peer dyads, for example, Kandel (1985) indicated that an adolescent

will either end a friendship or modify his or her own behavior when confronted with a friend whose attitude or behavior is inconsistent with their own. Interestingly enough, it is also true that as a youngster crosses the threshold into a more serious addiction, old friendships tend to dissolve. (Oetting & Lynch, 1994) This observation was evident by the different descriptions of peer relationships between the high school subgroup and the inpatient one. Accordingly, the teens who were addicted to crack lost interest in maintaining their friendships as they were preoccupied with obtaining the drug.

Lastly, the theme of drug using family members deserves mention. Although both peers and family exert considerable influence on the young person's use of drugs, they do so in different ways. Peers, for example, model drug using behavior whereas parents typically set the standard for values regarding drug use. (Kandel, 1985) It is thus uncommon when a drug using parent models and encourages drug using behavior. This signifies a major violation of generational boundaries and is cited in the research as a particularly strong risk-factor in teen drug abuse. (Brook et al, 1990)

Consequences

Consequences of addiction experienced at the sensorimotor level included the interpretation of unpleasant physical effects of drugs and alcohol; disorganized thinking, basic fears and dysphoria expressed at a bodily level (e.g. pain). It is significant that the phenomena of consequences appeared to evoke the most metaphoric expression and that these metaphors corresponded to a sensorimotor orientation. Accordingly, the theory revealed common references to death, Hell, darkness and falling. One subject, for example, imagined herself "walking down the street drunk and high and the street is coming to an end. Its foggy and dark and mysterious just like my life." Interestingly enough, most of these metaphors were elicited by the interview's open-ended assessment question. This observation suggests that the deep, unconscious or tacit meanings of these

metaphors are particularly salient and thus provide the means from which to access and change the person's underlying constructs of their involvement in the addictive process.

This discussion will address three specific issues related to the therapeutic use of metaphors within the context of addiction. First, it is hypothesized that the syndrome of addiction may contain its own unique set of metaphoric representations. Accordingly, Goncalves and Craine (1990) speculate that "If it is true that different types of psychological dysfunctions are characterized by a different level of tacit/unconscious organization, it should be possible to identify characteristic groups of metaphors in different nosological categories" (p.138). In this manner, loss appeared to be the central metaphor for depressed clients while danger and threat underlied the representations of anxious clients (Goncalves & Craine, 1990).

Looking at addiction then, one might anticipate finding metaphors related to surrender and control. Images of falling, being trapped and getting caught in vicious cycles, for example, were expressed in the interviews. The emergence of addiction metaphors does raise the opportunity for therapeutic change. Consequently, the second issue involves treatment matching at the metaphoric level. Briefly, this involves the clinician engaging in the client's metaphoric construction but facilitating its direction toward growth and change. This is essentially an epistemological process that involves the restructuring of an individual's "hard core" paradigms or constraining belief systems (Goncalves & Craine, 1990).

Matching the clients metaphors occurs primarily at the sensorimotor level because the person "motorically" constructs metaphors through perceptual processes. Accordingly, metaphors are based on sensory preferences whereby the person organizes his or her own experience from a primary sensory modality. Thus similar to the predominant cognitive-developmental level, we tend to rely on one sensory modality (e.g. visual, auditory or kinesthetic) to represent our experience. These preferences, moreover, are revealed by speech acts or language predicates that indicate the preferred modality.

Words like "pain", for example, would be a predicate for a kinesthetic sensory preference. (Mills & Crowley, 1986) By using the same sensory language preferences as the client, the clinician not only establishes rapport but also taps into what is personally relevant for the client on a deeper, unconscious level.

Lastly, connecting with the client on a metaphoric level creates a "shared phenomenological reality" (Mills & Crowley, 1986) that is similar to the empathy attained when the therapist matches the client's cognitive-developmental style. The use of therapeutic metaphor, however, adds another dimension to empathy by creating a three-way empathic relationship between the client, therapist and the story-metaphor. (Mills & Crowley, 1986) In this manner, the client develops a sense of identification with the therapeutic metaphor that is less threatening than the personal identification with the therapist with all its transferential issues and conflicts. This is especially important for adolescents who are struggling with issues of intimacy and autonomy. From the perspective of addiction, the young person's ability to develop a shared narrative is also significant given that the metaphors elicited by the interview (e.g. falling, trapped) conjured up images of a painful and isolating experience.

Moving on to the concrete operational domain, obsessive thinking about drugs and alcohol and the compulsion to use were primary consequences of the addictive process. Together, the obsessive and compulsive aspects of addiction form the phenomenon of craving. Craving has been defined as a strong desire and perceived need for the addictive experience. Its strength is determined by "how willing the person is to sacrifice other sources of reward or well-being to continue engaging in the addictive behavior" (Donovan & Marlatt, 1988; p.6). Craving thus becomes part of the cost/benefit analysis that was earlier described as factoring into the young person's continued use of drugs and alcohol. This section of the theory particularly reveals how the teens in rehab who were addicted to crack had sacrificed their family and social relationships, school and employment

status and their emotional and physical health in pursuit of crack. During the height of his addiction, one subject admitted, "I didn't care about anyone except the 'rock'."

Craving is a phase in the experience of addiction that is likewise idiosyncratic and multidimensional containing cognitive, affective and physiological components. (Beck et al, 1993) Consequently, the integration of cognitive-developmental and narrative approaches would seem effective in dealing with the phenomenon. In fact, case studies on untreated heroin addicts revealed that these individuals developed very personal ways to reinterpret the contextual cues related to craving. Specifically, they employed a method of cognitive restructuring that was compatible to their unique perspectives and total life schemes (Peele, 1989). More importantly, this approach reaffirmed the addict's sense of personal agency in contrast to the determinism of the medical model of addiction.

Another important consequence at the concrete operational level was the mind-set of invincibility and the subsequent escalation of self-destructive behaviors, especially among the more seriously addicted youths. This brings to mind the conception of the personal fable described earlier. Cognitively, it involves a distortion of cause and effect where the adolescent indulges in a false sense of power that impairs his or her judgment in critical situations and often with catastrophic consequences (Blos, 1962). Indeed as a 15 year-old subject reported after being arrested following a crime spree, "I always thought I'm not going to get caught."

Attitude Toward Treatment and Change

The person's motivation to change is a significant but sometimes overlooked issue in the treatment of drug and alcohol abuse. Miller and Rollnick's (1991) observation that most addicts are ambivalent about changing was consistent with the general attitude of the sample. Prochaska and colleagues' (1992) comprehensive model of motivation to change provides an especially useful framework from which to discuss the last section of the theory. In fact the theory's five stage sequence of readiness to change corresponds well to

the dialectic/systemic questioning from the interview. The last sequence of the interview relates to how the client moves toward action and change based on the integration of new perspectives of the focus issue. Accordingly, this last section of the theory was based on responses elicited from late dialectic/questioning (e.g. "What action will you take based on this new awareness?") (Ivey et al, 1987).

Prochaska's change model begins with the precontemplation stage where individuals demonstrate the least motivation to change. Within the field of substance abuse intervention, this phase is clearly associated with the traditional concept of denial. The precontemplation stage was particularly evident in the high school subgroup because their substance abuse had not yet progressed to a point where they required more intensive treatment. Consequently, these young people tended to reason that they didn't need to change since they did not yet experience overwhelmingly negative consequences from their drug and alcohol use. One young woman responded, for example, that "drugs and alcohol have never really done any harm to me to the point where I want to give it up."

In the contemplation stage, people are considered amenable to the idea of change but have not yet taken action. Ambivalence, is thus a major feature of this stage. Accordingly, the individual goes through a process of balancing the costs and benefits of continued drug use. This also includes recognition that change involves a degree of personal risk. For the most part, contemplation appeared to be triggered by one's experiencing of negative consequences that were inclusive of all levels of cognitive development. This ranged from hangovers at the sensorimotor level to empathic feelings of deep remorse at the formal operational level. In any case, it appeared as though more evidence confirming the negative side of the ambivalence was crucial to evoke movement toward change. As one subject concluded, I have gone over the limit smoking pot the last few times. If you're not going to get anything off it, why smoke pot? Its like payment for nothing."

During the next phase of preparation, the person desires to make changes but is unsure about how to go about it. Support and guidance thus become increasingly important to young people as they prepare for change. Just as they were influential in the adolescent's progression to drug use, peers and family are similarly important influences in promoting its cessation. As described earlier in the theory, many teens wished that their parents had been more active in providing structure and intervention. Peers, on the other hand, were perceived as important change agents especially if they had "been there". This observation is consistent with research that substantiates the effectiveness of prevention programs that utilize peer counselors. (Bangert-Drowns, 1988) The strength of peer influences makes sense when considering adolescent separation issues.

Individuals at the action stage have demonstrated a commitment to change. Among the sample, this included attempts to abstain from drug and alcohol use, entering a counseling relationship and seeking redemption from those whom they most hurt with their behavior. Major factors described as inhibiting action were a lack of trust in others and a sense of hopelessness about changing the situation.

The last stage of maintenance requires that individuals solidify their commitment to change from earlier phases. Within the context of the addictions, this would involve focusing on relapse prevention and follow-up with support systems such as AA, NA and other community-based programs. Not surprisingly, the teens from the rehab program in particular recognized that commitment to recovery may be a life-long process.

The Prochaska et al (1992) model of change adds another significant therapeutic dimension for which to match clients. Accordingly, client progress is enhanced if the therapist is able to initially focus on the same stage of change. (Prochaska & Diclemente, 1986) In fact, the progression to change model can be integrated well with a cognitive-developmental perspective if one looks at the issue of locus of control. The grounded theory bears out, for example, that sensorimotor and concrete operational precipitants to

change were extrinsically motivated by factors such as noxious physical consequences and social mandates such as the courts. Formal operational determinants, however, tended to be intrinsically motivated. Empathy and remorse, for example, are intrinsic factors that motivate change. It is hypothesized that these factors may be more sustaining of the change process.

To conclude, Table 4.3 summarizes some of the important themes that were discussed in this last phase of the grounded theory. Keeping in mind the Prochaska model of change, the table identifies the precipitants of change according to cognitive-developmental level. Sensorimotor and concrete operational orientations are shown to correspond to extrinsic motivators of change whereas formal operational and dialectic/systemic orientations reflect intrinsic motivated factors.

Table 4.3 Precipitants to Change

Level	Precipitants
	Extrinsic
Sensorimotor:	Noxious physical effects (e.g. hang-overs, pain) Negative emotional effects (e.g. depression)
Concrete Operational:	Social, legal and school consequences Parental limit-setting and support
	Intrinsic
Formal Operational:	Guilt, remorse and desire for redemption Empathetic and trusting relationships with helpers
Dialectic/Systemic:	recognition of healthy life-styles deeper sense of commitment to work, school and family sense of community responsibility a broader temporal perspective including hope and future aspirations

Summary and Conclusions

In this chapter, the grounded theory of teenage addiction was presented and discussed in terms of the relevant literature. The theory was based on common themes

derived from the cognitive-developmental interviews of twelve adolescents with histories of substance abuse. Specifically, these interviews were integrated into a meta-story of teenage addiction using DCT, narrative and grounded theory methods of interpretation. The theory is "grounded" in the sense that it developed directly from the stories of teenagers who abuse drugs and alcohol rather than from an apriori set of theoretical assumptions. In this manner, the validity of the theory is based on meeting the criteria for verisimilitude as opposed to universal truth conditions (Bruner, 1986).

The theory assumed the form of a narrative sequence consisting of four phases that comprised commonalties in the experience of addiction. The meta-story, moreover, contained the sample group's implicit assumptions about themselves and the world and also reflected cognitive transformations associated with the experience of substance abuse and addiction. To briefly sum, the theory represents addiction as a self-defeating process beginning with an Initiation process and followed by an escalation of drug use or Continuation phase. Next, a continued pattern of drug and alcohol use results in a variety of Consequences that are experienced physically, emotionally and socially. A vicious cycle unfolds in which the young person attempts to cope with the damaging effects of substance abuse through even more abuse. Eventually, the consequences become severe enough to warrant intervention thereby eliciting Attitudes toward treatment and change. Each phase of this progression was shown to intersect with the four stage sequence of DCT cognitive-developmental orientations.

Following presentation of the theory, the discussion section elaborated on the salient themes that emerged from the theory. This involved reference to the empirical and theoretical literature on teenage substance abuse and addiction. A thematic summary of the main themes is presented in Table 4.4.

Table 4.4: Trajectory of Addiction

DCT Level	Initiation	Continuation	Consequences	Treatment/ Change
Sensorimotor	Curiosity Anticipation of getting high. Disappoint-ment.	Euphoria. Need for exeitement. Medicate emotional and physieal pain.	Noxious physical effects (i.e. nausea). Dysphoria. Disorganized thinking.	Hopelessness. Lack of control. Relief. Extrinsic motivation factors (i.e. physical effects.)
Concrete Operational	"Gateway" drugs (i.e. pot, eigarettes). Peer influence. Lack of family involvement & discipline.	Teenage ritual. Conformity. Peer pressure.	Compulsive use. Obsessive thinking. Social, legal and academic consequences.	Cost/benefit analysis of drug use. Extrinsic motivating factors (social and legal sanctions).
Formal Operational	Development of "cool identity". Role-modeling.	Drug use as rite of passage. Compatability with develop-mental tasks.	Development of addictive personality and lifestyle. Identity diffusion. Self-defeating patterns.	Empathic relationships with others. Intrinsic motivating factors (i.e. guilt, remorse, regret).
Dialectic/ systemic	Recognition of intergenerat-ional influenec. Lacks awareness of cultural influences.	Internal identification with drug-using parents. Externalization of addiction as a generational disease.	Over-identif-ication of multi-generational patterns. Deterministic outlook.	Expanded temporal view includes future aspirations. Intrinsic motivating factors (sense of commitment, community responsibility).

CHAPTER V

TREATMENT APPLICATIONS

Introduction

This section will present an overview of treatment principles based on the integration of cognitive-developmental and narrative orientations. These principles will be discussed within the context of the grounded theory of teenage addiction. Next, a case study selected from the sample will be presented to illustrate a more specific application of the integrated treatment approach. This will involve the development of a hypothetical, individualized treatment plan. It is important to note that the proposed treatment plan was designed for illustrative purposes and therefore was not meant to be definitive. Rather, it would be expected that proven treatment strategies not mentioned in the chapter could be effectively integrated within the framework of the plan.

Principles of Treatment and Intervention

Treatment Matching

The need to develop more effective treatment models for adolescents who abuse drugs and alcohol is supported by the increasing rate of substance abuse among youth, similarly high relapse rates and the destructive consequences associated with teen drug abuse. As mentioned previously, main factors contributing to the ineffectiveness of traditional treatment programs for youth include the employment of adult treatment criteria that don't take into account the developmental needs of adolescents (Bell, 1990) and standardized programming for which young clients are not clinically matched. (Hester & Miller, 1988; Pickens & Fletcher, 1991) As one clinician summarized, "within the treatment community, one size does NOT fit all." (Parrish, 1994; p.455)

Consequently, treatment matching is the fundamental principle that informs the approach that will be applied here. It provides the basis for a metatheoretical framework

of addiction that integrates cognitive-developmental and narrative approaches to intervention. As will be demonstrated later in this section, systematic application of treatment matching is designed to provide the most personally and therefore effective treatment. Efficient treatment matching, moreover, is especially important in the current climate of brief and cost-effective outpatient treatment. (Mee Lee, 1995)

In like manner to the problem of theoretical organization, treatment matching requires an appreciation for the complexity and multidimensionality of addiction. Indeed, the development of a comprehensive and integrated treatment plan involves the same categorical difficulties as was shown in constructing a theoretical paradigm of addiction. The clinician, for example, is faced with the complicated task of organizing the myriad of psychological, social and environmental influences into a coherent plan. While the addiction field has moved toward an eclectic approach to treatment, the challenge for the clinician remains to select the strategies and interventions that would be most effective. This process involves thorough and accurate assessment of the client's needs and attributes as well as the availability of appropriate resources. As discussed previously, clients can be matched according to an infinite variety of internal and external factors such as the severity of the substance abuse, level of cognitive functioning, demographic characteristics and their receptiveness to different treatment modalities (e.g. individual, group or family therapy) Consequently, given the multitude of interacting variables and pathways to addiction, the question remains as to how to organize a comprehensive, coherent and personally relevant treatment plan.

The focal point for organizing treatment in this study is the person. More specifically, the course of treatment is determined by developing interventions that match the person's unique epistemology and lived-experience. Emphasis is placed on how the person construes his or her world. This focus simplifies planning and rivets attention to what is personally relevant. The clinician is thus spared from wading through a multitude

of externally related factors and influences that may not be salient to the experience of the client.

To conclude, the remainder of this subsection will illustrate the concept of treatment matching from both a cognitive-developmental and narrative orientation. Methods of integrating these two perspectives in treatment planning will be further discussed.

Developmental Counseling and Therapy (DCT)

Allen Ivey's DCT model of treatment emphasizes the individual's unique style of interpreting the world. By matching the client's cognitive style according to the neo-Piagetian learning sequence, the therapist allows the client to explore an issue from its multiple perspectives. Given the complexity of a phenomenon like addiction, a comprehensive treatment plan that encompasses the range of epistemological orientations can thus be developed.

Treatment matching from a DCT framework has additional benefits. First, matching the client's cognitive frame of reference enhances empathy in the therapeutic relationship. Clients are more likely to feel understood and therefore join easier with the therapist. Cognitive-developmental matching also insures that treatment strategies are adaptive to the client's frame of reference. In this manner, clients are more likely to follow through successfully with treatment strategies that they can comprehend. Lastly, treatment matching can occur eclectically at the metatheoretical level. The development and application of a treatment plan within a DCT framework requires that the clinician work flexibly with an expanded repertoire of intervention strategies. A hypothetical plan for an anxious 15 year-old who abuses marijuana, for example, might include relaxation exercises at the sensorimotor level and family systems therapy at the dialectic/systemic level to work through issues of separation and autonomy.

Having familiarity with a variety of treatment modalities allows the clinician to then match therapies according to individual differences. Within the grounded theory, for example, the subjects identified different factors that contributed to their drug use. At the sensorimotor level, some teens used drugs primarily to cope with boredom while others used to self-medicate. Each pathway to drug abuse would thus require a different intervention approach. Relaxation therapy, for example, might be one component of treatment for the self-medicating young people whereas an adventure-based counseling approach might be more relevant to the teens with an intolerance for boredom.

Its important to mention that the flexible use of different treatment strategies within the DCT model is also dependent on the therapist's ability to shift counseling styles. Accordingly, each cognitive-developmental orientation is associated with a particular style and set of counseling objectives. Table 5.1 identifies the counseling styles and therapies that are specific to each cognitive-developmental orientation.

This table functions as a general "road map" for DCT's eclectic approach and includes both individual and systemic approaches to therapy.

Table 5.2 illustrates a more specific adaptation of the model based on the grounded theory. The table charts the developmental progression of selected themes from the Continuation phase of the theory with corresponding suggestions for treatment.

Table 5.1: Counselor Styles and Therapies Specific to Each Cognitive-Developmental Level

Counseling Style/Objectives	Therapies/Approaches: Individual	Therapies/Approaches: Systemic (Family)
Environmental Structuring: Used to assist clients to explore issues at the sensorimotor level. A highly directive approach, it provides the structure for clients to be in contact with "here and now" sensory experience. Therapeutic interventions are organized not to facilitate thinking about emotional and physical sensations but, rather, to experience them directly.	Bioenergetics Relaxation therapy Behavior modification Neurolinguistic programming Behavior management Gestalt therapy Dance therapy Rolfing	Gestalt family therapy Solution-focused therapy Structural family therapy (behavioral strategies) Experiental/symbolic family therapy Psychoeducational models Neurolinguistic programming & family therapy Behavioral therapy
Coaching: Helps clients to understand their thoughts, feelings, and behavior from a concrete, linear perspective. The therapist assumes the role of coach and encourages clients to move and act in certain ways, and to identify concrete aspects of their situations.	Reality therapy Assertiveness training Decisional counseling Rational emotive therapy (RET) Adlerian logical consequences	Behavioral family therapy Satir's communication model Adlerian family therapy Structural family therapy Rational emotive family therapy Brief models Strategic therapy Solution-focused therapy
Consulting: Used to facilitate reflections about actions, thinking, and emotions. The therapist assumes the role of consultant, and the client takes the lead in mobilizing formal means of cognition and metacognition. Recognizing patterns and cycles is the basic objective.	Rogerian therapies Psychodynamic therapies Cognitive therapies Logotherapy Humanisitic approaches	Milan approaches Social leaning models Structural family therapy (cognitive strategies) Person-centered models
Dialectic/Systemic: Focuses on system operations with two central objectives: (a) to facilitate the identification of underlying epistemological and ontological issues so that new constructs of self and reality are made possible, and to introduce a dialectic interaction between the client and the environment.	Feminist therapy Transference/countertransference Projective identification Multicultural models	Feminist therapy Encounter groups Transgenerational therapy Object relations family therapy Bowenian therapy Multicultural models

Source: Rigazio-DiGilio, S. A. & Ivey, A. E. (1991)

Table 5.2 DCT Treatment Matching: An Example from the Grounded Theory

Phase of Addietion (Continuation)	DCT Level	Therapies/ Approaches
Self-Medication	Sensorimotor	Relaxation Therapy
Peer Pressure	Concrete Operational	Assertiveness Training
Striving for Autonomy and Individuation	Formal Operational	Systemie Family Therapy
Intergenerational influences	Dialectie/systemie	Narrative Therapy, Use of Genograms

Narrative Perspectives

Treatment matehing can also be viewed from a narrative perspective. In like manner to cognitive-developmental dimensions, narrative forms may be construed within a similar progressive sequenee from whieh elients ean be therapeutieally matched. Narrative forms, for example, exist along a continuum from elemental speech acts and metaphors to more global, cultural seripts. In faet, Table 5.3 demonstrates a correspondence between cognitive-developmental level and narrative structure. Accordingly, eaeh narrative form is represented by a distinct style of cognitive organization. Similar to DCT, each progressive level of narrative structure is integrated within the next form as one progresses to more elaborate struetures. For example, episodes may be patterned into life seripts which may in turn be integrated into cultural scripts.

Once narrative structures have been identified, they can be deconstructed through what narrativists eall the "therapeutie eonversation". This approach views therapy as a linguistie system that seeks to dissolve old meanings and ereate new meanings through dialogue (Anderson & Goolishian, 1988). Within a narrative framework, therapists ean

thus intervene from various levels of narrative structure, just like DCT. Each level of entry provides an opportunity to elicit changes in the client's problematic story. Table 5.3 also identifies four levels of Therapeutic Deconstruction that correspond to their respective narrative structures. These include re-languaging; re-storying; re-authoring and re-configuring.

Table 5.3 Cognitive-Developmental Correlates of Narrative Structures and their Therapeutic Deconstruction

DCT Level	Narrative Structures	Therapeutic Deconstruction
Sensorimotor	Speech Acts	Re-Languaging
Concrete Operational	Episodes	Re-Storying
Formal Operational	Life-Scripts	Re-Authoring
Dialectic/Systemic	Cultural Scripts	Re-Configuring

To briefly explain the table, narrative structures begin with the speech act. Speech acts are the elemental building blocks of the story just as random thoughts and emotions are the elements of experience from a sensorimotor orientation. Speech acts include utterances, metaphors and fragmented phrases or sentences that the narrator uses in conversation. However, as opposed to being isolated linguistic events, speech acts convey the intentionality of the speaker and fit into a larger system of coherent relationships (Agar & Hobbs, 1982). They provide insight into the person's unique constructions.

In planning interventions at the level of the speech act, the therapist would focus on the client's addiction-related metaphors and sensory language predicates described in chapter four. The grounded theory, for example, contained a sensory metaphor of life

being like a "blur". Blur is a visual language predicate that refers to issues of clarity. With this in mind, the therapist might use clarity as an organizing theme for the client. Additionally, this metaphor might be revealing of the person's reliance on a visual epistemology with all the trappings suggested previously in chapter one. The central therapeutic task at the level of the speech act then is to first connect the metaphors and utterances to the client's core themes and then to help get them unstuck by re-languaging. This process emphasizes the symbolic meaning of words and their role in mediating one's personal epistemology. Consequently, by re-languaging, the therapist helps clients develop alternative vocabularies that are more likely to elicit shifts in their core paradigms.

Moving to a more complex level of organization, episodes are the concrete events in a story that are situated in time and place. In contrast to the speech act, episodes have plots and involve a level of drama that is played out by characters in a specific context. Episodes are congruent with concrete operations because they emphasize the world of actions and unfold through the person's situational descriptions of events.

During the interviews from which the grounded theory was based, concrete operational questioning was designed to elicit examples or episodes of experience related to the use of drugs and alcohol. Accordingly, several subjects described their experiences in terms of seemingly disconnected episodes involving drug and alcohol parties and other peer rituals. These episodes contained meanings, however, that implicitly conveyed the person's core beliefs and paradigms.

At the episodic level, it is possible to facilitate changes in one's personal constructs by a process of re-storying. Here the therapist would preserve the basic integrity of the episode but evoke alternative meanings of the story by having the client alter basic elements of the situation. For example, the client might be asked to imagine different endings to the episode, revise the plot or setting and role-play different

characters in the situation. Consequently, it is intended that these shifts in the story would evoke shifts in the client's underlying constructions.

Life-scripts constitute the next level of narrative structure. Originally conceptualized within Berne's model of Transactional Analysis, life-scripts include the schemas and core beliefs from which individuals organize their lives (Berne, 1972). These scripts begin very early in life and consist of "parental messages we have incorporated...and our expectations of the way we think our life drama will be played out and how the story will end" (Corey, 1986; p. 157). Developmentally, life-scripts are organized at the formal operational level. Accordingly, scripting involves the ability to reflect on oneself and identify the patterns that guide one's existence in the world. The concepts of identity and selfhood are primary examples of the life-script.

Life-script issues were particularly evident at the formal operational orientation of the last two phases of the grounded theory, Consequences and Attitude Toward Treatment and Change. In the Consequences phase, for example, the meta-story revealed the difficulty of integrating a coherent identity. Specifically, the teens struggled to reconcile their addicted personality with other aspects of their identity. The Attitude Toward Treatment and Change phase, moreover, provided the temporal dimension to the life-script as the young people revealed their fears and aspirations about the future.

Therapeutic deconstruction of the life-script can be described as a process of "re-authoring". (Meyerhoff, 1982; White & Epston, 1990; Biever et al, 1995). Re-authoring involves the process by which the client is empowered to re-write his or her problematic narrative and generate alternative stories and understandings. The client, moreover, "externalizes" the problem so that it is viewed as something outside the self as opposed to a fundamental attribute of their identity (White & Epston, 1990). Citing the above example of the identity conflict, re-authoring would thus entail externalizing the addictive personality as, perhaps, a disease that afflicts the person much like the medical model

approach. It follows that re-authoring would then facilitate the story of the healthier, more adaptive personality.

Lastly, cultural scripts are the dialectic/systemic correlates of narrative form. Cultural scripts shape the dimensions of individual experience and generally reflect the traditions, belief systems and histories of the dominant culture. As mentioned previously, post-modern critics have challenged the privileged perspective of these "dominant stories" because they are not necessarily compatible with the experience of traditionally marginalized groups.

Since recognition of cultural scripts requires an ability to perceive experience from a dialectic/systemic orientation, there was minimal reference to cultural influences in the meta-story. Paradoxically, these unsaid realities are rendered more significant by their absence. Accordingly, one may infer that cultural repression, disconnection and ahistorical attitudes may in fact pervade contemporary life as essential themes of the dominant story. Significantly, these themes appear to constrain the temporal dimensions of adolescent life-experience.

The deconstruction of cultural scripts adds a political dimension to therapy. This investigator has labeled the process re-configuring because the therapist invites clients to challenge and change the cultural constraints of the dominant narrative that keeps them stuck, oppressed and marginalized. The process is similar to re-authoring in that it relies on "externalizing the problem" (White & Epston, 1990). Looking at the problem of teen substance abuse, for example, societal influences that render adolescents susceptible to addiction would be explicated within the context of the young person's troublesome, personal narrative. In this manner, the adolescent would be encouraged to challenge the cultural dynamics and ideologies that perpetuate the culture of addiction. These may specifically include the emphasis on instant gratification, narcissism, consumerism and the lack of economic opportunity for young people. Recognition of these cultural determinants stands in contrast to the political rhetoric that places the full burden of

addiction on the vulnerable young consumer as expressed by the anti-drug slogans of "Just say no" and "Just don't do it".

The process of re-configuring, however, goes a step beyond externalizing the problem by actually encouraging clients to take concrete action in confronting oppressive cultural scripts. A teenage client, for example, might write a letter to tobacco companies whose advertisement targets children. In any case, re-configuring is similar to DCT's dialectic/systemic sequence of action statements in the Standard Cognitive-Developmental Interview in which clients are asked what action they will take based on their new awareness (Ivey et al, 1987).

Following the Story-Line

When discussing therapeutic matching, it is important to point out that the DCT model involves more than a "menu" approach to treatment planning. That is, the selection of diverse interventions follows an implicit organizing scheme based on narrative principles. DCT, for example, can be viewed as a progressive narrative because it involves a story-line or progressive movement of one's intelligence toward fully, adaptive thought and the relevant ordering of events according to this developmental sequence (Gergen & Gergen, 1986). Thus from the organizing principle of epistemology, diverse treatment perspectives can be integrated into a coherent framework. Ivey in fact recognized that "This learning sequence seems to undergird many different therapies" (Ivey, 1991; p.67). Ivey, moreover, conceptualizes DCT's coherent approach to eclecticism in the following way.

> ""The outline of varying principles of treatment corresponds with the increasingly eclectic orientations to helping. However, DCT suggests that eclecticism can be informed by a broader, neo-Piagetian theory of learning. DCT is compatible with existing modes of helping and adds a rationale for much of eclectically oriented approaches to helping" (Ivey, 1991; p.69).

This subsection will apply narrative guide-lines to cognitive-developmental matching by emphasizing the story-line as the main criterion for a coherent treatment plan. To describe briefly, story-lines relate to the unfolding of core themes along the dimensions of cognitive-development and narrative structure. Essentially, they are the thematic threads that provide continuity to the systematic assessment and treatment of particular client issues.

The continuity of the core theme through multiple levels of cognitive-development and narrative structure results in an isomorphic arrangement of the story-line. This concept will be demonstrated by using an example from the grounded theory. Referring back to the metaphor, "Life is like a blur", a story-line will be constructed that unfolds isomorphically along a sequence of cognitive-developmental levels. This story-line will be identified by the problematic theme of "estrangement". Each identified level of the story of estrangement will be followed by a central therapeutic task which attempts to reconnect the addicted adolescent. Table 5.4 provides a summary of the story-line of estrangement. Starting at the sensorimotor level, estrangement is experienced as a stream of sensory confusion described as a blur. From this orientation the young addict's sensory experience is characterized by a state of "interior fragmentation" in which the senses become estranged from one another and become disconnected from other cognitive and emotional faculties (Dowling, 1984). In this case, visual perception plays a predominant role at the expense of other ways of knowing. Here the central therapeutic function would be to elicit a balance of sensory functions. Gestalt techniques, for example, might be an effective intervention in this case.

Table 5.4. A Cognitive-Developmental Story-Line of Estrangement

DCT Level	Estrangement
Sensorimotor	Sensory fragmentation: "Life is a blur".
Concrete Operational	Compulsive rituals. Withdraw from friends and family.
Formal Operational	Diffused identity.
Dialectic Systemic	Ahistorical perspective. Age-segregation. Absense of rites of passage.

Moving to the concrete operational orientation, estrangement is experienced as a series of repetitive episodes and drug-related rituals. The addict dissociates from friends and family in his or her obsessive pursuit of drugs. Drug rituals lack connection to a central, unifying purpose but yet provide the young person with a sense of predictability and a technology of control. Consequently, helping the adolescent establish meaningful social rituals might be an important therapeutic task from this vantage point of the story-line.

From the formal operational domain, the story-line of estrangement is revealed through the theme of identity diffusion. This is characterized by the difficulty in reconciling the addictive and non-addictive aspects of the self into a coherent identity. As mentioned in the last section, a useful therapeutic approach might be to externalize the addictive attributes and re-author one's identity.

Finally, as the story-line unfolds along the dialectic/systemic dimension, the cultural perspective of estrangement can be identified by such realities as the erosion of rites of passage, age-segregated schools, exclusion from economic opportunity, the fragmentary effects of the mass media and an overall zeitgeist of cultural and historical repression. Accordingly, the suggested therapeutic tasks would be to help the adolescent

develop institutional connections, groundedness in a cultural identity and a sense of belonging to the community.

To conclude this section on following story-lines, it is important that the therapist have the flexibility to pursue several story-lines simultaneously during the course of treatment. For example, a treatment plan can be designed to unfold around core themes related to root metaphors, identity, developmental tasks and universal conflict situations (e.g autonomy, loss, self-esteem). Yet it may also include the development of peripheral issues involving specific episodes, behaviors or treatment contingencies. The next section of this chapter, for example, illustrates a case study in which relapse triggers can be systematically addressed through the cognitive-developmental sequence.

Case Study: Eric

Introduction

In this section, a treatment plan will be developed using a case study selected from the sample. The purpose is to illustrate an eclectic approach to therapeutic intervention based on DCT and narrative principles. The case involves a 17 year-old adolescent male who was placed at a residential rehabilitation facility for crack addiction. He will be identified by the disguised name of "Eric" in order to insure confidentiality.

To begin with, Eric's story will be presented in the form of a narrative that is structured according to the four stage cognitive-developmental sequence. The narrative was developed from the guide-lines described in the third phase of the research design in which the coded responses were transformed into psychologically relevant themes. Once again, the subject's natural language was preserved as much as possible.

Following presentation of the narrative, an individualized treatment plan will be developed based on matching each of the four orientations with developmentally appropriate treatment strategies selected from a variety of treatment approaches. Furthermore, these interventions will be tailored so that they are congruent with the

person's narrative identity. This involves working with the individual's core metaphors and central life themes.

The Treatment Plan: Preliminary Considerations

After reviewing Eric's story, preliminary steps to treatment planning will be identified. The initial phase involves constructing a cognitive map of the salient issues that need to be addressed in treatment and from which cognitive-developmental orientations they revealed themselves. It is important to add that these decisions should be informed by a basic clinical understanding of addiction. Eric, for example, identified relapse triggers from the sensorimotor, concrete and formal operational orientations. By assessing the multidimensionality of relapse, the therapist can then map out a variety of compatible treatment interventions.

In addition to identifying addiction themes, it would be useful to track the central story-lines in the client's narrative. This may include noting the repetition of favored metaphors or following the trajectories of intentionality and identity as they span across the cognitive-developmental spectrum. Prior to developing a treatment plan the clinician attempts to assess what the person is up to in the world and how this intentionality is manifested from a variety of interpretive stances. Eric, for example, expressed a recurrent theme of grandiose self-destruction that he revealed through the imagery of angels and death as well as through his risk-taking behaviors.

The next step would be to explore addiction issues from the perspective of the individual's unique story-line. In this manner, the therapist can identify metaphors or narrative themes that have potential therapeutic value. This knowledge would assist in choosing a personally relevant course of intervention. In Eric's case, for example, the clinician might consider the possibility of using Eric's imaginative expressions of death as a therapeutic metaphor. In any event, the purpose of interweaving the process of addiction with the individual's narrative themes is to facilitate the relevance and coherence

of treatment. For some adolescents, for example, the quest for identity may be the organizing theme around which to develop an intervention plan.

Another preliminary step to treatment planning would be to further assess the client's cognitive-developmental profile. This would entail identifying his or her predominant cognitive-developmental orientation as well as the strengths and limitations of cognitive functioning. This would enable the therapist to determine whether the client would benefit from vertical or horizontal development of a particular issue (Ivey, 1991). Horizontal development involves expanding the range of competencies within a particular cognitive domain whereas vertical development relates to the client's facilitation of an issue from other cognitive-developmental orientations.

In essence, cognitive profile assessment provides the basis for matching the client's frame of reference. For example, since Eric demonstrated a unique capacity for sensory imagination, he might be particularly receptive to certain sensorimotor interventions. Also, since his profile showed a balanced representation of cognitive-developmental orientations, he would most likely benefit from a multimodal treatment approach.

The last preliminary consideration for treatment planning concerns the development of network interventions and how they can be integrated with the idiographic aspects of treatment that were just emphasized. Ivey (1991) describes network interventions as similar to the social ecosystems approach which recognizes that we exist in a community of relationships. The concept of networking is particularly important in dealing with the issue of teenage addiction where families, schools and communities all exert significant influence. In fact, an earlier discussion about relapse indicated that what happens after treatment especially determines whether a young person will continue to use. Consequently, a comprehensive treatment plan should include the use of appropriate social and community resources. As will be demonstrated

in Eric's case, networking can also be rendered more effective if it is congruent to the life-style of the adolescent and follows DCT matching principles.

Having discussed preliminary considerations for intervention, suggestions for treatment will be organized into a tentative plan. Since information other than Eric's responses to the Standard Cognitive-Developmental Interview is lacking, this plan is intended to illustrate the integration of DCT and narrative approaches to treatment rather than presume to be all encompassing. The treatment plan will unfold according to the DCT learning sequence which functions as the primary organizing framework for treatment. Each orientation is associated with a different therapeutic style.

Eric's Story

Sensorimotor. I visualize a sense of euphoria, not knowing what's going on...a loss of time, hunger, not having a place to stay, jail, rehab, money...

I also visualize death from drugs and alcohol, like having a heart attack from smoking a crack pipe. I hear a lot of silence. I feel my blood running through my body. I can feel my breathing starting to decrease, my eyes starting to shut and my heart slowing down. I'm hitting the floor and then I see a white light. Once death has set in you float toward the light which is heaven. There's turbulent wind in the air. A voice is talking to you telling you to come within the light. A warm feeling is all around you, like you're surrounded by love. Angels with the same face are all around.

After smoking crack one day til 3 in the morning, I felt my heart palpitating and I thought I was going to have a heart attack. Something told me to put this drug down or I was going to die. I didn't care and kept on going anyway. I never really had an experience with death but drugs are death that people sell you. I put down the pipe and paced the floor thinking that I was going to die. I felt my heart jumping out of my chest, I couldn't go to sleep and I thought I was overdosing because I smoked about $300 worth of crack. It was a real scary experience.

Seeing cigarette ashes will trigger a relapse because that's what you need to smoke crack. Other relapse triggers are seeing drug paraphernalia, smelling it in the air, hearing it on TV or hearing people talking about it. When I got older the aroma of pot turned me on. I'd smell it when my aunt and uncle smoked it.

Drugs medicate the pain emotionally and physically. When I'm not using drugs, I medicate my pain by flipping out and getting violent with the person whose trying to piss me off. Like using drugs, getting out of control is another way I take care of feelings I don't want to deal with. I'd blow up out of the blue for the simplest thing when I couldn't get any drugs because I didn't have any money for them or anything to sell or steal.

If I couldn't get my own way I would flip out. One time I didn't want to listen to my mother confronting me so the only way I could get rid of the anger was to exhale it out of my lungs by smoking the rock. My parents still listened to me while I was on drugs but the chemicals clogged my mind and were telling me, "I don't need you."

Concrete Operational. When I think about the words drugs and alcohol, I think about a mind altering substance that changes your feelings, takes away difficult emotions, and medicates your pain physically and emotionally. Also, any drug that you can overdose on can lead to death where its too late to turn back.

Almost every day, I would try to get a drug. I used mostly drugs instead of alcohol since the end of 1992. I wasn't a moderate drinker. I drank to get drunk so whatever mind altering substances I did, I made sure it was full-fledged. I look for a different high. The need to get drugs was a driving force behind my criminal behavior. All addicts are the same. Back then I did get down on myself for doing stupid things. When I was under the influence of crack, I didn't care about anyone except the "rock". I hated myself and others. Crack was like my "buddy". Now I have a chance to turn things around but an argument, a bad day and hanging around friends that use could trigger a

relapse with erack. Friends are a big relapse trigger. You'll never get away from crack if you keep hanging around them beeause of peer pressure. Its hard to say no because you don't want to be rejected by your friends.

I used to feel uncomfortable around my family and I didn't like to be with them beeause they would look at me funny and suspeet me of using drugs. I treated them like friends I didn't like and I would start frequent arguments with them. One time my mother was complaining that I wasn't going to school, I was getting bad grades and that my life was going down the tubes. She told me I had to stay inside but I didn't listen to her beeause I felt that at age 16 I was old enough to do what I want. I didn't get what I needed whieh was to go out and get high but my mother knew what was best for me. She would barrieade the door. However, it pissed me off when the eourts elamped down on me. I knew that the drugs were going to be taken away from me.

I was about 3 years old when my father left. He'd eome over for my birthday and holidays. He's a very materialistie person. He eomplains about ehild support. I'm siek and tired hearing that from him. Sometimes I just want to wring his neek but I can't because he's my father. My father lives in a neighborhood where I used to buy drugs. There's always trouble over there like shootings. I don't need to be around that.

My uncle killed himself when he was 21 while I was growing up. He lived with my grandmother. I'd smell pot eoming out of his room. My aunt used to have influence on me when I hung around her house. She used to try and pass me a joint. I trusted that she wouldn't give me anything harmful so I went along and did it.

Formal Operational. Anger, resentment and loneliness are the three main feelings I have that make me do drugs. Whenever I had an argument with my mother or girlfriend, I would avoid it by doing drugs. I didn't realize before that I had a suicidal tendency by smoking erack. My unele killed himself trying to quit drugs. I now feel remorse in that if I didn't stop my addietion in time , I would die. I've seen what drugs ean do to my life.

They put me in jail and rehab. I also missed school and didn't graduate with my class. Now I don't act insane. I know what I need to do in terms of getting my life back on track.

. I didn't have any self-discipline. I didn't know how to stop getting into trouble. My friends influenced me and I just went along. Just like my aunt who's constantly clouded under drugs, I didn't have a conscience. When I was using drugs my behavior was always based on negative things like stealing. It was an emotional issue as well as a material one. The only control I had during the 3 years I was using was knowing how to get the right drugs. I didn't have any control over being happy. I had no self-control. I got into a vicious cycle where I'd do negative things and then say I'm sorry. This made me feel as if I solved the problem but then I would do it all over again. For example, I had a pattern where I would get into arguments with my mother and then get kicked out of the house. This would then be an excuse to use drugs. I would then come back, make amends and do the same thing over again. My mother now says that saying sorry doesn't cut it anymore and that I'll have to start gaining her trust by showing her. This pattern ties into my criminal behavior where I'd break into houses expecting not to get caught. It's insane to do the same thing and expect different results. Now I do one thing, and if I don't like the results, I don't do it again.

I can't forget the past. I'm sorry for what happened and I feel I have to prove myself to everyone. Even though my mom forgives me, I can't accept that because I have so much more to say I'm sorry for. Sometimes I don't feel worthy. I have to do more. My family would say that they've seen a 180 degree turn in our relationship. I can look them in the eye when I talk to them and not hang my head and mumble. They see that I can identify my feelings and tell them when I'm angry. My mom helps me out with that. Though its now easier to identify my feelings, I never tested the waters about talking to my mother about how I feel about my father. I still beat around the bush and have a hard

time being straight forward. I would like to take more risks because I'm the type of person who feels that a risk is probably going to be good for me.

I'm making a commitment to stay clean, go to meetings, live up to my own expectations and be true to myself. I'll be satisfied if I do that. I still bottle up my anger but I try to bring it to staff's attention and have it come out later in a positive way. I see a definite change now because before, I used to go on a binge and nearly explode. I can relate to everyone in treatment because they have a similar story as myself. They offer good suggestions that would work. I'll prevent relapse if I follow the program and take the necessary risks and suggestions from others. Before I used to sit around, do nothing and wait for an excuse. In this session, I've seen a lot of things I never really thought about before. It's weird to see how different things are tied together.

Dialectic/Systemic. I thought it was safe to do drugs because I've seen my elders do it. I thought if it didn't harm them, it wouldn't harm me. My father was a heavy pot smoker until I was born. I think I got my addictive personality through his genes.

Now I know that I have a great family support system but I never used it. However, one thing that stands out for me is that my father was never there for me and I can't talk to my mother about it. I feel embarrassed that I did something wrong to my father. I'm coming up with things I've kept buried inside for a long time.

I live for my own expectations now, not what others expect of me. One of my expectations is to stick with the NA program. I need to satisfy myself first and not be a "gofer" and put on a big show just to make others happy like I used to. Yet I want to take suggestions from other people in the program and especially learn how they deal with their parents. I have a lot more opportunities to change my life around like going to a new school and learning a trade. I really don't want to leave rehab because of the safety bubble but I can deal with that when I go off the program.

The Treatment Plan

Sensorimotor. Eric's sensorimotor story is rich with therapeutic opportunities. In focusing first on addiction phenomena, Eric indicated that drugs functioned to self-medicate emotional and physical pain. He also recognized the harmful consequences of drug use from a sensorimotor perspective and identified relapse triggers from this orientation.

In a narrative sense, he is descriptive , uses vivid metaphors and shows good story-telling ability. Cognitively, Eric presents a well-balanced cognitive-developmental profile. His metaphors, moreover, reveal an ability to access his experience from a variety of sensory modalities.

Based on this assessment of sensorimotor issues, the goal is to develop appropriate treatment strategies. In describing the developmental sequence of counseling styles, Rigazio-DiGilio and Ivey (1991) identify environmental structuring as the primary task of sensorimotor intervention. This approach is defined as follows:

> "A highly directive approach, it provides the structure for clients to be in contact with 'here and now' sensory experience. Therapeutic interventions are organized not to facilitate thinking about emotional and physical sensations but, rather, to experiencing them directly." (Rigazio-DiGilio & Ivey, 1991; p.11)

With the above criteria in mind, it is recommended that Eric follow a covert sensitization program to prevent relapse and eliminate his craving for crack. Covert sensitization is an aversive behavioral procedure in which "approach behaviors" are extinguished by pairing them in imagination, with aversive or noxious scenes (Cautela & Wisocki, 1971). According to this procedure, Eric would identify high risk situations and behaviors based on his past experiences with drug use. He would then construct a scenario with the therapist in which he would imagine himself attempting to use crack. These attempts would be associated with noxious consequences such as imagining

himself vomiting when he sees crack or visualizing "punishment scenes" like getting arrested for using. In order to be effective, this procedure requires that the individual experience the scenario fully at the sensory level. Eric would then rehearse this scenario several times and then apply it whenever he acted upon an urge to use crack or experienced a relapse trigger. From a narrative framework, Eric is working at the level of the episode. Accordingly, he is re-storying the habitual drug scenario by imagining different outcomes.

There are several advantages to using the covert sensitization technique in this case. First of all, it addresses important addiction issues at the sensorimotor level such as relapse triggers that Eric experienced through his sensory modalities. Secondly, the procedure is congruent with Eric's capacity for visualization and sensory imagery. In fact, the creation of a noxious scenario would flow easily from Eric's narrative since he vividly described heart palpitations and imagined a heart attack as a possible consequence of his drug use. Lastly, the therapist could combine covert sensitization procedures with environmental structuring so as to help Eric avoid high risk situations in the first place.

To address his use of drugs for self-medication purposes, relaxation therapy would provide Eric with healthier alternatives to feeling good.

An additional sensorimotor intervention would be directed toward anger management. Indeed, Eric asserted that the only way he could get rid of his anger was to "exhale it out of my lungs by smoking the rock." Consequently, he might select with his counselor other cathartic outlets for his aggression such as karate or weight lifting. For the objective of developing a relevant treatment plan, these activities should be compatible to his interests and life-style.

Concrete Operational. This orientation is characterized by attention to concrete life events and the client's linear construction of reality. Through this perspective, the therapist often gains a better understanding of the client's everyday experience. As a

counseling style, concrete operational interventions have been compared to "coaching" (Rigazio-DiGilio & Ivey, 1991). In this manner, the therapist helps clients organize their lives in a linear, goal-oriented fashion and gives them concrete guide-lines on how to act upon the world.

Eric's concrete operational "story" contained the developmental progression of addiction-related themes that were introduced at the sensorimotor level. Relapse triggers at this stage, for example, are evident in the form of friends and peer influences as opposed to sensory stimuli. With this in mind, it is important to promote consistency and coherence to the therapeutic narrative by adjusting for the developmental transition of core issues. It is thus recommended that the covert sensitization procedure described in the last section be adapted to accommodate concrete operational phenomena. For example, the aversive imagery of noxious sensory effects used in response to sensory relapse triggers can be augmented to include the imagination of negative social consequences in response to peer influences. Behavior programs using peer inoculation techniques may also be effective.

Since the concrete operational orientation centers upon cause and effect relations and connects individuals with the consequences of their actions, other appropriate treatment strategies used to discourage drug use might include reality therapy, Adlerian logical consequences and decisional counseling.

Concerning the developmental trajectory of Eric's anger, the more primitive cathartic techniques of anger management can be replaced by appropriate concrete operational-based strategies such as assertiveness training. In Eric's case, assertiveness training would also help him cope with the peer pressure that he described.

Eric also introduces two additional issues at the concrete operational level, including family conflict and low self-esteem. First, the presence of family issues suggests the addition of family therapy as another modality. Family therapy from a concrete operational perspective might emphasize implementation of behavioral guide-

lines, rituals and rules. Accordingly, Eric might develop a contract with his family that defines mutual expectations, especially as they relate to facilitating his recovery from drug use.

Issues of self-esteem can be addressed by promoting activities that enhance self-efficacy. For example, Eric would benefit from developing life skills and competencies that were delayed through his past preoccupation with drugs.

Formal Operational. Planning interventions from the Formal Operational domain involves a "consulting" style of counseling (Rigazio-DiGilio & Ivey, 1991). In this manner, the therapist helps the client develop insights about the patterns and cycles of feelings, thoughts and behaviors that make up their experience. A primary objective is to facilitate self-awareness.

Translated into narrative terms, formal operations substantiate the unity of the self as a coherent text characterized by familiar modes of being in the world. The clinician's role as a consultant would be to assist clients in recognizing the recurrent themes that impart coherence to their stories and then help them re-author their life-scripts. Specifically, the client's identity issues would be explored and how they relate to the process of addiction. The clinician would also facilitate the young person's comprehension of addiction as a pattern or cycle of interrelated events. Indeed, pattern recognition is an especially integral component of addiction treatment due to the repetitive sequence of thoughts, feelings and behaviors that comprise the process.

Treatment planning from the formal operational orientation can be difficult since many individuals never achieve the capacity for reflection and abstract thinking. This limitation does not prevent the clinician from implementing formal strategies as a way to facilitate vertical development of the client's cognitive skills. Eric, however, did demonstrate the psychological-mindedness that would enable him to benefit from formal interventions. This ability, for example, would allow Eric to enter a more collaborative

relationship with a therapist who can shift roles from being a "coach" to being a "consultant".

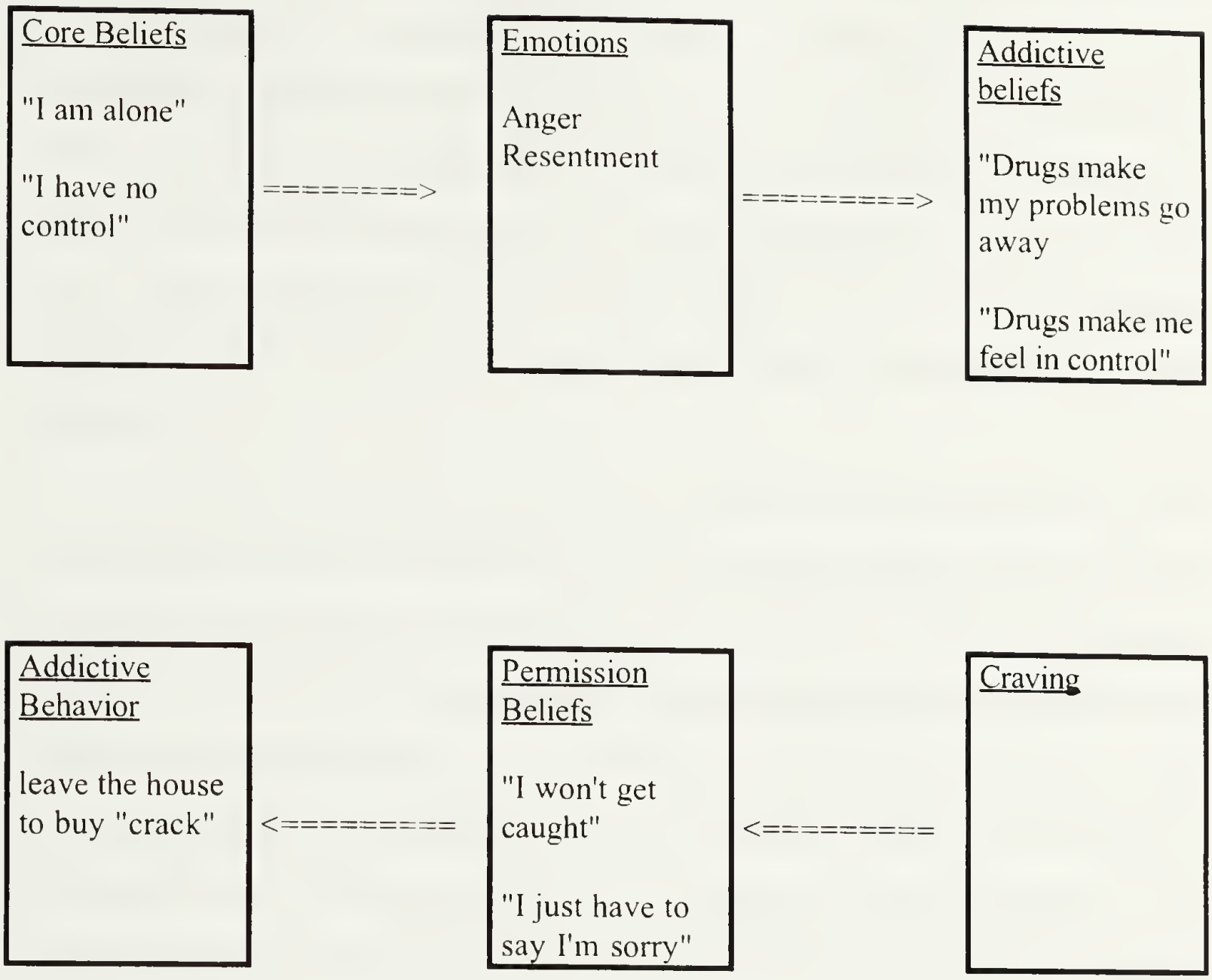
More importantly, this developmental transition in the therapeutic relationship is parallel to the process of the adolescent's own striving toward separation and autonomy. Accordingly, the creation of a partnership with the therapist may defuse some of the control conflicts that typically impede counseling with teens. It follows that the therapist must work within a paradigm that facilitates the collaborative process. Cognitive therapy appears to meet this criteria and would further serve as a useful orientation from which to address addiction at the formal operational level. According to Beck and his colleagues, "Cognitive therapy takes such a collaborative approach, whereby therapists communicate that they take their patients' points of view very seriously, downplay their own role as an "all knowing" paragon of authority and power, and stress the importance of mutual work toward discovery and positive changes" (Beck et al, 1993; p. 68).

In addition to promoting a collaborative helping relationship, cognitive therapy addresses the individual's underlying epistemology of addiction, or in other words, how they rationalize and make sense of their drug use. This interpretive agenda highlights formal operational intervention strategies. In this manner, the client and therapist collaborate to construct the client's personal theory of addiction. According to the cognitive model, this theory unfolds like a narrative describing the sequence of beliefs through which the person rationalizes and explains his or her use of drugs. Specifically, this narrative of addiction involves a story-line that connects the person's core beliefs or schemas to their addictive beliefs. Core beliefs usually involve one of the "basic universal conflict situations" (Mann, 1973) with which people struggle and delimit their existence. These conflicts often relate to issues of autonomy and self-worth. Accordingly, "The various permutations of the core belief take the following form: "I am unloved, undesirable, unwanted, repulsive, rejected, different, socially defective" (Beck et al, 1993;

p.44). From the perspective of the adoleseent substance abuser, these eore beliefs may reflect the difficult negotiation of developmental tasks related to identity, independence and intimacy. A narrative view of eore beliefs, moreover, highlights the drama associated with the protagonist's or elient's struggle to overeome these personal conflicts. These issues inevitably point to conflicts of personal identity.

Addictive beliefs, on the other hand, derive from eore beliefs and relate to the reasons people use to aceount for their drug use whether they be for pleasure, self-medication or escape. Examples of addictive beliefs might inelude, "Drugs make me feel more alive" or "Drugs make my problems go away".

Eric's formal operational story implieitly reveals the sequenee of beliefs that influence his addiction. His core beliefs, for example, include his description of being lonely and having no control over his life. These eore beliefs lead to emotional states sueh as anger, resentment and loneliness when triggered by life stressors (e.g. arguing with his mother). This situation then activates Eric's addictive beliefs (e.g. "Drugs are an escape" and "Drugs make me feel more in control"). This scenario then elicits Eric's craving for crack and permissive beliefs that rationalize his use of eraek despite aeknowledgment of its negative consequences. These beliefs include the assumptions that he won't get caught and that he can resolve issues by repeatedly making amends for his behavior. A simple cognitive model of Eric's drug use is illustrated by Figure 5.1.



(Source: Beck et al, 1993)

Figure 5.1 A Simple Cognitive Model of Addiction

The primary goal of cognitive therapy would be to help Eric become aware of the sequence of beliefs that reinforce his pattern of addiction. This process involves the co-construction of a personal theory of addiction. Consequently, the Socratic Method is recommended as a useful technique in identifying the underlying epistemology. The Socratic Method, or guided discovery, is an interviewing technique that uses probing questions, hypothesizing and interpretation to help clients reflect upon and challenge their thinking and distorted beliefs (Beck et al, 1993). When done effectively, this method enables clients to disrupt the cognitive chain of events that underlie the addictive process

and facilitates rational decision-making. In Eric's case, for example, the therapist might start by challenging his core belief that he doesn't have any control of his life. This is accomplished by prompting Eric to cite contrary evidence. Each belief in the addictive cycle would be similarly challenged. In narrative terms, changing core beliefs is an important step towards re-authoring a life-script. Essentially, Eric would re-write his story in a more realistic way. In sum, cognitive therapy epitomizes formal operational approaches to therapy because it directly encourages clients to comprehend their thinking patterns.

At this point, it would be important to address the issue of continuity in Eric's evolving treatment plan. Accordingly, themes such as relapse triggers, anger management and family conflict that were addressed from previous cognitive-developmental orientations can likewise be worked through at the formal operational level. These themes unfold in an isomorphic manner along the cognitive-developmental spectrum. The developmental transition of significant therapeutic themes, moreover, often entails the introduction of new treatment modalities. For example, peer encounter groups would provide a new forum from which Eric could further develop his assertiveness skills and enhance appropriate risk-taking. Group therapy would also encourage Eric to examine his addictive beliefs. Lastly, family counseling may shift focus from concrete behavior issues and contracts toward mending relationships within the family.

Dialectic/Systemic. Planning interventions from the dialectic/systemic orientation requires viewing the client within a more encompassing system of relationships. The therapist's objective is to help clients see how their issues develop within the context of family and culture. While these social contexts are influential factors in the phenomena of addiction, only recently have they become a primary focus of research (Cox & Ray, 1994).

The other goal of dialectic/systemic intervention is to help clients identify their epistemology and challenge the erroneous assumptions that keep them stuck. This process is comparable to a paradigm change within the client whose task is then to develop new constructs regarding his relatedness to the world.

Like formal operational thought, even fewer people fully attain the capability for dialectic/systemic thinking. Not surprisingly, less of these responses were elicited from the interviews than from any other cognitive-developmental category. Nevertheless, dialectic/systemic interventions can be effectively integrated into a treatment plan even if the client does not have the advanced capacity for abstract thought. In these cases, interventions can be directed at the environmental side of the person-environment dialectic. For example the therapist might want to facilitate changes in the client's support network. The client in turn, would change through a recursive process with the social environment. Eric, for example, would be advised to continue attending NA groups and resume supportive counseling.

Eric's story provides the therapist with several opportunities to apply dialectic/systemic interventions. These interventions are designed to integrate the social contexts related to his addiction as well as to facilitate a change in his underlying epistemology. As will be demonstrated in Eric's case, these two objectives of dialectic/systemic intervention are mutually related.

Starting with epistemological issues, Eric offered a theory of the etiology of his addiction. Describing his father as a heavy pot smoker he surmised, "I think I got my addictive personality through his genes." This interpretation has several implications that can be addressed from a dialectic/systemic style of counseling. First, Eric's genetic explanation of how he acquired an "addictive personality" requires challenge and further elaboration from the therapist. Here the therapist might critique his medical model hypothesis and offer alternative perspectives that might explain his addictive behavior. Indeed, Eric himself provided a social modeling interpretation of his behavior by citing the

influence of observing older family members smoke pot. Rather than choose one explanation of his addiction over another, the therapist's objective from a dialectic/systemic orientation would be to help Eric integrate all the etiological pathways to his addiction.

Additionally, Eric's recognition of an intergenerational pattern of substance abuse shows an ability to see himself in a historical connection to larger systems. With this in mind, the Bowenian approach is recommended as part of his treatment plan. To briefly summarize, the Bowen model of therapy is a family approach to therapy that encourages clients to see their presenting problems as products of intergenerational dynamics (Bowen, 1978). Family trends such as alcoholism and drug abuse, for example, are mapped out though use of the family genogram. Once the problematic patterns are discerned, clients develop strategies to extricate themselves from the web of family pathologies. Consequently, a primary focus is on the client's struggle to differentiate from the family.

In working from the Bowen model, Eric would trace the history of substance abuse in his family and identify family characteristics and events that might contribute to this pattern. Relevant themes from his story to explore might then include the family lineage of his "addictive personality"; suicidal trends within the family and parental rejection. With its value on individuation, the Bowen approach would also reinforce Eric's strivings for autonomy. In his story, for example, he claimed that "I live for my own expectations now, not what others expect." It is also worth mentioning that the Bowen model is compatible with the assumptions of this investigation. For one, with its use of family chronology or intergenerational scripts, it essentially follows a narrative framework of therapy. Secondly, the Bowen approach is congruent with the developmental tasks of adolescents who are struggling with issues of attachment and autonomy. In a culture lacking historical ties, the model also helps the adolescent expand his or her view of identity. Referring to cultural scripts, for example, Eric would also be

encouraged to challenge implicit gender roles, especially those that equate masculinity with risk-taking.

To conclude, Table 5.5 presents a summary of the suggested treatment issues and interventions for the case study. Here it is important to reiterate that this plan was developed to illustrate treatment principles using DCT and narrative orientations. Given the limits of important assessment information, the plan was therefore not intended to serve as a definitive therapeutic program. The treatment plan, however, demonstrates a systematic organizing scheme from which to develop an eclectic intervention program. This is based on the sequential unfolding of clinical issues and themes across the range of cognitive-developmental orientations. Table 5.5, for example, follows the story-line of Eric's anger as it invokes different treatment responses along the cognitive-developmental spectrum. Accordingly, the therapeutic response to anger moves from anger management techniques to assertiveness training and then to systemic interventions. These strategies are implemented in a way that is compatible and relevant to the person's lived-experience.

Table 5.5 Treatment Plan Summary

DCT Level	Issues	Approaches/Interventions
Sensorimotor	Use of drugs to self-medicate. Use of drugs to cope with anger. Relapse triggers (sensory cues).	Relaxation Therapy. Anger management. Covert Sensitization.
Concrete operational	Anger. Peer pressure. Relapse trigger (social cues). Family support/structure. Delays in social functioning.	Assertiveness Training. Peer inoculation techniques. Covert sensitization. Use of contracts in family therapy. Social and life-skills training.
Formal operational	Addictive beliefs. Addiction cycle. Family relationships and separation issues.	Cognitive therapy. Peer pressure groups. Family therapy shift to systemic focus.
Dialectic/Systemic	Intergenerational Dynamics. Need for community-based resources. Gender issues involved in drug-related behavior.	Bowenian therapy (use of genograms). Attend NA groups/ supportive counseling. Develop positive model of masculinity.

Chapter Summary

This chapter presented a comprehensive and eclectic approach to substance abuse treatment based on the integration of cognitive-developmental and narrative orientations. The first part of the chapter discussed the main principles of treatment and intervention that guided this approach, treatment matching and following the story-line. More specifically, treatment matching involved developing strategies that were relevant to both the person's lived-experience and unique style of construing the world. Guide-lines were thus presented by which the therapist can select interventions that match clients' cognitive-developmental profiles and also the specific narrative structure through which they convey their experiences (e.g. metaphor or life-script).

Next, following the story-line was described as a method of organizing the course of treatment according to the salient themes that unfold isomorphically through the multiple levels of cognitive-development and narrative structure. This approach was shown to provide coherence and continuity to the eclectically-oriented treatment plan.

The last section of this chapter presented a case study selected from the sample. This was used to illustrate a more specific application of the treatment approach. After presentation of the client's story, a hypothetical treatment plan was developed that addressed the relevant therapeutic issues that unfolded along the range of cognitive-developmental orientations. This plan, moreover, was designed to be congruent with the client's central life themes.

CHAPTER VI

NARRATIVES OF TEENAGE ADDICTION: SUMMARY AND CONCLUSIONS

Introduction

The focus of this dissertation was to develop a metatheoretical paradigm for the study of adolescent substance abuse based on the integration of cognitive-developmental and narrative modes of inquiry. These orientations were selected as a guiding framework for the study because they emphasize the central role that epistemology and the young person's interpretive experience play in the phenomenon of addiction. This constructivist position views the adolescent as an active maker of meaning rather than as a passive respondent to social and physiological forces.

Moreover, the absence of young people's experiential perspeetives in drug abuse research reflects a marginalized role in society that contributes to their suseeptibility in a culture of addiction. With rates of teen drug use and other health afflictions that beset youth eontinuing to rise at an alarming paee, there is need for a new paradigm that views these problems within a more encompassing soeial, developmental and eultural contcxt. Indeed, issues affecting young people are too often studied in isolation from each other. Consequently, this dissertation is titled Narratives of Teenage Addiction beeause stories give voice to the vulnerable and validate the shared realities that are often suppressed by reductionistic modes of inquiry.

The Integration of Developmental Therapy (DCT) and Narrative Theory

As described previously, the eomplexity and diversity of the addictions field has made it difficult to develop a paradigm that is both theoretieally consistent and clinically useful. Indeed, current theory and research reflcet the influenee of competing philosophies, diseiplines and explanations. Allen Ivey's Developmental Therapy was

selected as the foundation for this study because it provided a unitary and systematic approach from which to organize the multiple dimensions of addiction.

To summarize, DCT was defined as a cognitive-developmental model of theory and practice based on Piagetian learning stages. From both a metatheoretical and individual counseling perspective, DCT was shown to organize the diverse components of addiction theory and experience according to a dynamic sequence of four epistemological vantage points that proceed toward higher levels of abstraction. These cognitive-developmental frames of reference specifically include 1) the Sensorimotor, which pertains to the bodily and sensory aspects of experience, 2) the Concrete Operational, which situates meaning in a linear description of concrete events, 3) the Formal Operational, which analyzes self-reflective patterns of thought from multiple perspectives and 4) the Dialectic/Systemic, in which conceptual patterns are integrated into even more complex systems. Thus given a multiply-determined problem like addiction, DCT would encourage that all four modes of cognitive-development be explored in order to construct both a comprehensive theoretical model and a well-coordinated system of treatment.

Whereas Developmental Therapy provided systematic organization of the meanings of addiction, a narrative mode of inquiry complemented this structural focus with a textural one. This involved attending to the situated context of people's lived-experience and establishing thematic coherence to the cognitive-developmental configuration of this experience. More importantly, the focal point of inquiry remained the person rather than the clustering of de-contextualized, external variables.

Overall, there were several other advantages to using a narrative approach for this study. First, narrative perspectives enable people to tell their own stories. This is especially empowering to adolescents whose experiences are either storied by adults or else suppressed because they do not conform to the realities of a dominant culture. From

a research standpoint, a narrative mode of inquiry thus provides access to valuable domains of knowledge that are neglected by reductionistic methods.

Narratives are similarly empowering because they capture the vicissitudes of human intentionality, change and movement. Here the establishment of personal agency is likewise therapeutic in the sense that it provides a more hopeful account to the conventional wisdom that constrains addicted individuals to an indeterminate sentence.

Additionally, stories are parsimonious because they are the "natural psychological unit" (Mishler, 1986) through which people actually convey the meanings in their lives. This makes narrative form especially applicable to the study of human development. Accordingly, this dissertation previously observed that the adolescent's primary developmental task of constructing an identity is largely achieved through narrative methods that impart coherence and continuity to the life course.

A final advantage of applying narrative discourse is that it mediates between the unique experience of the individual and the realities of the larger social order. In this manner, shared social themes shape and are shaped by individual stories in ongoing dialogue. The fundamental task of the study was then to identify the common themes in the stories of teenage drug users and integrate them into a local theory of teenage addiction that would inform our thinking and facilitate a more relevant approach to treatment planning.

Research Methods

The main objective of the research was to develop a grounded theory of adolescent addiction based on the common stories of a sample of twelve teenagers. The study was particularly interested in how the experience of addiction would unfold according to the four major cognitive-developmental orientations. Additionally, specific focus was placed on identifying the shared themes or story-lines that traversed the cognitive-developmental spectrum. Once the epistemological configuration of narrative themes was established in

a theoretical structure, the next task was to develop a systematic and relevant approach to treatment intervention based on the prineiple of treatment matching.

To summarize the research procedures, a sample of twelve consenting teenagers with documented histories of substance abuse was selected equally among a public high school and a residential rehabilitation facility. The purpose of dividing the sample into different settings was to obtain a wider range of responses. In terms of demographics, the sample consisted of six males and six females between the ages of fourteen and nineteen. All of the subjects were white Caueasians which appeared to reflect the demography of their home communities.

The research design was organized into a logieal sequence of qualitative procedures for data eollection and analysis. The design integrated methods from cognitive-developmental, narrative and grounded theory orientations. Each perspective contributed a specific function to the investigation. Ivey's Developmental Therapy, for example, was used to systematieally eollect and sort the interview data into eognitive-developmental categories. Narrative methods were then used to establish coherence and continuity among the various themes and story-lines that were elieited through the Standard Cognitive-Developmental Interview (SCDI). Lastly, grounded theory introduced a flexible and dynamic theoretical paradigm from which to integrate the structural components of cognitive-developmental interpretation and the textural aspects of a narrative perspeetive. A grounded theory approach was further deseribed as having advantages over eonventional theoretical paradigms because of its emphasis on the in-depth analysis of local knowledge. This served to enhance the clinical relevancy and aceessibility of the data. A summary of the eclectic research design from ehapter three is presented in Table 6.1.

Table 6.1: Summary of the Research Design

Phase	Research Tasks	Steps/Procedures
I.	Data Collection	1. Standard Cognitive-Developmental Interview (SCDI) 2. Self-administered Survey
II.	Cognitive-Developmental Structuring	3. Full reading of interview protocols 4. Use of Standard Cognitive Developmental Classification System (SCDCS) to code responses 5. Abstract coded responses and organize into respective DCT levels
III.	Narrative Transformation	6. Translate coded responses into meaning units 7. Translate meaning units into a story for each subject
IV.	Theoretical Construction	8. Grounded theory - open coding 9. Grounded theory - developing core categories 10. Grounded theory - selective coding 11. Description of theory in narrative terms

The Results

A grounded theory of teenage addiction was presented as a meta-story describing the common themes and conceptual issues that emerged from the experiences of the sample group. The theory, named Vicious Cycles, conceived addiction as a self-defeating process that followed a trajectory of four phases including 1) Initiation, which described factors contributing to one's initiation to drug and alcohol abuse; 2) Continuation, which relates to how drug use is reinforced by its perceived functions and benefits; 3) Consequences, in which the negative effects of continued drug use either precipitates a coping response toward further abuse of drugs or else elicits 4) Attitudes toward treatment and change. This last phase conveyed issues that both inhibit and facilitate the

young person's desire to change. Specific attention was devoted to exploring the precipitants of change in the discussion section of chapter four.

Table 6.2: Trajectory of Addiction

DCT Level	Initiation	Continuation	Consequences	Treatment/ Change
Sensorimotor	Curiosity Anticipation of getting high. Disappoint-ment.	Euphoria. Need for excitement. Medicate emotional and physical pain.	Noxious physical effects (i.e. nausea). Dysphoria. Disorganized thinking.	Hopelessness. Lack of control. Relief. Extrinsic motivation factors (i.e. physical effects.)
Concrete Operational	"Gateway" drugs (i.e. pot, cigarettes). Peer influence. Lack of family involvement & discipline.	Teenage ritual. Conformity. Peer pressure.	Compulsive use. Obsessive thinking. Social, legal and academic consequences.	Cost/benefit analysis of drug use. Extrinsic motivating factors (social and legal sanctions).
Formal Operational	Development of "cool identity". Role-modeling.	Drug use as rite of passage. Compatability with develop-mental tasks.	Development of addictive personality and lifestyle. Identity diffusion. Self-defeating patterns.	Empathic relationships with others. Intrinsic motivating factors (i.e. guilt, remorse, regret).
Dialectic/ systemic	Recognition of intergenerat-ional influence. Lacks awareness of cultural influences.	Internal identification with drug-using parents. Externalization of addiction as a generational disease.	Over-identif-ication of multi-generational patterns. Deterministic outlook.	Expanded temporal view includes future aspirations. Intrinsic motivating factors (sense of commitment, community responsibility).

Importantly, each phase of this progression was manifested through the sequence of DCT's cognitive-developmental orientations. Following presentation of the grounded theory, a discussion section elaborated on the salient themes that emerged. References to the empirical and theoretical literature on teenage substance abuse and addiction were made to enhance the discussion. A summary of the main themes is presented in Table 6.2.

Implications for Treatment

Using the grounded theory as a frame of reference, this dissertation presented an eclectic and coherent approach to substance abuse treatment based on the integration of cognitive-developmental and narrative orientations. The guiding assumption for intervention identified the person as the focal point for organizing treatment. This required a systematic program of matching the client's cognitive-developmental profile of the addictive experience with developmentally appropriate interventions. To illustrate, Table 6.3 identifies the epistemological progression of selected themes from the Continuation phase of the grounded theory with corresponding suggestions for treatment.

Table 6.3 DCT Treatment Matching: An Example from the Grounded Theory

DCT Level	Phase of Addiction (Continuation)	Therapies/ Approaches
Sensorimotor	Self-Medication	Relaxation Therapy
Concrete Operational	Peer Pressure	Assertiveness Training
Formal Operational	Striving for Autonomy and Individuation	Systemic Family Therapy
Dialectic/systemic	Intergenerational influences	Narrative Therapy, Use of Genograms

Table 6.4 Cognitive-Developmental Correlates of Narrative Structures and their Therapeutic Deconstruction

DCT Level	Narrative Structures	Therapeutic Deconstruction
Sensorimotor	Speech Acts	Re-Languaging
Concrete Operational	Episodes	Re-Storying
Formal Operational	Life-Scripts	Re-Authoring
Dialectic/Systemic	Cultural Scripts	Re-Configuring

Treatment matching can also be employed according to the client's use of narrative structures. For example, clients may convey meaning through a metaphor or a life-script. Each level of entry into the client's narrative thus provides an opportunity to elicit change in the problematic story. These narrative structures, moreover, are represented by a distinct style of cognitive organization. Table 6.4 demonstrates this correspondence and further identifies four therapeutic processes by which these structures can be de-constructed.

Lastly, following the story-line was described as a method for organizing the course of treatment according to the central themes that unfold isomorphically through the multiple levels of cognitive-development and narrative structure. This approach lends coherence and continuity to an eclectic treatment plan. The primary treatment principles of treatment matching and following the story-line were illustrated through a case study from the sample. The main advantage of using this approach for addiction intervention is that it provides a more personally relevant and in-depth exploration of issues in comparison to standardized treatment programs.

Limitations of the Study

This research focused on developing an eclectic paradigm for the study of adolescent substance abuse by integrating Ivey's Developmental Therapy with narrative modes of inquiry. To demonstrate a specific application of this approach, qualitative research methods were used to construct a grounded theory of teenage addiction that was organized according to levels of developmental cognition. The theory derived from the common stories of a sample of adolescents with histories of drug abuse. Treatment implications were discussed based on the emerging theory.

Several limitations of the study deserve mention here. First, the sample size of twelve was sufficient for an in-depth analysis at the local level, but inadequate for generalizing to a larger population. Improved software programs that provide thematic analysis, however, are available to accommodate larger populations.

Secondly, the variability of the data was also limited by geography. Since both research sites were located in western Massachusetts, they did not reflect the diversity of racial and ethnic regional influences. The inclusion of African-American and Latino perspectives, for example, would have most likely yielded a different meta-story.

Thirdly, the reliability of the study was compromised by not using other raters in both the coding and analysis of the data. This contributed to self-bias in the reading of the interview protocols and interpretation of themes used in the grounded theory.

Its important to clarify that the focus of this study was not to establish validity of the theory and methods but rather to illustrate their clinical utility. This was accomplished by discussing the therapeutic implications of the theory and by constructing a hypothetical treatment plan based on a case study from the sample.

Nevertheless, this study would be enhanced by including provisions for measuring validity. As Bruner's (1986) insightful comparison between logico-scientific and narrative modes of inquiry indicated, a narrative orientation, such as used in this study, would be subject to different criteria for validity. Accordingly, the validity of a theoretical meta-

story would be gauged by its verisimilitude and "goodness of fit" across variable samples from a similar population of adolescents. In other words, how credible or relevant to their own experience would other teenage substance abusers find the story. This type of convergent validity could be accomplished by constructing a rating scale.

It was similarly beyond the scope of this study to establish criteria for the predictive validity of the therapeutic interventions suggested in chapter five. Rigazio-DiGilio's (1989) study on the predictive validity of cognitive-developmental interventions with a depressive population sample, however, provides a guiding framework that can be applied to a population of adolescent substance abusers.

Directions for Future Research

In addition to establishing criteria for the convergent validity of theoretical meta-stories and the predictive validity of corresponding interventions, two general areas for future research deserve specific attention. First, greater emphasis should be placed on developing "local" theories of teenage addiction that reflect the specific problems experienced by targeted populations in the contexts of communities, neighborhoods or schools. Indeed, "grand" theories of addiction that attempt to account for the complex range of causal conditions appear to have minimal relevance to the confluence of situated events experienced by people. Research therefore needs to include the perspectives of adolescents themselves in order to facilitate change. Consequently, a dynamic and solution-oriented approach to the assessment and treatment of addiction within local contexts is advocated. The integration of cognitive-developmental and narrative models, with its emphasis on treatment matching and situated meanings, appears to present a promising new approach.

Paradoxically, while greater emphasis should be placed on treating issues at the local level, the exploration of cultural variables that influence the adolescent's susceptibility to addiction is also warranted. Since these dynamics remained suppressed

by traditional discourse, the burden of change remains with the vulnerable young consumer. From a cognitive-developmental perspective, we thus need to adopt more of a dialectic/systemic stance toward the complex problem of teenage addiction. This orientation would facilitate thoughtful analysis of the cultural and epistemological issues that are foundational to the phenomenon of teenage addiction.

Conclusion

To conclude, the epistemological and narrative orientations used in this investigation raised the age-old philosophical argument between free will and determinism. The problem of addiction, in particular, is emblematic of this controversy. The traditional disease model of addiction typically reflects the deterministic view whereas the principle of free will underlies the moral model and more recent post-conventional trends that reject the idea of addiction as an "indeterminate sentence".

This argument, however, is not merely an esoteric one because each perspective adheres to a different conception of causality and responsibility with their distinct clinical implications. Deterministic views of addiction, for example, delimit the notion of personal agency. Accordingly, emphasis is placed on events over which the individual is deemed to have no control. This may span the inner workings of genetics to the outer level of cultural and historical dynamics. The free will perspective, on the other hand, relates to choice and intentionality. Indeed, today's prevention slogan encourages the individual to "Just say no" to drugs.

The epistemological foundations of this study were intended to defuse the dichotomy between free will and determinism by reframing the argument from a co-constructivist position. Accordingly, insight into the problem of addiction requires a more precise understanding of how we shape and are shaped by social and cultural forces. Most importantly, this involves explicit recognition of the power relations that govern human interaction and meaning-making.

This dissertation will thus conclude by briefly summarizing two opposing ways of reconciling the power relations that undergird the phenomenon of addiction. It is hoped that the contrast will evoke new ways of thinking about the problem of teenage substance abuse.

The first perspective, epitomized by Bateson's (1972) epistemology, may be described as an internal solution to the underlying power dynamics of addiction. As described in chapter one, Bateson identified the misguided omnipotence of the addict who failed to see him or herself as existing harmoniously in the larger order of things. This was also shown to be descriptive of the adolescent's epistemological striving to define his or her position in the world. In Bateson's view, moreover, the alcoholic maintained a dualistic perspective that placed alcoholism outside of the self. Recovery from addiction began with the person's reconciliation with the larger system. This required the adoption of a more "correct" epistemology in which the addict assumed a more mutual relationship with respect to the world.

Bateson's perspective, however, did not take into account the political realities that defined the larger human system. In this respect, resolution of the power dynamics implies that the individual alter his or her internal script of reality to provide a better "fit" rather than challenge predominant and oppressive ideologies. This position was further described as fostering a withdrawal into a more passive and subjective mind-set that would make young people even more susceptible to drugs and alcohol.

In contrast, a narrative perspective provides an external solution to the underlying power dynamics of addiction. This involves what narrativists describe as "externalizing the problem" (White & Epston, 1990). From this standpoint, the addict would be encouraged to locate the "problem-saturated" story outside the self. This might include, for example, recognition of the socio-cultural conditions that facilitate the chronicity of addiction. By gaining distance from the problem, the addict would then experience a

sense of personal agency and begin to "re-author" an identity that is different from the addicted one.

A major caution of this approach, however, is that it may engender the same illusion of autonomy and "pride" of which Bateson was critical in the first place. Here a deconstructivist agenda may easily blame society and rationalize away the addict's personal responsibility. Re-authoring may thus similarly translate into a kind of subjective grandiosity akin to the adolescent predicament. In any event, both internal and external solutions present a circularity that may actually facilitate the phenomena they seek to change.

Consequently, the position taken here is that one must repeatedly shift between internal and external solutions to the inherent power relations that characterize the individual's relationship to society and culture. In regard to addiction, this dialectical process entails acknowledgment and acceptance of how one is culturally determined and yet at the same time, encourages an active and political stand instead of withdrawal into an internal script of reality. This position is congruent, moreover, with the dialectic/systemic orientation of Developmental Therapy. The recent crusade against cigarette ads that target children, for example, is a movement in this direction. Within the context of co-constituted realities, however, the burden of addiction is still consigned to the vulnerable young person.

The Standard Cognitive-Developmental Interview

Allen E. Ivey, Sandra A. Rigazio-DiGilio, and Mary Bradford Ivey

General Guidelines

In order to ensure standardization, the interviewer must adhere to the format (for example, sequence and content of questions) below. However, adaptations of this formal structure have proven useful with a wide variety of children, clients, and patients. Our clinical experience is that going through the systematic 1 to 2 hour framework is therapeutic in itself. This is because clients learn new ways to think about themselves and their issues and therefore see more alternatives for change.

While the interview here is highly structured, the concepts could form the basis of a series of interviews or be integrated as part of the assessment or treatment of clients experiencing differing types of problems. We have found that the questions can be adapted successfully to family counseling.

The interview here attempts to focus on client cognitions, with the interviewer providing stimuli that move the client to different levels. The only techniques in the standard interview that can be used at the discretion of the interviewer are those drawn from the specific questions outlined below or from Ivey's Basic Listening Sequence (Ivey, 1971, 1988). These techniques include attending, encouraging, paraphrasing, reflecting feelings and meanings, and summarizing, and the intent of these techniques is to elicit further data and ensure clarity while minimally affecting the content of client conceptualizations. The way in which the client thinks about these conceptualizations often changes during the interview.

We have found it helpful to have the standard interview on the desk or held in the lap so that the interviewer can feel free to refer to the questions from time to time for new ideas or to recall the sequence and goals of a questioning level. Each segment of the interview has specific aims, which are summarized first in the goals of each segment and then identified specifically in terms of criteria for fulfillment of each cognitive-developmental level. With concrete clients, it is helpful to have them repeat several specific examples, which can assist them first to learn late concrete causal issues in their lives and then to identify patterns. Formal-operational clients may move so rapidly that you may need to slow them down so that they really experience their issues at the

sensorimotor and concrete levels. When this is done successfully, it can help the client move from an illogical (partial) formal response to a more comprehensive and accurate response.

Do not continue to the next level of the interview until the client is able to meet the specific criteria of the previous level. With some clients, the recommended specific questions below will be most effective, and stage criteria can be easily met. With others, you will find it necessary to improvise new questions suitable for that particular client.

Again, when using this interview or its adaptations for the first few times, it is important to have the set of questions on your desk or on your lap. If this is not a research situation, you may wish to share the questions with some clients. Our experience is that if clients know what type of focus you are looking for, they participate with interest and enthusiasm. The sharing of goals can be beneficial to the process, the interviewer, and the client.

The initial question selected for the Standard Cognitive-Developmental Interview is one that allows the client to focus both on self and family. It is possible to focus solely on the individual, a specific topic, or the family. However, the dual focus of this question was preferred, since it seems to help clients in one-on-one counseling and therapy learn how their issues arise in a family context. We find that questions of this type—those integrating both individual and family content—tend to be particularly effective in helping clients look at themselves in new ways. Armed with new insights, clients are often more interested in and prepared for concrete behavioral change.

Introduction to Client

Interview Goal

To join the client and ensure comfort and cooperation.

Interviewer Task

To clarify parameters of interview and to begin the interview.

Interviewer Statements

The standard interview may be used for clinical research purposes. When used for research, the specific guidelines are adhered to rigorously. When used as a therapeutic or counseling process, the interview can be more flexible and adapted to the special needs of the client or family. We find that the standard interview may be extended over more than one session with profit.

When using the interview for research purposes say:

This interview will take approximately 45 to 90 minutes to complete. Although I will be audiotaping it, this interview will be typed out and all names deleted before anyone from the research team reviews it; therefore, confidentiality is ensured.

Opening Presentation of Family Issue

Interview Goals

To obtain a broad picture of a family issue and the key facts and feelings, as organized by the client, with minimal interference from the interviewer.
To assess the predominant cognitive-developmental level used by each client.

Interviewer Tasks

To obtain three to five sentences, or approximately 50 to 100 words, in response to the interviewer statement below.
To listen for the client's presentation of a family issue and to use this as the foundation for the next phase.

Interviewer Statements

To begin with, I would like you to respond to a statement that I hope will stimulate you in some way. I would like you to say as much as you can about what happens for you when you focus in on your family.

When the client has provided from 50 to 100 words, summarize what has been said to ensure clarity.

Early Sensorimotor/Elemental Issues (Key Words: See, Hear, Feel)

Interview Goals

To obtain an understanding of how the client organizes her or his visual, auditory, and kinesthetic representations of a family issue.
To ensure the client knows you understand.

Interviewer Tasks

After making the *introductory statement* below, to use at least one question from each *sensory category* below to facilitate the client's punctuation of her/or his sensory reality of the chosen issue, *accepting the client's randomness of presentation.*

To *not* move the client beyond the specific elements as these elements are remembered.
To focus on the client's self-perceptual frame of reference.
To aim for *here-and-now experiencing*, not understanding or interpreting.

Level Criterion

The client should talk about the situation, self, or issue in a relatively random way that concretizes the problem. The interviewer may receive fragments and pieces of sensory-based data as the client talks about what is seen, heard, and felt.

Interviewer Statements

Introductory Statements

You mentioned (family issue presented). During this interview, I'm going to ask you some questions about this, and I would like you to respond as best you can. It will be important for you to try to directly respond to the questions I ask you. To begin with, I would like you to find one visual image that occurs for you when you focus on (family issue).

Sensory Statements

(Change *are* statements to *do/did* statement if *are* seems too powerful.)

1. Visual perceptions
   a. *What are you seeing?*
   b. *Describe in detail the scene where it happened.*
2. Auditory perceptions
   a. *What are you hearing?*
   b. *How are people sounding?*
   c. *Describe the sounds in detail.*
3. Kinesthetic Perceptions
   a. *What are you feeling in your body at this moment?*
   b. *How are you feeling?*
   c. *What are you feeling as this is going on?*

Summarization Statements

-Summarize key perceptions of the client's, using her/or his important words and phrases.

Late Sensorimotor/Elemental Issues (Key Word: Belief)

Interview Goal

To obtain an understanding of how the client makes sense of the elemental issues: her or his interpretation of the elemental data discussed or the frame of reference that she or he brings to the interview.

Interviewer Tasks

To encourage client to discuss her or his interpretation of the example by asking any of the *interpretation questions* below.
To discourage any further experiencing statements or any discussion of facts.
To *not* challenge client's interpretation.

Level Criterion

Client should provide a frame of reference or view of reality that, to her or him, makes meaning and sense out of the sensory-based data. At this stage, the interpretation may be incomplete or irrational.

Interviewer Statements

Paraphrase client's statements if necessary.

Restate key words and phrases to assist client to access her or his unique construction of the example.

Interpretation Questions

1. *How do you make sense of all of this?*
2. *What do you think about all of this?*
3. *How do you explain all of this?*
4. *How do you put all of this together?*
5. *What meaning does all of this have for you?*
6. *What one thing stands out for you from all of this?*

Summarize client's response to ensure clarity.

Early Concrete-Operational/Situational Issues (Key Word: Do)

Interview Goal

To obtain concrete and specific facts pertaining to the client's issue. (The major emphasis is on description and facts, with a limited emphasis on feelings and with no emphasis on evaluation or analysis.)

Interviewer Tasks

After obtaining a good idea of how the client experiences and interprets the situation, to summarize and assist her/or him to discuss the *concrete details of the situation in linear, sequential form*, with major emphasis on facts.

To assist the client by using any or all of the *behavioral tracking questions* listed below.

To encourage discussion of specific things that happened in as concrete a form as possible.

To discourage any further interpretation or subjective/evaluative verbalizations.

Level Criterion

The client should describe events in a linear, relatively organized sequence, with a few basic feelings. It may be that the client offers a single perspective on the problem at this stage.

Interviewer Statements

Introductory Statements

I think I have an idea about how you think and feel about . . . (family issue—paraphrase or summarize data from previous two segments). *It would now be helpful for me to get an idea of an example where these images, thoughts, and feelings occur for you. Tell me all the facts.*

Behavioral Tracking Questions

1. *Can you tell me specifically what happened?* (Use if an example has already been presented.)
2. *Could you give me a specific example?* (Use if an example has not been presented.)

The following three questions may need to be recycled frequently to get very specific details. With very concrete clients, the repetition of the same situation several times plus repetitions of parallel situations is essential if you wish to help them examine the cause-and-effect thinking of late concrete operations or discover repeating patterns underlying the concrete events at an early formal level. Unless a careful concrete foundation is built, later, more abstract thinking becomes difficult. Furthermore, very abstract, dialectic/systemic and formal clients may benefit from this careful detailing of concrete events. They often find, after this type of review, that their abstractions and interpretations of concrete events was more limited than they thought.

3. *What did you say (do) then?*
4. *And then what happened?*
5. *What did the other person say (do)?*
6. *Could you give me another specific example?*

This last question is not really early concrete, but it helps some individuals begin to see similarities. It is a question that seems to help integration over the long term.

Late Concrete-Operational/Situational Issues (Key Words: If/Then)

Interview Goals

To arrive at a mutually satisfactory system explaining the situation under discussion, usually with an if/then dimension that may lead to issues of causation.

To draw out what happens before and after the occurrence of the example/or situation provided by the client.

Interviewer Tasks

To search for *antecedent and consequent* conditions while still discouraging interpretation. (The emphasis remains on description, not on evaluation or analysis. The questions below are meant to assist the client to review what happened before and after the situation.)

Level Criterion

The client may be able to organize previous segments into linear if/then statements, may be able to control and describe action, and may be able to think in terms of antecedents and consequences. Logic and reversibility may be evident, and the client may be able to think about actions and the impact of actions.

Interviewer Statements

Antecedent/Consequent Questions

1. *What happened just before all this occurred?*
2. *What happened afterward?*
3. *What was the result*
4. *So if you do _____, then what happens?*
5. *Given all the facts as you describe them (paraphrase or summarize previous statements), what do you think causes or triggers what?*
6. *Could you give me another example?* (Note that this is seen as a developmental building block that may help clients begin to see repeating patterns.)

Early Formal-Operational/Pattern Issues (Key Word:

Interview Goals

To move from description to examination and/or analysis of the facts of the situation and/or of the self.

To facilitate the client's identification and examination of repetitive behavior, thoughts, and affect related to situations perceived to be similar to the primary example and related self.

Interviewer Task

To move client away from sensory experiences and toward *abstract thinking* by asking some of the questions below until the client demonstrates an ability to *identify and think about repeating patterns of behaviors, thoughts, and affect* that occur in situations similar to the primary example.

Level Criterion

The client will be able to offer an isomorphic situation(s) in which the same sensorimotor elements and concrete-operational issues occur. The client will be able to analyze both situation and self in this isomorphic example.

Interviewer Statements

Paraphrase and summarize the linear, sequential format described previously using the client's main constructs, key words, and phrases.

Move toward an examination of the situation by asking some of the questions below until the client provides an isomorphic example.

1. *Are there other situations that you find yourself in when you are with your family, where this same set of events and feelings occur for you?*
2. *Does this kind of thing happen a lot for you in your family?*
3. *Does this kind of thing happen a lot?*
4. *Could you give me another specific example?*

Again, this last question seems to help those who find difficulty in seeing patterns. Move back to very concrete situations, examine two, three, or four

concrete situations in detail, then work on the cause and effect of late concrete operations. Even very concrete clients, including children, are often able to see repeating patterns.

Move toward an examination of self by asking some of the questions below until the client shows an ability to interpret her or his repeating patterns of behavior, thought, and affect.

1. *What are you saying to yourself when that happens?*
2. *How do you think about (see) yourself in that family situation?*
3. *Have you felt (thought, acted) that way in other family situations?*
4. *You seem to have a tendency to repeat that particular behavior thought, interpretation). For example (paraphrase).*
   a. *What do you think about this tendency of yours?*
   b. *What does this pattern of behavior (thought) mean to you?*
   c. *What function does this pattern of behavior (thought) serve for you?*

Late Formal-Operational/Pattern Issues (Key Words: Patterns of Patterns)

Interview Goals

To assist the client to identify and examine larger, consistently repeating patterns in her or his life.

To analyze these patterns from the vantage point of the self and the contextual fields within which the client interacts.

Interviewer Task

To assist the client to identify and examine similar situations and repetitive patterns of thoughts, behaviors, and actions in the self and in others from *a multitude of perspectives that account for similarities and differences.* (This will be accomplished by asking some of the questions below until the client demonstrates an ability to recognize similarities, differences, and complexities.)

Level Criterion

At this stage, the client may be able to examine patterns of patterns. Situationally, she or he will be able to compare and contrast different situations and coordinate this into a gestalt, and will manifest an ability to gain multiple perspectives and a fundamental unity for situations. In relation to the self, the client will be able to examine patterns in the self and be able to recognize mixed and complex feelings.

Interviewer Statements

1. *You have just shared with me two ways where you (and others) behave (think, feel) the same way (paraphrase or summarize). You have also shared with me what you think this all means for (about) you (paraphrase or summarize).*
   a. *Do you see any way these patterns are connected?*
   b. *Putting the two issues together, how would you synthesize them?*

2. *I see the pattern of behavior and thought that you had (that can occur) with _____ and the pattern of behavior and thought that you had (that can occur) with _____.*
   a. *How do you think these patterns relate?*
   b. *Do these examples speak to even a larger pattern?*
   c. *What is the feeling you have connected with these examples?*
   d. *What do you think these examples speak to?*
   e. *What is similar about them?*
   f. *How do you think your way of reacting in each situation is similar?*

Dialectic/Systemic/Integrative Issues (Key Words: Integrate, Put Together)

Interview Goals

To assist the client in moving to an awareness that personal constructions of reality are co-generated via a network of relationships. (This section of the interview is limited mainly to the network of family relationships.)

To obtain a basic organizational summary of how the client integrates what has been shared.

To assist the client to perceive this integration from several perspectives.

Interviewer Task

To ask questions from the list below that assist the client to see the *impact of this network of relationships* and to *integrate the knowledge* that has been shared throughout the first half of the interview.

Level Criterion

The client should be able to generate an integrative picture of what has been shared and view this from several perspectives, some which encompass the idea of reality as co-constructed.

Interviewer Statements

Summarize information gained at the early and late formal levels and follow with a question related to (1) integration and (2) co-construction.

1. Integration
   a. *Given what you have said about your family, yourself, and your situation (summarize using key words and phrases), how might you make sense of all these ideas as a whole?*
   b. *What meaning do you get here?*
   c. *What stands out for you from this session?*
   d. *How would you synthesize this experience?*
2. Co-construction
   a. *It seems we have been able to determine a pattern of thinking, feeling, and behaving that repeats itself for you when you are with your family. How do you think this pattern developed in your family—either in your family*

of origin, previous family environments, or your current living arrangement?

b. *Are there other situations in your family that also contribute to the way you think and behave?*
c. *What other situations help to form the way you think and behave?*
d. *How did people learn these ways of thinking and acting in your family?*
e. *What rule are you operating under?*
f. *How do you suppose this way of thinking and acting came about for you?*
g. *How do you suppose this way of thinking or acting came about in your family?*

Dialectic/Systemic/Deconstruction/Transformational Issues[1] (Key Words: Challenge the Integration, Action)

Interview Goals

To assist the client to develop an awareness that all assumptions and rules can be challenged and found to have flaws and/or that there are a multitude of vantage points from which to perceive any assumption or rule.

To challenge the client's perceptions.

To assist the client to move toward action based on the development of alternative perspectives.

Interviewer Tasks

To assist the client to view her or his integration from several vantage points.

To discover and challenge the parameters and flaws of the client's view. (This can be done by asking a few questions from the first set of *challenging statements*.)

To assist the client to rethink her or his integration and to discover new and alternative perspectives. (This can be done by asking a few questions from the set of *alternative statements*.)

To assist the client to move toward action based on her or his situational, self, or belief system examination. This can be done by asking a few questions from the set of *action statements*.)

Level Criterion

The client will be able to criticize and challenge her or his own integrated system and discover alternative perspectives. The client will be able to move toward action based on these alternative perspectives.

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[1] The concept of deconstruction has not been emphasized in this book. It is seen as a late postformal or dialectic/systemic form of reasoning. In essence, the concept points out that virtually all patterns of reasoning and logic have internal flaws. Deconstruction is the act of identifying flaws in constructions or verbal representations of the world, thus the word *deconstruction*. For elaboration of these concepts, see Ivey (1986, pp. 110–111, 146, 326–330, 345–346.)

Interviewer Statement

Paraphrase or summarize knowledge obtained from the previous segment.

We've seen that your original example (paraphrase/and summarize) is a typical pattern and that this pattern and your thoughts about it have developed for you within your family of origin (previous family, current family) into rules of behavior and thoughts.

Challenging Statements

1. *I wonder if it is possible to identify any flaws in these rules—any ways that these rules for thinking and acting are not valid or reasonable? Or, how do you not get you what you need?*
2. *Can you see any flaws in what everyone has learned?*
3. *Can you see some flaws in your reasoning in the statements above? If you were to criticize your integration, what might the major issue be?*

Alternative Statements

1. *Are there other ways to look at these rules you have learned or these situations?*
2. *If you could add to or change these rules, how would you do so?*
3. *What could another point of view be on this?*
4. *How might another family member describe your situation?*

Action Statements

1. *When you are feeling that way, do you (could you) do anything about it?*
2. *Given the complexity of all these possibilities, what commitment might you follow despite all this?*
3. *Will you do anything about it?*
4. *What action will you take based on this new awareness?*
5. *What one thing stands out for you, and what will you do about it?*

Summary Statement for Interview

I hope this way of discussing you and your family offered some new thoughts for you. I appreciate your willingness to participate. Now that the interview is over, do you have any questions you might want to ask me about our session?

The Standard Cognitive-Developmental Classification System

Allen E. Ivey and Sandra A. Rigazio-DiGilio

General Guidelines

This classification system is designed to rate the Standard Cognitive-Developmental Interview. Scorers will independently classify the predominant cognitive-developmental level as revealed by the client's verbal behavior during different sections of the interview using the criteria that follow. Although most clients will operate at different levels at different times, or at multiple levels, the classification should be according to the level that predominates.

In addition, the criteria suggested here may be adapted and used to classify an interview portion or a client or counselor statement. Generally, using larger segments of verbal behavior to make a classification is most effective, but it is possible to use single client statements with some degree of reliability. It is also possible to use adaptations of these criteria to classify the verbal behavior of the interviewer, therapist, or counselor.

The rating system here is based on a typescript. However, with practice, it is possible to rate from an audiotape or videotape of the interview, or even from observation of an actual session through a one-way mirror or videotape.

Initial Presenting Assessment

Basic Objective

To use the client's first 50 to 100 words to classify the client as being at one of the four cognitive-developmental levels.

Method

Each scorer will receive a typescript of the dialogue that occurred between the interviewer and client during the assessment phase of the interview. The task for the rater is to determine the level of cognitive development predominantly represented by the client's conceptualization of a family issue. Ratings will be made on a four-point classification scale that identifies the four basic dimensions of cognitive development: sensorimotor/elemental, concrete-operational/situational, formal-operational/pattern, and dialectic/systemic/transformational.

Although the client may operate at more than one level, the task of the scorer is to determine which of the four levels is predominantly used as a frame of reference during the assessment phase. Two methods of rating will be used as follows:

1. The raters will classify each client statement using the criteria defined on the following pages. The predominant cognitive-developmental level will be computed by percentages of client responses in each of the four cognitive-developmental categories.
2. The raters will classify the entire client statement or series of statements into one of the four categories.

Classifying the Interview Segments

Basic Objective

The rater will classify eight interview segments, presented randomly, into eight categories—the subdivisions of the basic four categories. The portions of the interview will be presented with the counselor statements deleted. (This can be considered more of a training procedure. In rating ongoing interviews, it is helpful to classify both counselor and client statements.)

Method

Each scorer will also receive eight intervention sections that occur during the treatment phase of the interview, divided to reflect the eight cognitive-developmental subdivisions defined below. The group of typescripts will be randomized and will include only the client statements. The task of the scorer is to holistically review each section and determine the cognitive-developmental subdivision predominantly revealed in the client statements.

Ratings will be made on an eight-point classification system that subdivides each of the four basic dimensions of developmental cognition by early and late indicators: early and late sensorimotor/elemental, early and late concrete-operational/situational, early and late formal-operational/pattern, and early and late dialectic/systemic/transformational. Again, although more than one subdivision may be identified in each section, the task of the scorer is to determine which of the eight is predominantly used by the client within each section. Raters will use only the holistic method of classification for these eight sections.

Cognitive-Developmental Dimensions: Criteria for Rating

Sensorimotor/Elemental Dimension

Early Sensorimotor/Elemental Subdivision (Key Words: See, Hear, Feel)

The client randomly focuses on fragments and pieces of sensory-based data as she or he talks about the visual, auditory, and/or kinesthetic elements of a situation or issue.

Cognition

- The client focuses predominantly on a factual description of the concrete details of a situation or issue from her or his own perspective. There is minimal emphasis on evaluation or analysis.

Late Concrete-Operational/Situational Subdivision (Key Words: If/Then)

The client organizes the elements or facts of the situation or issue into linear if/then statements that may lead to issues of causation. She or he may be able to control and describe actions, and may be able to think in terms of antecedents and consequences. The focus is on facts and actions as opposed to analyzing, evaluating, or showing awareness of patterns. Logic and reversibility may be evident.

Affect

- The client is able to control and describe broad-based, undifferentiated, outwardly focused affect. He or she may say, "I feel _____ when _____ happens." Otherwise feelings are relatively undifferentiated. Awareness of mixed or ambivalent feelings is rare, for example.

Cognition

- The client demonstrates linear if/then thinking, emphasizing causality and predictability from a single perspective.
- The client is able to control and describe actions and the impact of actions.
- The client is able to apply logic and reversibility to concrete situations/or issues.
- The client is able to separate thoughts and actions.

Formal-Operational/Pattern Dimension

Early Formal-Operational/Pattern Subdivision (Key Word: Pattern)

The client moves away from description of sensory experience toward examining and/or analyzing the facts of a situation or issue or toward examining and analyzing the self. She or he is able to identify repetitive behavior, thoughts, and affect related to various similar situations and issues.

Affect

- The client demonstrates an awareness of the complexity of feelings and is able to separate self from feelings and reflect on them.

Cognition

- The client describes repeating patterns of thought, behavior, and affect in the self that occur across situations.
- The client engages in analysis of self and situation.

Affect

- The client shows very minimal distinction between sensory input and emotions.
- The client is dominated by sensory stimuli and affect.

Cognition

- The client shows minimal ability to coordinate the elements of sensory-based data into an organized gestalt.

Late Sensorimotor/Elemental Subdivision (Key Word: Belief)

The client provides a view of reality that makes sense of the sensory-based data reflective of the situation/or issue in a somewhat incomplete or irrational manner.

The late sensorimotor period, according to DCT, is a time of naming and issues. In work with clinical populations, virtually all clients answered the meaning-oriented questions of this stage with clearly faulty reasoning. Many clients, however, respond to late sensorimotor questions with logical concrete and/or formal statements. It may require careful questioning to uncover the mistaken logic of these clients, which is not always possible. If this is the case, the client *will not* demonstrate the illogical or magical patterns expected as they discuss key issues; thus, their statements should be categorized in one of the other seven categories.

Affect

- The client's emotions remain sensory-based and reactive.
- The client is unable to act on her or his emotions.

Cognitive

- The client offers interpretations that, no matter how sophisticated, are illusory and irrational and are stated in a way that reveals that the client cannot take effective actions based on the beliefs.

Concrete-Operational/Situational Dimension

Early Concrete-Operational/Situational Subdivision (Key Word: Do)

The client describes the situation or issue from a single self-perspective in a linear, relatively organized sequence of concrete specifics. Her or his explanation has a major emphasis on the facts with some focus on a few of the basic feelings.

Affect

- The client describes general emotions simply, from one perspective and with a lack of differentiation.
- The client expresses emotions outwardly.

Late Formal-Operational/Pattern Subdivision
(Key Words: Patterns of Patterns)

The client is able to analyze patterns of patterns or multiple perspectives of behavior, thought, and feeling from the vantage points of the self and the contextual fields within which she or he interacts. The client is able to see larger, consistently repeating patterns of behavior, thought, and feeling in her or his life and to examine how she or he thinks and feels about the evolving theme or view of reality.

Affect

- The client demonstrates an ability to analyze her or his patterns of feelings.
- The client demonstrates an ability to identify others' feelings and be empathic.
- The client demonstrates an awareness that feelings can be validly expressed in multiple ways.

Cognition

- The client demonstrates an ability to examine the patterns of self and situation.
- The client demonstrates an ability to organize and analyze different situations or issues abstractly.
- The client may coordinate and discover new patterns, compare and contrast different situations, and form this into a gestalt.

Dialectic/Systemic Dimension

Early Dialectic/Systemic/Transformational/Integrative Subdivision (Key Words: Integrate, Put Together)

The client demonstrates an ability to generate an integrative picture that combines thought and action and shows an awareness that personal constructions of reality are co-generated via the family network.

The client is able to reflect on systems of operations and how "things go together" in an interdependent sense. Becoming increasingly multiperspective, the client is able to see a situation from several frames of reference and keep them in mind simultaneously.

Affect

- The client offers a wide range of emotions and recognizes that emotions can change contextually. For example, "I am sad that my wife died, but when I think about the pain she was experiencing, I feel glad that she no longer has to suffer. I feel anger when I think about the injustice of it all."
- The client recognizes that she or he can change and adapt to new situations.

Cognition

- The client demonstrates an ability to coordinate concepts and put together a holistic integrated picture.
- The client demonstrates an awareness that the evolving integration was co-constructed in a dialectical or dialogic relationship with family, history, culture, and so on.

Late Dialectic/Systemic/Deconstruction/Transformational Subdivision (Key Words: Challenge the Integration, Action)

The client demonstrates an ability to criticize and challenge her or his own integrated system and discover alternative perspectives. The client is able to think about moving toward action based on these alternative perspectives.

Affect

- The client is able to look at her or his entire realm of emotions and then still move beyond into an infinite reflection on reflections.

Cognition

- The client intellectualizes and challenges her or his assumptions and integrations.
- The client can identify the flaws in the reasoning and logic of her or his integration from various relational perspectives.
- The client demonstrates an ability to think about action in relation to her or his new perspectives.

APPENDIX C

CONSENT TO PARTICIPATE FORMS

Dear

I am writing to ask whether you would be willing to help me in a research study which I am conducting as part of the requirements for my doctoral program at the University of Massachusetts. My professional experience in working with young people has led me to believe that there is a need to better understand the problem of drug and alcohol use from their own point of view. I hope that you will be willing to share your story with me.

Participation in this study will involve completing an interview with myself that focuses on exploring your experiences related to drug and alcohol problems. Each interview should take between 45 minutes and 1 ½ hours to complete. The interviews will be tape-recorded and then transcribed. Please be assured that all information will be kept strictly confidential.

It is important to note there is a chance that you may experience some discomfort during the interview but no harmful effects. You are completely free to withdraw from the study at any time. Should you choose to withdraw, all audiotapes will be destroyed. People who have completed the interview, however, have usually found it to be a positive experience. A small monetary incentive will also be given for participation. Prior to the actual interview I will be glad to address any further questions that you may have. I have also enclosed a permission form to be signed by your parent(s) or Guardian.

Thank you for your consideration.

Sincerely,

____

David R. Boyer
Ph.D. Candidate
University of Massachusetts

- -

My signature indicates that I have read the information above and have decided to participate. I realize that I may withdraw without prejudice at any time after signing this form should I decide to do so.

Signature: __________________________ Date: ____________

Parental/Guardian Informed Consent - Sample Letter

Dear Parent or Guardian:

I am currently involved in research of teenage drug and alcohol use which I am conducting as part of the requirements for my doctoral program at the University of Massachusetts. I am particularly interested in identifying how young people make sense of their life experience. My professional work with teenagers who are at risk for drug and alcohol abuse has led me to believe that there is a need to understand the problem from a more personal perspective. This information is valuable for preparing treatment interventions that are compatible with the specific needs, abilities and motivations of teenagers who may enter counseling.

I would thus like permission for your child to participate in a study that will consist of completing a structured interview with myself that focuses on exploring experiences related to drug and alcohol problems. Each interview should take between 45 minutes and 1 ½ hours to complete. The interviews will be tape-recorded and then transcribed. Please be assured that all information will be kept strictly confidential. All names and identifying references will be changed.

Prior to conducting the interview, I will discuss the possible effects of participating in this study with your son or daughter. This may include the chance of some discomfort, but no harmful effects. If you should decide to allow your child to participate, both of you are completely free to withdraw consent and discontinue involvement in the study at any time. Also, if either of you feels that this study interferes in any way with your son or daughter's treatment program, we would discontinue his or her involvement as well. All audiotapes will be destroyed should your child withdraw for any reason.

Although there is a small monetary incentive for participating in this study, people who have completed the interview have generally found the experience to be a positive one in that they have developed a new awareness of themselves. Moreover, it is intended that the results of this research will have practical applications by contributing to the development of innovative treatment models for young people with drug and alcohol problems.

Please sign and return this form as soon as possible. I have also enclosed a copy of the permission form that will be presented to your child. Thank you very much.

Sincerely,

_____ _____ _____

David R. Boyer Parental/Guardian Approval Date
Ph.D. Candidate, University of Massachusetts

APPENDIX D

STANDARD HUMAN SUBJECTS PROCEDURES

From: Human Subjects Review Committee

To: School of Education Doctoral Students and Other Researchers

Subject: Doctoral Form 7A, Human Subjects Review and Informed Written Consent Form

Among the notions central to research with humans are the following three:

1. participation in research is voluntary;

2. voluntary participation is based on being informed; and

3. the researcher must guard against making participants vulnerable.

Federal guidelines and University of Massachusetts policy indicate that in order to act consistently with the above notions, in most cases when researchers wish to do research using human participants, the researcher must seek the informed written consent of the participants.

Unless the Chair of your committee signs Form 7A saying that you are not working with human participants, in most cases you must develop an informed consent form which meets the following guidelines.1 The Human Subjects Review Committee will review your consent form with these guidelines in mind.

The Written Consent Form:

1. Indicates:
   --who the researcher is;
   --what the researcher proposes to do; and
   --for what purpose.

2. Informs the participants of any risks they may be taking by participating.

3. Informs the participants of their rights:
   --their right to withdraw from part or all of the study at any time; and
   --indicates position on the right to review material.

4. Informs the participants about how names will be used:
   --clear on whether the researcher will seek to protect the participants' identity or not; and
   --clear on pseudonyms or other steps taken to protect identity.

5. Informs participants on:
   --how results will be disseminated; and
   --is reasonable on projected benefits.

6. Indicates that participants are free to participate or not without prejudice.

7. Provides for consent to appropriate adults in the case of children.

8. Deals with other issues of concern specific to the research project.

These guidelines should assist you in developing a written consent form. To further assist you, examples of written consent forms used for interview studies and a memo concerning what might be appropriate for questionnaire and survey studies are available in the Graduate Program Office. Use the above guidelines and the examples to guide you in developing a written consent form appropriate to your research project.

If you wish further guidance, doctoral students may consult with the Human Subjects Review Coordinators.

1These guidelines are taken from Chapter 6 of Interviewing as Qualitative Research, by Seidman, I.E., (1991) New York: Teachers College Press.

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