George Fox University

Digital Commons @ George Fox University

Faculty Publications - Graduate School of Counseling

Graduate School of Counseling

3-14-2008

A Developmental Intervention Science (DIS) outreach research approach to promoting youth development: Theoretical, methodological, and meta-theoretical challenges.

Marilyn J. Montgomery
George Fox University, mmontgomery@georgefox.edu

William M. Kurtines

Laura Ferrer-Wreder

Steven L. Berman

Carolyn Cass Lorente

See next page for additional authors

Follow this and additional works at: https://digitalcommons.georgefox.edu/gsc

Part of the Counseling Commons

Recommended Citation

Montgomery, Marilyn J.; Kurtines, William M.; Ferrer-Wreder, Laura; Berman, Steven L.; Lorente, Carolyn Cass; Briones, Ervin; Silverman, Wendy; Ritchie, Rachel; and Eichas, Kyle, "A Developmental Intervention Science (DIS) outreach research approach to promoting youth development: Theoretical, methodological, and meta-theoretical challenges." (2008). *Faculty Publications - Graduate School of Counseling*. 56.
https://digitalcommons.georgefox.edu/gsc/56

This Article is brought to you for free and open access by the Graduate School of Counseling at Digital Commons @ George Fox University. It has been accepted for inclusion in Faculty Publications - Graduate School of Counseling by an authorized administrator of Digital Commons @ George Fox University. For more information, please contact arolfe@georgefox.edu.

Authors
Marilyn J. Montgomery, William M. Kurtines, Laura Ferrer-Wreder, Steven L. Berman, Carolyn Cass Lorente, Ervin Briones, Wendy Silverman, Rachel Ritchie, and Kyle Eichas

This article is available at Digital Commons @ George Fox University: https://digitalcommons.georgefox.edu/gsc/56

A Developmental Intervention Science (DIS) Outreach Research Approach to Promoting Youth Development

Theoretical, Methodological, and Meta-Theoretical Challenges

Marilyn J. Montgomery
William M. Kurtines

Laura Ferrer-Wreder

Steven L. Berman

Carolyn Cass Lorente

Ervin Briones

Wendy Silverman
Rachel Ritchie
Kyle Eichas

This paper describes work directed toward creating community-supported positive youth development interventions that draw on a developmental intervention science outreach research approach. With respect to developmental interventions, this approach focuses on creating evidence-based longitudinal change intervention strategies for promoting long-term developmental change. The paper describes three broad challenges (theoretical, methodological, and meta-theoretical) that the authors faced in their efforts to develop and implement community-supported intervention programs built on this approach. The authors describe first the theoretical challenges they addressed in developing the conceptual framework for their community-supported intervention; second, the

challenge of developing and refining a methodological framework for evaluating positive youth development interventions in "real-world" settings; and third, the meta-theoretical challenges that arose in the context of implementing community-supported positive development programs.

Keywords: *positive youth development; community-supported interventions; developmental intervention science; outreach research; meta-theoretical issues*

Our efforts to create and implement community-supported positive youth development programs for troubled youths brings together a convergence of concepts and constructs in both developmental and intervention science. (Arnett, Kurtines & Montgomery, 2008, this issue) With respect to developmental science, this convergence of concepts has resulted in the formulation of a set of ideas portraying youths as resources to be developed rather than as problems to be managed (Lerner, 2005; Roth & Brooks-Gunn, 2003). When fused with intervention-prevention science literatures (Masten & Coatsworth, 1998), the result is a developmental intervention science approach (i.e., a fusion of the two literatures). The work described in this paper aims to move this perspective forward by drawing on outreach research principles in the development of community-supported positive development programs. The Changing Lives Program (CLP), one of the developmental intervention science programs currently being developed (and the focus of this paper), is implemented as a selective-indicated youth development program targeting multiproblem youths in alternative high schools (Kurtines, Ferrer-Wreder. Berman, Cass-Lorente, Silverman, Montgomery, 2008, this issue). As we began to unify these concepts within a developmental intervention science outreach research framework, we encountered theoretical challenges in applying existing theory that took us in new directions.

Theoretical Challenges

Developmental Theory: A Psychosocial Developmental Life Course Approach

The developmental theoretical framework (i.e., theory of what changes and how it changes) for our positive youth development program, which we call a

---

Authors' Note: This paper describes the work of the Youth Development Project of the Child and Family Psychosocial Research Center, Department of Psychology, Florida International University. We would like to thank (in alphabetical order) Donette Archer, Marlene Arzola, Alan M. Berman, Janene Bussell, Arlene Garcia, Clary Milnitsky, Seth Schwartz, Silvia Sullivan, Sara K. Swenson, Aida Varela, and Rebecca Wang. Please address correspondence to William M. Kurtines, Department of Psychology, Florida International University, Miami, FL 33199; e-mail: kurtines@fiu.edu.

"psychosocial developmental life course approach," draws from both psychosocial developmental theory (Erikson, 1968) and life course theory (Elder, 1998). From psychosocial developmental theory, this developmental intervention science approach adopts a view of adolescence as the developmental period during which the individual is first confronted with the difficult challenge (and responsibility) of choosing the goals, roles, and beliefs about the world that give life direction and purpose as well as coherence and integration (i.e., a positive sense of identity). From life course theory, this approach adopts an emphasis on how individuals construct their own life courses through the choices they make and the actions they take within the constraints and opportunities of historical and social circumstances.

Targeting the Developmental and Historical Moment: Linking Identity and Life Course Theory

The concept of identity derived from psychosocial developmental theory, when unified with the concept of life transitions and turning points derived from life course theory, provides a link between development, context, and human agency—that is, a coherent conceptualization of individuals as producers of their own development (for a detailed discussion of this conceptualization, see Kurtines et al., in press). Linking these concepts highlights the role of identity as the steering mechanism guiding the individual's life course. A life course (Elder, 1998) is the pathway of the individual's life as it moves through the sequence of socially defined, age-graded events and roles over time, and identity (Erikson, 1968) is the "self-structure" (i.e., the self-constructed, coherent, and dynamic structure) that steers the individual along this path. Thus, this conceptualization does not privilege any particular process or determinant (social-historical, biological-maturational, agentic, etc.) in regulating movement through the life course. Rather, it adopts the view that human agency can be numbered among the multiple determinants (e.g., social-historical, biological, etc.) that play an important role in which life course is followed and how it is followed.

Although human agency is one determinant among many, it is one that is critical to understanding how individuals work out their lives in particular contexts. As Elder (1998) observed, one of the basic principles of life course theory is that "individuals construct their own life course through the choices and actions they take within the constraints and opportunities of history and social circumstances" (p. 961). Exemplifying this potential, in response to the question "Who am I?," one adolescent in the CLP program said,

> Who Am I? . . . I am what I want to be and not what society or my parents or anybody but me wants me to be. Because I see myself as an individual not to be trying to change myself for the better of someone else, but I should change myself for the better of me.

Changing Life Courses

Life course theory thus offers a vocabulary for talking about the process by which individuals change. Life course theory not only holds that life transitions involve qualitative state changes that are both social and psychological, but also that qualitative state changes that occur during transitions are always elements of a larger trajectory (the individual's life course). To this, life course theory adds the view that a particular state change may represent a "life course turning point" as well (Elder, 1998). A *turning point* is a specific type of state change, one that is characterized by a qualitative directional change. A directional change has two features: a discontinuation of movement along a previous pathway and continued successive movement along a qualitatively different trajectory or pathway. A turning point thus results in a qualitative change in direction, and that change can be either short term or long term relative to an individual's life course history. A *life course turning point* is thus a long-term qualitative change in an individual's life course. As such, whether a turning point is a life course turning point cannot be determined prospectively; it can only be done retrospectively, relative to a specific individual's lived life course. Moreover, because a life course is a pathway that the individual, through her or his choices, selects from the array of available trajectories (e.g., institutional, developmental, etc.), the individual is in this sense the "producer" of the pathway of her or his life course. Agency in the selection of particular roles or situations represents a mechanism through which life advantages or disadvantages may begin to accumulate according to the law of effect in which behavior is sustained or changed by its consequences (Elder, 1998).

Adolescents can identify changes in themselves or their life course that they see as constituting qualitative change, life course turning points, or both. One adolescent in the CLP program, for example, responded to the question "Are you presently undergoing a life turning point?" by describing a negative turning point in his ongoing relationship with his mother that was changing his life:

> Yeah, yep, my stepdaddy left my momma, and she felt like it was my fault. So, now it's like changing on me and stuff. I think she hates me now. Aw, I don't know, 'cause now it's all changing, she feels like it's my fault he's gone and he don't wanna come back to her . . . now she gets at anything to argue with me. It's a negative change, I feel like she wanna throw me out and put him back in.

In response to the same life turning point question, another adolescent reported that she was undergoing a positive life transformational change in her sense of self-identity: "I'm becoming more mature and I can feel it. I understand things better now."

Turning full circle, life course theory thus offers a view of life transitions such as adolescence as periods of increased likelihood of a radical break or departure from a previous life course pathway. Interventions that target the transition to adulthood thus not only have the potential to reduce risky or problem behaviors, they may also increase the individual's prospects for positive long-term life course change. The concepts of a life course pathway, agency, and life course turning points, when coupled with the concept of identity as a self-constructed, coherent, and dynamic organization of the self, yield a useful perspective on improving youth interventions—particularly when linked to the life course concept of *events* as key building blocks that can be combined into *event histories* or trajectories.

As described in detail below, such a framework makes it possible to investigate scientifically the relation of intentionally manipulated macro-level institutional events (e.g., establishment of a system of alternative high schools and implementation of youth development program in the high schools) and the associated micro-level social processes (e.g., the small group counseling interactions and face-to-face individual counseling interactions that take place within the context of these events) and qualitative change in the meaning and significance of the life course experiences of individuals who participate in those events (i.e., transformation in the meaning and significance of one's sense of self and identity and life course turning points).

Intervention Theory: A Participatory Transformative Approach

The intervention theoretical framework (i.e., theory of what to change and how to change it) for our positive youth development program, which we call a participatory transformative approach, draws both from Freire's (1970/1983) transformative pedagogy and from multicultural counseling theory (Sue & Zane, 2006) for its strategies to enhance the critical consciousness of marginalized people about their exclusion from the mainstream. Freire referred to such an approach as transformative pedagogy, a pedagogy of dialogue rather than instruction. Freire developed this approach for use in his work with poor rural Brazilians, and we found that it worked well with the culturally diverse multiproblem youths who are the focus of the CLP.

Participatory Colearning and Transformative Activities

Our primary intervention goal is to empower troubled adolescents to change their lives in positive directions. To this end, CLP group work involves

three phases: (a) engagement, (b) participatory colearning, and (c) transformative activities. The engagement phase and the participatory colearning experiences provide the foundation for the student-directed transformative activities, our key change-producing intervention strategy. While engaged in student-directed transformative activities involving proactive problem posing and solving, students are expected to learn to be the "experts." Engaging in transformative activities creates change that often solves participants' short-term presenting problems, an important outcome. However, although important, this is not our primary therapeutic goal. Rather, as described below, we consider the opportunities for mastery experiences that these activities create to be the primary therapeutic ingredient of our programs.

The implementation phases are designed to be flexible and can be adapted to diverse populations and problems, goals, and settings. As shown in Table 1, after youths are engaged, the counselor shifts the students' focus to the participatory colearning and transformative activities. However, the sequencing tends to be phasic but flexible (back and forth between phases) as the counselor uses the CLP strategies when opportunities present themselves in the sessions (details are presented in Garcia, Montgomery, & Kurtines, in press).

The aim is to create contexts in which troubled young people can transform their sense of control and responsibility and, in the process, change their negative life pathways into positive ones. Our intervention program thus aims at changing lives, and we use intervention strategies that are both participatory and transformative to achieve this goal. Using Freire's (1983/1970) work as a springboard, our participatory transformative approach also draws on multicultural counseling theory (Sue & Zane, 2006) and the empowerment literature (Brandtstaedter & Lerner, 1999; McWhirter, 1997; Peterson & Reid, 2003; Zimmerman, 1995). The aim is to create contexts in which program participants take an active role in the intervention process with the interventionist (facilitator, teacher, etc.) participating as a colearner in their efforts to construct alternatives to negative life pathways. In the Youth Development Program, participants not only talk about their problems, they do something about them. In the process, they are empowered as they experience the possibility of creating (rather than enduring) the circumstances of their lives.

Mastery Experiences: CLP's Core Mediator of Life Course Change

CLP uses youth-directed transformative activities as its key behavioral intervention strategy for facilitating empowerment (Kurtines, W. M., Montgomery,

Table 1
Changing Lives Program: Intervention Phases, Objectives, and Strategies

Phase	Objective	Strategy
Engagement	Group cohesion Facilitator-student rapport	Cohesion-building activities Joining or establishing therapeutic alliance
Participatory colearning Transforming yourself	Knowledge of self Realization of potentials	Emotion-focused problem posing (exploration for insight) Envision future selves Identify transformative life goal
Participatory colearning Transforming the world you live in	Critical problem posing and critical understanding (Identifying the right problem or challenge rather than a solution to the wrong problem)	Reality-focused problem posing (critical thinking and critical discussion) Exploration of instrumental alternatives (transformation of self or others?) Critical problem solving (reality-based evaluation of identified solutions)
Transformative activities	Proactive participation in transforming self and others	Student-directed transformative activities (aimed at self, peers, family, school, or community)
Mastery experiences	Personal empowerment	Acceptance of responsibility, implement change goals, accept challenges, overcome obstacles

M. J., Eichas, K., Ritchie, R., Garcia, A., Albrecht, R., et al., in press). While intentionally identifying problems and engaging in transformative activities to solve these problems (changing the way things are for the better), students become the experts and in the process become empowered. Because of such mastery experiences, youths learn "to see a closer correspondence between their goals and a sense of how to achieve them, gain greater access to and control over resources and . . . gain mastery over their lives" (Zimmerman, 1995, p. 583).

We extend and refine the concept of mastery experiences by articulating a psychosocial developmental life course conceptualization of positive mastery experiences as a mediating mechanism of life course change. That is, although our key intervention strategy consists of a primarily behavioral intervention (i.e., facilitating participants' engagement in transformational change-producing activities), it is the quality of the cognitive and affective processes associated with mastery experiences generated by transformative activities that are hypothesized to operate as cognitive-affective mediating

mechanisms by transforming the way youths understand or feel about their current life course. Specifically, we hypothesize that the quality of the cognitive and affective processes associated with mastery experiences generated by transformative activities (positive or negative) precipitate complex cascading change in either (or both) cognitive and affective components of the individual's subjective evaluation of the experience (see Kurtines et al., in press).

Although we consider positive mastery experiences to have the potential to transform the subjective meaning and significance of all types of life course experiences, we consider mastery experiences that result in change in a participant's experiences of self and identity to be a particularly important type of life course change experience. In addition, we further consider mastery experiences that result in a transformative (directional) change (e.g., from negative to positive) in a participant's experiences of self and identity to be one of the most important types of life course experience changes because it is the type of change that is most likely to result in long-term directional life course change. From a psychosocial developmental life course perspective, an identity is seen as a relatively stable "self-structure" (i.e., the self-constructed, coherent, and dynamic organization of the drives, abilities, beliefs, and personal history) that serves as an individual's steering mechanism for directing her or his choices and actions, within the constraints and opportunities of history and social circumstances, throughout the duration of a life course.

Moreover, because life course theory views a life course as a pathway that the individual directs through her or his cumulative choices from the array of available trajectories (e.g., institutional or developmental), the forward edge of an individual's movement through a life course is located at the intersection of these possible trajectories and the future direction of the pathway as directed by each individual's interpretation of the subjective meaning and significance of the cumulative effects of the alternatives selected. Agency in the selection of particular roles or situations thus represents a mechanism through which life advantages and disadvantages accumulate and life courses are sustained or changed by the interpretation of the meaning and significance of their consequences to the individual.

Consequently, for purposes of intervention and measurement, we adopt the meaning and significance of a program participant's life experiences in the context of the available array of possible trajectories at the time of entry into the program as the lead point of that participant's movement through a life course; hence, it is not only the focus of our empowerment intervention strategies but also the focus of our efforts to measure and track long-term and directional qualitative life course change. Specifically, from the perspective of our

psychosocial developmental life course approach, the most empowering type of transformational change to promote in a troubled youth on a negative life course pathway is positive transformational change in the youth's experiences of self and identity. Thus, we consider the occurrence of youth proactive transformational activities that promote the formation of a positive sense of identity to be a key change-producing ingredient in our intervention work. We consider it among the most empowering types of transformational change because such change alters youths' personal sense of identity that serves as the steering mechanism for directing the course of their lives over the long haul.

Methodological Challenges: The Legacy of Historically Split Meta-Theories

We considered the availability of methods to measure and track qualitative life course change important for our intervention work because, as discussed above, we consider interventions that promote transformational change in the subjective meaning and significance of program participants' life course experiences in empowering ways to have the potential to promote long-term directional life course change as they alter an individual's personal sense of identity, which serves as a steering mechanism in constructing her or his life course. The aim of our program is to change the lives of troubled young people for the better, where *change* means a qualitative change in direction (i.e., from negative to positive) and where *for the better* is understood as particularly and contextually situated (e.g., in ways that are relative to each individual's specific life course pathway at the time of entry into the program). Thus, although addressing the lack of well-established readily available methods for investigating transformational change in the subjective meaning and significance of life course experiences is an important aim of our measurement development efforts, our specific need for methods for identifying and categorizing the unique properties or qualities of subjective meaning and significance of each individual's experiences of self and identity informed the development of a number of the core measures that are used in our program.

Measurement and Evaluation of Qualitative Life Course Change

Documenting qualitative change in the meaning and significance of life course experiences involved the adaptation and refinement of measures and methods for analyzing such change. In this context, our program of

research sought to advance the field by refining measures and methods for assessing qualitative change in the life course experiences of youths. At the specific level of the Miami Youth Development Program, our aim was to refine methods for evaluating person-centered qualitative research hypotheses associated with one pole of the methodological split that has historically existed between person-centered and variable-centered research. A further goal was to fuse the use of these person-centered methods with variable-oriented research methods and data analytic strategies for evaluating quantitative research hypotheses associated with the other pole. In doing so, we developed Relational Data Analysis (RDA) as a framework for the use in evaluating CLP (see Kurtines, Montgomery, Lewis Arango, et al., 2008, this issue, for additional details on RDA.)

Unifying the Methodological Meta-Theoretical Split

This split has separated two of the major meta-theoretical traditions represented in the human sciences, traditions that have had a far-reaching and pervasive impact (both direct and indirect) on diverse disciplines. Operationally, these traditions have been associated with two wide-ranging literatures (often broadly referred to by such terms as *qualitative vs. quantitative* or *sociological vs. psychological* approaches, etc.) that have been historically identified with the meta-theoretical themes defining the opposing poles of the methodological split (structural-causal, variational-transformational, expressive-instrumental, interpretation-observation, etc.). Against this background, our broadest aim was to investigate the analytic utility of fusing (within the RDA framework) qualitative and quantitative methods representative of these two distinct research traditions, the quantitative-experimental research tradition associated with clinic–lab-based psychological-developmental sciences, and the qualitative–field research tradition associated with ethnographic–community-based sociological-anthropological sciences.

Although the split meta-theory of positivist philosophy of science had a pervasive impact on research in psychological science in general and developmental science in particular (Overton, 2006; see Table 2), the influence of split meta-theory on the sociological-anthropological tradition was less pervasive. Grounded theory, the approach we drew on in developing our qualitative measures, emerged out of sociological-anthropological science, with its strong ethnographic tradition, an orientation that in contrast to psychological science, has traditionally not included research on nonhuman species. The research methods that evolved out of this tradition, consequently, tend to focus on measures and methods useful for research on language using, meaning making, cultural

Table 2
Relational Versus Split Meta-Theory Perspectives on Developmental Change

With respect to the scientific study of human development, the most significant impact of split meta-theory has to do with the particular perspective it adopts regarding what changes, how it changes, and how it is measured:

Concerning **what** changes:		
Expressive action in humans is considered to reflect the creative function of humans in making new behaviors, new intentions, and new meanings	**OR** (at the opposite pole)	Instrumental action in humans is considered to provide a means for attaining some outcome as the pragmatic dimension of action.
Concerning **how** it changes: The split is whether changes are either		
Transformational change that reflects changes in the structure, pattern, organization, complexity, etc., of observed units and can be understood as qualitative in nature (i.e., transformational-morphological change)	**OR** (at the opposite pole)	Variational change that reflects changes in the degree or extent to which an observed change varies from a postulated standard and can be understood as quantitative in nature (i.e., an increase or decrease from the standard).
Concerning **how** change is measured: The split is whether change is measured either		
By means of behavioral observation free from interpretation as dependent variables	**OR** (at the opposite pole)	By means of theoretically meaningful interpretations of culture-laden narrative expressions of subjective life course experiences as dependent variable

Source: Overton (1998).

bearing organisms—that is, humans (Denzin & Lincoln, 2000). As a result, the methods associated with grounded theory (e.g., open coding and constant comparison) evolved mainly for use in research collecting and analyzing data obtained with qualitative measures that capture the subjective meaning and significance of the life experiences of human research participants (e.g., as expressed in open-ended linguistic response data collected by means of unstructured interviews, written or oral narratives, or field observation notes; Denzin & Lincoln, 2000; Glaser & Strauss, 1967; Strauss & Corbin, 1998).

In this context, objective reports of observable responses (free of observer interpretation of meaning and significance) considered the definitive foundational data for psychological-developmental research conducted within the split

meta-theoretical tradition are, within the sociological-anthropological interpretative tradition, considered primarily a starting point. That is, these objective reports are viewed as "raw" behavioral observations to be extended, refined, enriched, and verified by data collected with measures and methods designed to capture and facilitate the interpretation of the human meaning and significance of the linguistic and culture-laden intentions of the person or persons engaged in the behavior being observed.

Consistent with this tradition, for example, we interpreted the interview response data we obtained from the RDA adaptation of the Life Course Interview (Clausen, 1998) and the Possible Selves Questionnaire (Oyserman, 1987) as narrative expressions of the subjective meaning and significance of participants' experiences of self and identity. Thus, although the subjective meaning and significance of life course experience (including experiences of self and identity) are not directly observable, the narrative-linguistic expressions of the meaning and significance of these experiences captured in the interview transcripts are available for intersubjective observation and analysis. Participants' narrative expressions of meaning and significance are thus conceptualized as indicators or markers of unobservable latent variables, that is, the "actual" subjective meaning and significance of the experiences of self and identity (which are obviously unavailable for observation). A latent variable is a variable for which there is no sample realization for at least some observations in a given sample (Bollen, 2002). A latent variable is thus unobservable at least some of the time, and as Bollen (2002) pointed out, many variables in the psychological and sociological sciences are unobservable all of the time. In this context, we use qualitative change in these narrative expressions of the meaning and significance of the experiences of self and identity as primary outcome variables in evaluating whether our interventions promote transformational change in the subjective meaning and significance of program participants' life course experiences.

In addition, because it has been historically identified with the sociological-anthropological ethnographic–community-based tradition, the grounded theory approach has emphasized theory "construction" using data collected on human participants in field or community settings. This is in contrast to the experimental tradition that evolved in psychological-developmental research emphasizing the "evaluation" of theory (vis-à-vis hypothesis testing) using data collected under rigorously controlled clinic or lab settings and frequently intended to generalize to human and nonhuman species (i.e., species that are not language using, culture bearing, or meaning making). Consequently, qualitative research methods, such as theoretical sampling and saturation (as developed for use in grounded theory), have tended to be used to develop and

refine theory regarding the linkages between inner psychological states (e.g., subjective meaning and significance of experiences) and observed human behavior in real-world human ecologies, as interpreted by the researcher and, more important, by the participants themselves—a context in which theory development is justifiably considered still in the discovery stage.

As Strauss and Corbin (1998) noted, theoretical sampling is "data gathering driven by concepts derived from evolving theory . . . [intended] to maximize opportunities to discover variations among concepts and to densify categories in terms of their properties and dimensions" (p. 201). Theoretical saturation, in turn, provides a criterion for determining how long to continue theoretical sampling, namely, "until (a) no new or relevant data seem to emerge regarding a category, (b) the category is well developed in terms of its properties and dimensions demonstrating variation, and (c) the relations among categories are well established and validated" (p. 212). Consequently, qualitative methods and procedures, such as theoretical sampling and saturation, provide a useful means for breaking new ground in theory construction because building on theory as it evolves facilitates bootstrapping where no theory currently exists. The idea is to use whatever new theoretical developments emerge as a guide to the collection of new data (i.e., to sample "new" data in ways that are likely to be constructive in furthering the evolution of theory). In well-established literatures, in contrast, the goal is frequently that of the evaluation of theory—that is, the goal is to test theories as rigorously as possible to confirm or refute existing theoretical concepts and constructs (or refine them) rather than create new theory out of raw data.

In this context, a key aim was to investigate the potential contribution of the data analytic strategies that we have developed (RDA) for moderating the methodological split at the theoretical and factual level through their fusing with well-established qualitative research methods and procedures (e.g., open coding and theoretical sampling or saturation) and quantitative research methods and procedures (e.g., manipulated independent variables, random assignment to condition, and quasi-experimental designs). In addition, we also sought to draw on relational meta-theory to provide a useful framework for challenging the validity of the split. The nature and setting of the type of research conducted by the Youth Development Program thus provided an opportunity to bring together as coequals a number of elements from two distinct meta-theoretical traditions that have had a far-reaching and pervasive impact on the field, outlined in Table 3.

The research hypotheses generated by RDA thus provided the opportunity to extend and refine methods for testing qualitative research hypotheses derived

Table 3
Complementary Methodological Meta-Theoretical Orientations

The quantitative-experimental tradition is primarily defined by the use of	The qualitative-field tradition is primarily defined by the use of
Research designs for collecting data under controlled lab, clinic, or experimental conditions	Research designs for collecting unstructured nonexperimental data in field settings
Measures of variational change in instrumental action in human and nonhuman species	Measures of transformational change in expressive action in humans
Behavioral observation free from interpretation as dependent variables	Theoretically meaningful interpretations of culture-laden narrative expressions of the meaning of subjective life course experiences as dependent variables
Data-analytic strategies testing hypothesized causal (quantitative) change	Data-analytic strategies evaluating hypothesized structural (qualitative) change
Theory (hypothesis) testing and refinement	Theory construction and development

from one meta-theoretical tradition, the qualitative–field research tradition, and fuse their use with measures, methods, and data analytic strategies for testing research hypotheses derived from a "rival" meta-theoretical tradition, the quantitative-experimental research tradition. At this level, theoretical questions become inextricably interrelated to and inseparable from not only methodological questions but also meta-theoretical ones and begin to test and extend the limits of what has been done in the field and expand the horizons of what may be done.

Conceptualizing Life Course Change

In addition to drawing on an approach (grounded theory) that emerged out of the sociological tradition to document life course change as it takes place at the individual level, we have additionally drawn on an approach (life course theory) that similarly emerged out of the sociological tradition in the development of a framework for conceptualizing life course change as it takes place at the intersection of the individual and society. Life course inquiry arose out of the confluence of several major theoretical and empirical streams of research connecting social change, social structure, and individual action (Giele & Elder, 1998). It represents an integration of the two broad paradigms for conceptualizing the relation between the individual and society that defined the social sciences in the first half of the 20th century—a snapshot of "social relations" or structural approach that focused on the impact of the social surroundings on the individual, or a movielike temporal or

dynamic approach that traced the story of lives over time. The orientation of the structural approach was atemporal or ahistorical and focused on the interconnections between the individual and either (a) the macro-level social order (the whole society) or (b) the micro-level social order (small groups and face-to-face interactions). The dynamic or temporal orientation, on the other hand, focused on the dynamics of social context and change in either (a) special subgroups or (b) the lives of individual actors (Giele & Elder, 1998, p. 6). Life course inquiry, in contrast, integrates both of these traditions by using events as key building blocks that are combined in event histories or trajectories that are compared across persons or groups by noting differences in timing, duration, and rates of change.

As developmental intervention scientists drawing on the life course approach, however, our primary concern has not been with investigating the relation between naturally occurring events and subsequent event histories at the "mega" macro sociohistorical level (e.g., wars or economic depressions) and individual life course events and subsequent life course event histories in the context of historical events. Rather, for the purposes of our current research program, our efforts have focused on "mini" macro-level social events (e.g., establishment of a system of alternative high schools or implementation of a youth development program in the high schools) and the associated mini micro-level social processes (e.g., small group counseling interactions and face-to-face individual counseling interactions) and individual life course change. Fortunately, because events are more manageable at this level, working at a mini micro-level provides the opportunity to complement investigations of the relation between naturally occurring events at the mega macro sociohistorical level and individual life course events with investigations of the relation between intentionally manipulated events at the mini micro social process level and individual life course events, that is, to expand the horizons of efficacy-effectiveness outcome research both longitudinally and comparatively.

Efficacy-Effectiveness Outcome Research: Expanding the Horizons

The research studies reported in this special issue were designed to provide preliminary evidence for the reliability and validity of the qualitative measures under development as well as the utility of unifying qualitative and quantitative research methods and procedures for evaluating intervention programs. In this sense, the studies were designed to be efficacy-effectiveness outcome studies. The research studies, however, were not conceptualized primarily as efficacy-effectiveness outcome research. Rather, they were conceptualized as

the first data collection wave in a type of outreach "research design" that we have been developing as an extension of our ongoing program of developmental intervention science outreach research. The structure and format of this research design is intended to realize the potential for conducting comparative and longitudinal program evaluation research made possible by the logic of outreach research, that is, research involving a long-term commitment of both community stakeholders and researchers in support of programs that meet both community and youth needs.

The development of this design, termed a *multistage longitudinal comparative* (MLC) program evaluation design, was modeled after current recommendations for developing and evaluating interventions (Rounsaville, Carroll, & Onken, 2001), however, in this case for a life-span evaluation with respect to the life span of the program and the life span of the participants. The MLC program evaluation design draws on the multistage approach but adapts it to include phase-specific evaluation across three core stages of program evolution (formation, consolidation, and maintenance-dissolution). This design is thus intended to be longitudinal *and* comparative, developed to evaluate long-term community-supported outreach programs with respect to external and internal validity. That is, both long-term time and cost effectiveness (feasible, affordable, and sustainable in real-world settings) and research efficacy (experimentally manipulated variables, control conditions, psychometrically sound measures, etc.).

The MLC design stages, which follow the three-stage model summarized by Rounsaville et al. (2001), are presented in Table 4 (also see Kurtines, Montgomery, Ferrer-Wreder, et al., 2008, this issue). The aim of our empirical research was thus to expand the horizons of efficacy-effectiveness outcome research and address the complex issue of the relation between the individual and society over time at multiple levels (individual, program, institutional, etc.) in ways that have the potential to render transparent the reciprocity of the process of individual and social change.

Meta-Theoretical Challenges

At the individual level, our goal in developing RDA was to contribute to the development of measures and methods for documenting qualitative change in participants in our interventions. Although this was an important theoretical and methodological goal, our goals extended beyond the theoretical and methodological. Indeed, moving into actual application of RDA specifically highlighted the fact that this particular goal was in service of

Table 4
Multistage Longitudinal Comparative Program Evaluation Design

Stage	Programmatic Activities
Stage 1: Formation	Includes identifying community needs (problem, population, community sector, etc.), creating a sustaining support infrastructure (identify stakeholders, community partners, institutional resources, etc.), establish preliminary linkages at appropriate micro-level social system or network (family, school, or neighborhood-based programs)
Stage 2: Consolidation	Includes the construction of a conceptual-theoretical framework (identify or define change goals, intervention strategies, etc.), develop a methodological framework (select an appropriate short-term research design, identify appropriate intervention and comparison control conditions, select or construct measures, identify appropriate data analytic strategies, etc.), conduct a planned preliminary evaluation (psychometric evaluation of measures, short-term controlled studies, etc.) of an intervention program that provides preliminary reliability, validity, and utility checks and the opportunity for midcourse correction in research methods and procedures
Stage 3: Maintenance-dissolution	Includes selecting appropriate nonrandomized comparison control (matched sample comparison, community comparison, etc.), reconfiguring community resources to meet changing needs, etc), evaluate program's long-term time and cost effectiveness (durable, affordable, and sustainable, etc., over the life span of the program), evaluate program's long-term research effectiveness (multistage longitudinal comparative evaluation of program effectiveness across the life span of the participants and the program, whichever comes first)

Note: Table adapted from Rounsaville, Carroll, and Onken (2001).

a broader goal, that of unifying the methodological split, and that our primary approach for doing this involved making an intentional effort to facilitate fusing the methodological split at the meta-theoretical level (see Overton, 1998). We considered our efforts to contribute to unifying the methodological split at the meta-theoretical level by challenging the utility and validity of the split as it has separated two of the major meta-theoretical traditions represented in the human sciences, traditions that have had a far-reaching and pervasive impact (both direct and indirect) on diverse disciplines.

With this possibility in mind, we conducted evaluation efforts that included the collection of qualitative data (using qualitative measures and methods) drawn from the sociological-anthropological field tradition of theory construction, in a research design (a short-term longitudinal quasi-experimental design

with a comparison control group) drawn from the psychological-developmental clinic-laboratory tradition of theory testing. Our aim in doing so was to realize more fully the unifying potential of the relational circle as articulated in the relational meta-theory proposed by Overton (1998, 2003, 2006; see also Kurtines, Montgomery, Ferrer-Wreder, et al., 2008, this issue).

Thus, while we sought to establish Youth Development Program research projects within the community-sensitive model of outreach research, we also sought to adopt knowledge development strategies that would be fitting for such an effort. Parallel to the need for a shift in the direction of research toward closer university-community collaborations, there is a need for a shift in research in the human sciences toward a greater balance between top-down, theory-driven laboratory- and clinic-based research and bottom-up data-driven contextual and community-supported research. Because the leading edge of the sociohistorical change takes place at the intersection of the individual and society, the type of breakthroughs needed to stay at the forward edge of this change are methodological advances that render our measures, methods, and data-analytic strategies capable of capturing, in the raw and in real time, the leading edge of this change and render it explicit and intelligible.

We see the value of developmental intervention science outreach research to the emergence of new directions in efficacy-effectiveness research as creating the opportunity to capture in real time the temporal dimension of developmental and historical change (i.e., changing lives in changing times). The capacity to conceptually link developmental and historical change is also why we consider outreach research (i.e., research conducted in real-world community settings and responsive to local needs that draws on preexisting or novel theoretical approaches) to be an especially useful complement to top-down theory-driven research, particularly in the human sciences. Outreach research begins and remains rooted in the real world as well as in the theoretical perspective that the investigator brings to the research setting. Outreach research has the potential to provide the developmental investigator a ready-at-hand array of research methods and procedures for fusing theory-driven data collection and data-driven theory construction.

To contribute to this end, we have drawn on the qualitative-field tradition in the human sciences in an effort to extend and refine methods and procedures sensitive to change in real-world community settings and responsive to local needs and values. This included, at the level of the individual, change in the subjective meaning and significance of the life course experience of research participants. However, the research value of reports of the subjective meaning and significance of the life course experience underwent challenge in psychological-developmental sciences during the first half of the

20th century by the growing prominence of the positivist movement in philosophy and the associated emergence of a prominent behavioral functionalist learning tradition in the psychological-developmental sciences (chiefly in the United States).

Beginning with Kuhn (1962), the persistent and pervasive philosophical critiques of the positivist movement that emerged during the second half of the 20th century have rendered the movement's objectivist claim that scientific theory is necessarily grounded in objective data based on direct observation (along with the positivists' other foundational assumptions) problematic, with a resulting decline in the influence of the positivist movement in philosophy (see Overton, 2006). Consequently, as the 21st century gets underway with no strong philosophic defense of the objectivist claims of the positivists on the horizon, it appears appropriate to propose a more straightforward and practical alternative for making progress than another extended round of philosophical discourse—particularly with respect to the issue of the potential contribution of the subjective experience of human research participants to the scientific understanding of developmental and historical change. From the perspective of relational meta-theory (Overton, 2006), this issue appears as amenable to consensual resolution at the level of theoretical and factual discourse via scientific analysis as it appears amenable to consensual resolution at the level of meta-theoretical discourse via philosophical analysis, that is, that what scientists have to say about the issue might matter as much as what philosophers have to say.

Indeed, from the perspective of the relational meta-theory goal of unifying historical methodological splits, it appears reasonable to propose that the main accomplishment of the initial acceptance of the positivists' objectivist claim for scientific understanding was that of narrowing the scope of scientific investigation. The resulting constraints on the limits of scientific investigation shifted advances in the behavioral domain of scientific inquiry into the foreground, with the result that advances in the scientific investigation of the meaning and significance of subjective experience tended to be shifted to the background. However, in view of the pervasive philosophical critiques that have rendered the positivists' objectivist claims problematic and the absence of a strong philosophic response, there no longer appears to be any substantive reason to rule out in advance the potential value of scientific investigation of the meaning and significance of subjective experience in the psychological and developmental sciences. Indeed, as noted, the fact that that field has advanced to the point where the types of meta-theoretical frameworks that are needed for unifying meta-theoretical traditions are available (e.g., relational methodological meta-theory) opens up the possibility of drawing on these frameworks to advance the field at

the theoretical and factual levels in concrete and specific domains of research, including unifying the use of both quantitative and qualitative methods in the analysis of developmental change. Revisiting the issue of the value of the scientific investigation of the meaning and significance of subjective experience at this point (i.e., the beginning of the 21st century) has an added advantage in that it is now possible to draw on the extensive methodological advances in quantitative-experimental methods that have taken place as a means for facilitating advances in qualitative-field methods, and in this way facilitating the unification of the artificially opposed traditions.

In this context, our approach has been to draw on open-ended measures, methods, and data-analytic strategies that have evolved in qualitative-field tradition for rendering intelligible the meaning and significance of individual and institutional change to the language-using, culture-bearing, meaning-making community of participants who coconstruct and create this change and fuse the results of the use of these qualitative methods with the use of methods and data analytic strategies for testing research hypotheses derived from the quantitative-experimental research tradition. Our approach to unifying them has thus involved a proactive infusion of elements from both traditions. It involved, for example, efforts to develop qualitative measures and methods for collecting narrative expressions of subjective experiences that could be coded with a level of reliability and validity that parallel those of quantitative measures and methods and coming up with methods and procedures for analyzing qualitative data that draw on the capability and power of the statistical methods used in the analysis of quantitative data. For this approach, the evolution of new directions in efficacy-effectiveness research needed to generate breakthroughs and advances in knowledge development does not require a triumph of one tradition over the other. To the contrary, the extent to which one tradition is privileged over the other (in either direction) only serves to impoverish knowledge development at all levels (i.e., factual, methodological, theoretical, and meta-theoretical).

Conclusion

The results of developmental intervention science outreach research thus have the potential to contribute to what Lerner, Fisher, and Weinberg (2000); Jensen, Hoagwood, and Trickett (1999); and others have described as the blurring of the distinctions between science and practice in developmental science and appear to have the potential to help enhance the vitality for the future progress of the field of human development and, in the process, the very viability of the academy itself (Eccles, 1996; Lerner et al., 2000). The emergence of a movement that seeks to

fuse and unify as coequals measures, methods, and data analytic strategies for testing research hypotheses derived from "rival" meta-theoretical traditions, each seemingly defining opposite poles of the meta-theoretical methodological split, is movement in a direction that represents an opportunity to begin, as we observed, to test and extend the limits of what has been done in the field and expand the horizons of what may be done in the future.

References

Arnett, J.J, Kurtines, W.M., Montgomery, M.J. (Eds.) (2008, this issue). Promoting positive youth development [Special issue]. *Journal of Adolescent Research*, *23*.

Bollen, K. A. (2002). Latent variables in psychology and the social sciences. *Annual Review of Psychology, 53,* 605-634.

Brandtstaedter, J., & Lerner, R. M. (Eds.). (1999). *Action & self-development: Theory and research through the life span.* Thousand Oaks, CA: Sage.

Clausen, J. A. (1998). Life reviews and life stories. In J. Z. Giele & G. H. Elder (Eds.), *Methods of life course research: Qualitative and quantitative approaches* (pp. 189-212). Thousand Oaks, CA: Sage.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2000). *The handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

Eccles, J. S. (1996). The power and difficulty of university-community collaboration. *Journal of Research on Adolescence, 6,* 81-86.

Elder, G. H. (1998). The life course and human development. In R. M. Lerner (Ed.), *Handbook of child psychology, Vol. 1: Theoretical models of human development.* New York: John Wiley.

Erikson, E. H. (1968). *Identity: Youth and crisis.* New York: Norton.

Erikson, E. H., & Erikson, K. T. (1957). The confirmation of the delinquent. In S. Schlein (Ed.), *A way of looking at things: Selected papers from 1930 to 1980 Erik H. Erikson* (pp. 87-102). New York: Norton.

Freire, P. (1983). *Pedagogy of the oppressed.* New York: Herder & Herder. (Original work published 1970)

Giele, J. Z., & Elder, G. H. (Eds.). (1998). *Methods of life course research: Qualitative and quantitative approaches.* Thousand Oaks, CA: Sage.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago: Aldine.

Kuhn, T. S. (1962). *The structure of scientific revolutions.* Chicago: University of Chicago Press.

Kurtines, W.M., Ferrer-Wreder, L., Berman, S.L., et al. (2008, this issue). Introduction to the special issue: Promoting positive youth development: New directions in the developmental theory, methods, and research. *Journal of Adolescent Research*, *23*, 233-244.

Kurtines, W. M., Montgomery, M. J., Ferrer-Wreder, Berman, Cass Lorente, & Silverman, W. K. (2008, this issue). Promoting positive youth development: Implications for future directions in developmental theory, methods, and research. *Journal of Adolescent Research, 23,* 359-378.

Kurtines, W. M., Montgomery, M. J., Lewis Arango, L., Kortsch, G., Albrecht, R., & Garcia, A. (2008, this issue). Promoting positive youth development: Relational data analysis. *Journal of Adolescent Research, 23,* 291-309.

Kurtines, W. M., Montgomery, M. J., Eichas, K., Ritchie, R., Garcia, A., Albrecht, R., et al. (in press). Promoting positive identity development in troubled youth: A developmental intervention science approach. *Identity: A Journal of Theory & Research.*

Jensen, P., Hoagwood, K., & Trickett, E. (1999). Ivory towers or earthen trenches? Community collaborations to foster "real world" research. *Applied Developmental Science, 3*, 206-212.

Lerner, R. M. (2005, September). *Promoting positive youth development: Theoretical and empirical bases* (White paper prepared for the Workshop on the Science of Adolescent Health and Development, National Research Council/Institute of Medicine). Washington, DC: National Academies of Science.

Lerner, R. M., Fisher, C. B., & Weinberg, R. A. (2000). Toward a science for and of the people: Promoting civil society through the application of developmental science. *Child Development, 71,* 11-20.

Masten, A. S., & Coatsworth, D. J. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist, 53*, 205-220.

McWhirter, E. H. (1997). Empowerment, social activism, and counseling. *Counseling and Human Development, 29,* 1-14.

Overton, W. (1998). Developmental psychology: Philosophy, concepts, and methodology. In R. M. Lerner (Ed.) & W. Damon (Series Ed.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (5th ed., pp. 107-187). New York: John Wiley.

Overton, W. F. (2003). Embodied development: Ending the nativism-empiricism debate. In C. Garcia Coll, E. Bearer, & R. Lerner (Eds.), *Nature and nurture: The complex interplay of genetic and environmental influences on human behavior and development* (pp. 201-224). Mahwah, NJ: Lawrence Erlbaum.

Overton, W. F. (2006). Developmental psychology: Philosophy, concepts, methodology. In R. M. Lerner (Ed.), *Handbook of child psychology. Volume 1: Theoretical models of human development* (6th ed., pp. 18-88). New York: Wiley.

Oyserman, D. (1987). *Possible selves and behavior: The case of juvenile delinquency.* Unpublished doctoral dissertation, University of Michigan, Ann Arbor.

Peterson, N. A., & Reid, R. J. (2003). Paths to psychological empowerment in an urban community: Sense of community and citizen participation in substance abuse prevention activities. *Journal of Community Psychology, 31,* 25-38.

Roth, J. L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science, 7,* 94-111.

Rounsaville, B. J., Carroll, K. M., & Onken, L. S. (2001). A stage model of behavioral therapies research: Getting started and moving on from stage I. *Clinical Psychology: Science and Practice, 48,* 133-142.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research.* Thousand Oaks, CA: Sage.

Sue, S., & Zane, N. (Eds.). (2006). *How well do both evidence-based practices and treatment as usual satisfactorily address the various dimensions of diversity?* Washington, DC: American Psychological Association.

Zimmerman, M. A. (1995). Psychological empowerment: issues and illustration. *American Journal of Community Psychology, 23,* 581-599.

Marilyn J. Montgomery, PhD, received her doctorate in human development and family studies from Texas Tech University and credentials in mental health counseling (LMHC). At Florida International University, she is an associate professor in the Departments of Psychology and Educational and Psychological Studies. Her research interests address relations between substance use, mental health, and past and current maltreatment in close relationships among culturally and ethnically diverse female adolescents and counseling process. She is currently an investigator on two National Institute on Alcohol Abuse and Alcoholism grants that do community-based intervention research with adolescents.

William M. Kurtines received his PhD in psychology from Johns Hopkins University. He is professor of psychology in the Department of Psychology at Florida International University. He is director of the doctoral program in Life-Span Developmental Science, director of the Youth Development Project, and associate director of the Child and Family Psychosocial Research Center, Department of Psychology at Florida International University. Dr. Kurtines's areas of scholarly and research interest include social and personality development, life span developmental science, positive development, outreach research, and developmental intervention science.

Laura Ferrer-Wreder earned her PhD in life span developmental psychology at Florida International University. She is an associate professor of psychology at Barry University in Miami, Florida. Her undergraduate and graduate studies were supported by National Institutes of Health (MARC) training grants. As a post-doc, she received a National Science Foundation International Research Fellowship (Örrebro University, Sweden). Her research interests include positive youth development and prevention science.

Steven L. Berman obtained his PhD in developmental psychology from Florida International University and is now an associate professor in the Department of Psychology at the University of Central Florida, Daytona Beach campus. His research interests include identity development and interventions aimed at promoting positive psychological growth by resolving identity dilemmas and reducing related symptoms of anxiety and distress.

Carolyn Cass Lorente, PhD, is a lecturer in the Graduate School of Education and Human Development at George Washington University and cofounder of the Miami Youth Development Project. She coauthored the internationally published book *Successful Prevention and Youth Development Programs: Across Borders* (Kluwer, 2004). Her current interests are researching and facilitating positive development throughout the life span, including the adult years.

Ervin Briones, PhD, is assistant professor at the Department of Psychology, University of Tennessee at Martin. He received his PhD in life span human development at Florida International University. His research interests include adolescent development, including identity formation and behavior problem prevention, acculturation, and family and couples relations.

Wendy Silverman received her PhD in clinical psychology from Case Western Reserve University. She is a professor of psychology at Florida International University. She is the founder and director of Florida International University's Child and Family Psychosocial Research Center. Dr. Silverman's knowledge development efforts have focused particularly on designing and evaluating efficacious treatment interventions and on furthering understanding about the theoretical mechanisms that are associated with positive child (and family) treatment response.

Rachel Ritchie is a doctoral student in developmental psychology at Florida International University. Her research interests include the development of qualitative measures, promoting positive development, and intervention research.

Kyle Eichas is a doctoral student in developmental psychology at Florida International University. His research interests include the structural equation modeling, promoting positive development, and intervention research.