A CONTEXTUAL APPROACH FOR EVALUATING PROGRESS IN CHILDRENS' ENVIRONMENT OF CARE

Barbara Thomlison
Associate Professor
Faculty of Social Work
University of Calgary
Calgary, Alberta


Child and youth care practitioners need to consider the importance of evaluating children's progress from placement to discharge. There are many ways to assess this information and there are several points at which the goals of assessment may provide critical information, such as pre-placement, during placement, and post-placement. Measures should be thorough enough to capture a broad spectrum of information, yet specific enough to provide functional analyses. The use of two measures, multiaxial timelines and a restrictiveness scale provide data to determine how well a child is doing in a program, and evaluate treatment efficacy in terms of maintaining a child in a less restrictive setting. Multiaxial timelines provide both assessment outcome information, as well as information pertaining to the interplay of multiple life transitions, environmental elements, and interpersonal processes. Using multiaxial timelines a case is summarized for important events and critical behaviors in the life of a child. Information from diverse sources show common themes and focus on child and family strengths and resources for change. Case studies using multiaxial timelines can be a potential source of validated inferences in the process of evaluation of children's environment of care.

A CONTEXTUAL APPROACH FOR EVALUATING PROGRESS IN CHILDREN'S ENVIRONMENT OF CARE

One of the key tasks in providing services to children and youth in out-of-home care is to perform an evaluation of the critical events and conditions in their lives and, to assess progress in terms of what has and has not worked. However, many child and youth care workers regard evaluation as one of the most challenging aspects of their work. In particular, workers are often unsure about what areas of children's functioning and their environment are relevant to consider, as well as how to actually evaluate these areas.
This article presents a contextual approach to the assessment of children's environment of care as a method to evaluate outcomes and to assist child and youth care workers to enhance accountability in their practice. Specifically, two methods to evaluate outcomes and place information into an objective framework for assessment and case planning purposes are included: (1) the multiaxial timeline, and (2) the restrictiveness of children's living environment measure. These evaluation methods can be useful indicators of quality assurance in the process of placement planning, monitoring, and evaluation. These methods of analysis show the influence of life events and their impact on children's problems, strengths, resources, and environments. A case study of a child in treatment foster family care illustrates the use of timelines to provide a contextual assessment of a child's progress and care history for service accountability.

Conceptual Approach to Assessment

It is important to place the conceptual framework for assessment in the context of recent theoretical, policy, and practice issues from which it has developed.

Theoretical Perspective

Ecological theory is a framework which takes into account the multifaceted processes between people and their environments. This perspective recognizes that the interaction of people, places and times, and contexts are both the source and the solution to children's problems (Belsky & Vondra, 1989; Garbarino, 1989; Whittaker, Schinke, & Gilchrist, 1986). Some examples of ecological influence in child and family services have been shifts from institutional and residential care to competency-based family care, community-based programs, and permanency planning services.

Children's out-of-home care has also been guided by current developments of researchers and clinicians in attachment, affiliation, and identification theory. The impact of these studies has been individualized assessment of children to ensure the need for permanency, security, stability and continuity of living environment and relationships for the development of behavioral organization in children (Hegar, 1988a, 1988b; Hess, 1982, 1988; Hill & Triseliotis, 1989; Thomlison, 1992, 1991). Environmental factors are critical in establishing and maintaining attitudinal change and behaviors that children and their families require to function in normalized settings at the termination of services (Whittaker & Maluccio, 1989). Examples of such broad social contextual influences on children include marital relations, developmental history, social networks, stress, support, child welfare policy, and out-of-home care practices.
Policy and Practice Context

A general shift in the practice and treatment philosophy of children and youth requires that they be served in the least restrictive environment of care and should live in environments that are community-based and family-centered. These environments most closely resemble the way that people live and function on a day-to-day basis and normalization is the overriding goal.

The significance of these factors for planning programs and services include: (1) the use of minimally restrictive, normalizing environments as treatment settings; (2) the increased responsibilities of all persons in children's ecological system regarding treatment, education, health and caretaking issues; and, (3) the expanded focus of children’s placements to acknowledge children’s need to be linked with birth parents, neighbourhood and extended family resources for optimal functioning (Thomlison, 1992).

The Assessment Process and Product

The term “assessment” is used to define different evaluation and decision-making processes. The nature of assessment varies according to the child and youth care worker's role, but is viewed both as an ongoing process and a product (Hepworth & Larsen, 1989).

Assessment as a process is a fact finding procedure to gather together pertinent information about a child. Quality assessment information involves gathering, analyzing, and synthesizing relevant data of the child and family context to appraise not only the problem(s), but evaluate strengths, resources, healthy functioning, and level of agency services required. Diverse information from separate sources are brought together to reach an overall decision by integrating them. The selection of events and conditions for assessment provides an infinite number of choices. The result is obtained as an individualized assessment profile integrating aspects of a child's development, care process, and competence in dealing with the environment.

As a product, assessment provides information for the tasks which can be used to support the case decision making process, guide intervention, and identify and measure expected outcomes. The product of assessment is usually a written report, a scoring profile, or both. Such assessment products may also be a requirement of policy and law in child welfare services and therefore should capture the multidimensionality of children’s problems and strengths (Pine & Krieger, 1990; Thomlison, Gabor, & Hudson, 1993).

Assessment activities are most successful when the measures are kept as simple and manageable as possible for both child, practitioner, and the services involved. The criteria or choice of measurement method should ideally include reliability, validity, ease of interpretation, economy of data
collection, unobtrusive administration and a quick summary of a few relevant features of the case or program. In addition measures should be culturally neutral and free of gender bias (Corcoran & Fischer, 1989).

To the extent possible, outcome information about children and their environments should ideally demonstrate the linkages between assessment and intervention. The use of multiaxial timelines as a method to evaluate outcomes and establish accountability at the case-level shows the complex interplay of many factors within a child or within that child’s environment. Multiaxial timelines are discussed first, then the use of a recently developed scale to measure the degree of restrictiveness of children’s placements provides further contextual information as a placement outcome indicator.

The Multiaxial Timeline

Timelines.

Multiaxial timelines present the case in a summative and descriptive style. Components of the case are organized to the assessment and case planning questions or essentially to other relevant frameworks and are derived from the case and service records. Units of analysis should parallel child, family, and service elements to illustrate the concurrent incidence of events. The sequence of case events for the child, Jason, and his family are chronologically organized and graphically represented by multiaxial timelines (Yin, 1989) (see Figure 1). A brief summary of the case is contained in Appendix A.

Use of Timelines.

The multiaxial timeline can be used to highlight the critical events and conditions in a child’s life (Jason) as well as what has and has not worked and what could have been done differently. Events are presented as descriptive arrays on the timelines as child behaviors or problems, child treatment services, educational services, residential services, child events, and parental events (Figure 1). This allows for the tracking of events over time and viewing the order in which events occurred as separate or layered. Information is then useful for clinical purposes and reveals the turbulence of Jason’s history, the damage inflicted on this child, as well as his adjustments. Figure 1 also displays the changes in Jason’s living arrangements which are more fully understood within the context of the chain of continuity in life course events.

The multiaxial timelines present the sequence of different classes of events or critical behaviors, child and family life events, child and family services, from birth to Jason’s 16th year on six separate axes. This allows for the visual correlation of simultaneously occurring events. From the multiaxial timelines, one can analyze the relationships between the service delivery system and the child and family. For example, it is apparent that in spite of Jason’s problematic behaviors which caused his initial placement...
in a residential setting, no services were provided to the family except Jason's out-of-home residential child care, prior to his placement in treatment foster care and child welfare status. Also, there is little evidence that the education services were coordinated with any other service agencies. The referral process for a more restrictive educational placement was initiated early in this child's life.

The multiaxial timelines also illustrate the simultaneous occurrence of events before and after the implementation of treatment foster care placement. Serious emotional and behavioral problems began for Jason at age 4 and continued until he was placed in a residential setting at age 9. By the time Jason entered out-of-home care with child welfare status, he had experienced significant events, with a traumatic introduction into a highly restrictive setting, that most likely affected him negatively. The influence of this residential living arrangement determined important aspects of the pre-placement status of Jason and the course of his adjustment while in treatment foster care each time and afterwards. These frequent changes were due to destructive, aggressive, oppositional and noncompliant behavior.

After placement in treatment foster care on each separate occasion, the timeline provides information regarding Jason's behavioral adjustment and service delivery during this care. Treatment foster care services expect that children such as Jason will challenge the program, and tolerance for oppositional behaviors are present which helped Jason become stabilized. The timeline indicates that treatment foster care services were coordinated and more comprehensive during this care plan than at any other time. The timeline also indicates a decrease in Jason's problem behaviors.

Jason's progress can also be monitored by examining the residential services timeline with Figure 1 for the level of restrictiveness of services received. Jason's service restrictiveness history indicates a reduction in placement restrictiveness and an increase in placement stability after entering treatment foster family care.

An examination of these timelines reveals the importance of continuity of care and its impact on life course experiences. A sequence of many disrupted living arrangements can produce serious deterioration of a child's condition, as it appeared to do for Jason. Critically appraising the factors related to each successful or failed placement Jason had may indicate his adjustment while in care, and his mode of discharge from a living arrangement. Efforts to include work with the parents assisted reunification goals, even on the second treatment foster family care placement when many indicators such as the severity of Jason's behavior, child welfare status, parental and parent-child relationships suggested that a return home was unlikely.

Jason first entered out-of-home care and was placed in a residential treatment center at the age of nine. He was 10 years-old when he was first placed in treatment foster family care, and 13 years old at the time of his
second intake to treatment foster family care. If the first residential treatment setting had been avoided and the child and family services had been directed to the goal of surrounding this family with services in the least restrictive and most normalized environment possible, these events may have influenced Jason's subsequent behavior and adaptation back home.

**Restrictiveness of Living Environments Scale**

This case can be used to evaluate whether placement services for a child are provided in the least restrictive and most normalized environment of care. The Restrictiveness Of Living Environments Scale (ROLES) is a recently recognized child-focused indicator of a child's progress and treatment efficacy (Hawkins, Almeida, Fabry, & Reitz, 1992; Thomlison & Krysik, 1991; 1993). ROLES measures the restrictiveness of a setting as opposed to the intensity of the treatment. Thus, ROLES measures the degree a program or service is reducing the restrictiveness of children's environments. Restrictiveness is an indirect measure of children's behavior and a socially meaningful descriptor of children's living circumstances and can then be considered a program outcome measure.

### Table 1

Summary of Jason's Placements by Mean Restrictiveness Scores from ROLES*

<table>
<thead>
<tr>
<th>Living Environment</th>
<th>Mean Score</th>
<th>Living Environment</th>
<th>Mean Score</th>
<th>Score Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home of natural parents (R_{pn})</td>
<td>2.0</td>
<td>Residential treatment center (R_{p})</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Residential treatment center (R_{p})</td>
<td>6.5</td>
<td>Group emergency home (R_{pg})</td>
<td>6.0</td>
<td>.5</td>
</tr>
<tr>
<td>Group emergency home (R_{pg})</td>
<td>6.0</td>
<td>Foster family-based treatment (R_{pf})</td>
<td>5.1</td>
<td>.9</td>
</tr>
<tr>
<td>Foster family-based treatment (R_{pf})</td>
<td>5.1</td>
<td>Home of natural parents (R_{pn})</td>
<td>2.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Home of natural parents (R_{pn})</td>
<td>2.0</td>
<td>Youth correctional center (R_{ps})</td>
<td>8.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Youth correctional center (R_{ps})</td>
<td>8.9</td>
<td>Group emergency home (R_{pg})</td>
<td>6.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Group emergency home (R_{pg})</td>
<td>6.0</td>
<td>Run away (R_{p})</td>
<td>0.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Run away (R_{p})</td>
<td>0.5</td>
<td>Youth correctional center (R_{ps})</td>
<td>8.9</td>
<td>8.4</td>
</tr>
<tr>
<td>Youth correctional center (R_{ps})</td>
<td>8.9</td>
<td>Foster family-based treatment (R_{pf})</td>
<td>5.1</td>
<td>3.8</td>
</tr>
<tr>
<td>Foster family-based treatment (R_{pf})</td>
<td>5.1</td>
<td>Home of natural parents (R_{pn})</td>
<td>2.0</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Change in Total restrictiveness score 4.5

\( p = \) placement sequence

\( (R_{pn}) \) denotes restrictiveness score for placement \( p \)

*Restrictiveness scores are from ROLES (see Hawkins, Almeida, Fabry, & Reitz, 1992)
ROLES measures the restrictiveness of 25 different living environment values of children and youth. ROLES is used to rate the degree of restrictiveness of a child's place of living from a continuum of 25 environment values. The 25 living environment values have been rank-ordered for the degree of restrictiveness from not very restrictive at one extreme, to very restrictive at the other. The normalized family-based settings are rated the least restrictive, the treatment focused settings are rated midrange, and those settings of a psychiatric and criminal justice nature are rated the most restrictive. The environment value anchored at the point of least restrictiveness is independent living-by-self. At the opposite end of the restrictiveness continuum is jail. Table 1 illustrates Jason's service restrictiveness history.
Restrictiveness of Services Evaluation

In the following analyses the placement outcome and child, family, and service events have been arrayed separately by descriptive categories but need to be perceived as interrelated (Figure 1). A life course perspective of Jason, his parents, and challenges facing the service delivery system is disclosed in each time array. The case findings of Jason and his family are considered by: (1) placement outcome, and (2) the child, family, and service findings.

Placement Outcome

Jason's placement outcomes are exhibited in Table 1 and Figure 1. Findings are displayed by restrictiveness scores and discussed by preplacement status, postplacement status, and then appraised according to the change in preplacement and postplacement outcome. As a placement outcome indicator, ROLES allows interpretation of Jason’s movement and progress through care at different levels of evaluation. By examining the timeline a visual representation of Jason’s placement history is apparent and graphically shows the changing levels of placement restrictiveness as Jason moved through out-of-home care. Since first entering out-of-home care Jason has experienced 10 placement changes or living environments as delineated on ROLES, (Hawkins et al., 1992; Thomlison, 1992) one run away, and a total of five placements more restrictive than treatment foster family placement. He has lived in group emergency homes on two occasions. Jason’s placement history provides a useful review of the frequency and types of out-of-home care provided for him. The more restrictive a placement is, generally the more costly the service.

Ideally, Jason’s out-of-home placements should reduce restrictiveness of his environment and care over time. The degree of restrictiveness of each setting varied. Treatment foster family care is more restrictive than other family placements because of Jason’s child welfare status, the motivational systems implemented by the treatment parents, and because more adults were involved in the decision-making aspects of his life.

Preplacement Status

A total of two treatment foster family care placements occurred. Jason’s preplacement status on the first occasion in treatment foster family care was a group emergency home with a mean restrictiveness score of 6.0. The second treatment foster family placement was preceded by a preplacement status in a youth correctional center, with a mean restrictiveness score of 8.9. As can be seen from Table 1 both preplacement living environments were more restrictive than treatment foster family care and Jason’s own home with his birth parents.
PostPlacement Status

The post-placement environment at discharge from treatment foster family care each time was return home to birth parents. Table 1 shows that discharge from treatment foster family placements yielded a decrease in the restrictiveness score from 5.1 to 2.0 for the postplacement environment—home of birth parents.

PrePlacement and PostPlacement Outcome

Jason entered treatment foster care each time with a history of rejection and abuse, negative behaviors such as stealing, lying, aggression and poor educational achievement. He left treatment foster family care each time for the home of his birth parents, with improved behaviors and skills, and improved educational and community-based functioning. Jason's adaptation to the treatment family environment appeared to influence new ways of experiencing family life which in term were generalized to the birth family environment.

The overall adjustment in restrictiveness of these 10 placements can be calculated by subtracting the mean restrictiveness score of each placement from the mean restrictiveness score of the previous placement and summing the results. By examining Table 1 a summary of the restrictiveness for each of Jason's living environments or placements is represented by the mean restrictiveness scores using ROLES. The overall adjustment in the restrictiveness level is obtained by calculating: restrictiveness of placement one - residential treatment center (R_{p1}) 6.5, subtracting restrictiveness of placement two - group emergency home (R_{p2}) 6.0 = .5; placement two - group emergency home (R_{p2}) 6.0, subtracting placement three - foster family based treatment (R_{p3}) 5.1 = .9; thus the subsequent mean restrictiveness scores can be calculated for Jason's entire movement throughout care (see Table 1).

Positive differences represent a decrease in restrictiveness. Negative differences represent an increase in restrictiveness. Increasing restrictiveness is regarded as no improvement in Jason's behavior and decreasing restrictiveness can be viewed as improvement. The overall restrictiveness adjustment of Jason's movement through care from his initial out-of-home placement until his final return home decreased by 4.5 on a 10 point scale. Decreased restrictiveness can be assumed to equate with gains in skills and behaviors conducive to living in a less restrictive environment.

Regardless of the types of behaviors still present for Jason, living in family-based settings assumed increased socially acceptable behaviors, skills and competencies. Decreased restrictiveness of Jason's living environment can generally be associated with movement toward the service objective of normalized living in the community.

Placement outcome was determined by the difference in preplacement and postplacement change in restrictiveness scores. Jason's preplacement and postplacement outcome from the first treatment foster family place-
ment was group emergency home \((R_{pe}) 6.0\) to home of birth parents \((R_{ph}) 2.0\). Restrictiveness was reduced by 4.0. This indicates an improvement in Jason’s behavior and functioning since entering treatment foster family care. Jason’s pre-placement and post-placement outcome from the second treatment foster family placement was youth correctional center \((R_{pc}) 8.9\) to home of birth parents \((R_{ph}) 2.0\). A reduction in restrictiveness of 6.9. This also indicates a positive outcome for Jason and an increase in placement stability. The nature of Jason’s treatment foster care experiences addressed his circumstances and resulted in an improved post-placement adjustment.

**Child, Family, and Service Findings**

From the multiaxial timelines, one can analyze the relationships between the service delivery system and the child and family. For example, it is apparent that in spite of Jason’s problematic behaviors which caused his initial placement in a residential setting, no services were provided to the family except Jason’s out-of-home residential child care, prior to his placement in treatment foster care and child welfare status. Also, there is little evidence that the education services were coordinated with any other service agencies. The referral process for a more restrictive educational placement was initiated early in this child’s life.

**Summary**

The use of multiaxial timelines and the restrictiveness of living environments scale are two relatively objective indicators of children’s progress in the environment of care. These methods of evaluation are less intrusive and value laden than other measures, and permit easier tracking of children’s progress and the interventions used. Multiaxial timelines can be used at any point in obtaining a pictorial representation of events. These methods do not rely on administration by specialists, interfere with service, or involve complex or time consuming scores or interpretations. Timelines do not require access to the clients, but can be combined with other client-descriptive observations, such as the restrictiveness of living environments scale as an outcome indicator. Multiaxial timelines add a dimensionality to children’s problems and needs that may not be as apparent with other measures. Practitioners will find this method of assessment and monitoring helpful in gathering, analyzing, interpreting and evaluating information on children’s outcomes. Influence of history and maturation on a child’s problem is apparent. The influence of efficacy of treatment and the living environment can be easily captured. Furthermore, the use of multiaxial timelines is applicable to all persons or events, is free of cultural bias, and is not restricted to problem assessment, gender, or developmental level of the client. Case studies using multiaxial timelines can be a potential source of validated inferences in the process of evaluating progress in children’s environment of care from placement to discharge.
References


**Appendix A**

**CASE SUMMARY OF JASON**

*Case Summary.* This case represented the story of one child and family served by treatment foster family services. Issues of abuse and neglect had prompted the initial treatment center to refer this family for child protection services. The main goal of the initial treatment foster family placement was to return this child to his family with supports necessary to maintain custody, even though the parents were initially hostile to this idea. The second placement in treatment foster family care was also to prepare Jason for return to his parents. The goal was achieved by teaching social competency skills to Jason, drug counselling, and treatment focused on increasing positive behaviors and self-esteem. Educational competency was an important goal, as was improved marital and family functioning. Jason went back home but continues extended contact with his treatment foster family. Relationships improved among his birth family but ongoing support services continue to be necessary.

The results of these efforts include a mixture of success. The marital relationship and parenting skills have improved with extensive individual and couple counselling. The parents have an especially difficult time in reframing negative events and fear failure in many roles as a consequence of their early development which left them with huge gaps in their knowledge and sense of family life. They continue to work on this area and have benefitted greatly from acceptance into the lives of the treatment foster family, who model family roles. The difficulties encountered while trying to support this family in becoming self-sufficient have been many. Jason, his parents, and the treatment foster family program are continuing toward the challenge of living together and interdependence.