

SOCIAL RESEARCH AND DEMONSTRATION

SOCIÉTÉ DE RECHERCHE CORPORATION SOCIALE APPLIQUÉE

Date: July 22, 2009 Contract No.: 9755-08-0006

#### Assessing the Measures of the Dynamics Within Families with Children: **Final Report**

Submitted to:

Catherine Massé, Policy Research Directorate Human Resources and Skills Development Canada

Submitted by:

Sheila Currie, Principal Research Associate Social Research and Demonstration Corporation 55 Murray Street, Suite 400 Ottawa, Ontario K1N 5M3

SRDC wishes to acknowledge the work of Dr. Christa Japel, Department of Education, Université du Québec à Montréal, as a contributor to this research.

Social Research and Demonstration Corporation Société de recherche sociale appliquée 55 Murray Street, Suite 400 55, rue Murray, bureau 400 Ottawa, Ontario K1N 5M3 Ottawa (Ontario) K1N 5M3 Tel.: 613-237-4311 Tél.: 613-237-4311 Fax: 613-237-5045 Téléc. : 613-237-5045

www.srdc.org

### **Table of Contents**

#### Page

EXECUTIVE SUMMARY	5
Assessing the Measures of Family Dynamics: Final Report	9
I. LITERATURE REVIEW	9
Background	9
Data Collection Methods	10
HOW DO WE MEASURE THE MEASURES? RELIABILITY, VALIDITY AND	
OTHER PRACTICAL CONSIDERATIONS	12
FAMILY DYNAMICS INDICATORS	13
MEASURES OF FAMILY FUNCTIONING	14
McMaster Family Assessment Device (FAD)	14
Family Assessment Measure (FAM)	14
North Carolina Family Assessment Scale (NCFAS)	15
Family Functioning Index (FFI)	15
MEASURES OF FAMILY ENVIRONMENT	16
Home Observation for the Measure of Environment (HOME)	16
Family Environment Scale (FES)	17
Conflict Behaviour Questionnaire (CBQ)	18
MEASURES OF FAMILY QUALITY OF LIFE	18
Beach Centre Family Quality of Life Scale (BCFQoL)	18
International Family Quality of Life (IFQoL)	19
OTHER MEASURES OF WHOLE FAMILY DYNAMICS	19
Family Climate Scale (FCS)	19
Beavers Model of Family Assessment	20
Circumplex Model	20
DISCUSSION	21
II. SURVEY OF EXPERTS	22
Methodology	22
Survey Responses	22
CONCLUSION	32

#### **APPENDICES** (attached):

- References	
- Panel of Experts	6
- Selected Measures	
- Survey screen-shots	
~	

#### **EXECUTIVE SUMMARY**

#### BACKGROUND

The critical role of the family in child development and well-being is widely recognized, and there exists an extensive body of research on family assessment. The wealth of literature across disciplines is very broad, with contributions from many academic fields including psychology, sociology, family therapy, economics, health and social work. The breadth of academic interest is also reflected in the vast number of measures developed to assess family dynamics, the many variations in their application, and the models or theories upon which they are based.

Family assessment measures are employed both in research and clinical settings. Measures of family dynamics are collected for the statistical comparison of populations, baseline data and longitudinal studies, for policy and program planning. In a clinical setting, they may be employed at intake, for treatment planning, for measuring changes over time, and at closure or for measuring outcomes.

The objective of this two-part study was to provide an analysis of the most common approaches to measuring family dynamics that are thought to play a determinant role in child development. The analysis is to promote a better understanding of the relationship between the current measures and child outcomes, and to identify priorities to improve the collection of data on family dynamics in Canada.

The first part of the study was an extensive literature search to select the most common approaches and identify their strengths and weaknesses; as well, the reliability and validity of specific indicators were summarized. Experts across academic disciplines were then invited to respond to a survey based on findings of the literature review, thus providing a fuller understanding of the measures and their application.

The family dynamics literature offers measures based on various units of analysis: whole family (e.g., family functioning, family quality of life), dyadic relationships (e.g., parent-parent, parent-child), or single factor (e.g., maternal depression, positive parenting). Measures of dyadic relationships and single-factor indicators, while undoubtedly relevant to family assessment and child outcomes, are beyond the scope of this report which focuses solely on measures of whole family dynamics<sup>1</sup>.

#### **METHODOLOGY**

For the literature review, searches were conducted of a number of electronic databases (e.g., PsycInfo, ERIC, CSA) as well as research centres and institutes dedicated to the subject matter (e.g., Centre of Excellences for Children's Well-Being, Canadian Council on Learning)2. As a

<sup>&</sup>lt;sup>1</sup> The literature includes discussion about the relative merits of single factor vs. composite measures, with a general acceptance that composite measures provide a better assessment of the complex constructs underlying family dynamics (Rothbaum & Weisz 1994, Cunningham 2007).

<sup>&</sup>lt;sup>2</sup> Search keywords: family dynamics, family dynamics scale, family dynamics assessment, family system, family system scale, family system assessment, family environment, family environment, family environment scale, family environment assessment, dynamiques familiales, échelle dynamiques familiales, évaluation dynamiques familiales, système familial, échelle système familial, environnement familial, échelle environnement familial, évaluation environnement familial.

result of the literature review, twelve measures of full family functioning were selected for review based on evidence-based criteria. It was noted that considerable overlap exists among the subscales of the twelve measures, and the constructs they purport to measure. Also based on the literature review, the pros and cons of various approaches to measuring family dynamics were presented.

In the second part of the study, sixteen of the twenty experts invited completed a survey developed based on findings from the Part I literature review. The survey methodology combined an online survey including closed and open-ended questions, with follow up by email or phone as indicated to clarify responses, exchange ideas or request more detailed information. This time-efficient methodology proved to be highly effective for comparing and contrasting expert opinions as well as understanding perspectives of the individual experts. The survey responses were analyzed and compared to findings from the literature review.

#### **FINDINGS**

Responses to the survey of experts reaffirmed the findings from the literature review. There is no one clearly superior way to measure family dynamics. Experts agreed that while psychometric properties are paramount in importance, different approaches and different measures have relative merit depending on the research questions, population of interest, sample size, budget, and intended analyses.

While noting some advantages of snapshot data collection, the literature on family dynamics favours longitudinal data collection cycles. The experts generally agreed with this perspective, pointing out that longitudinal data is critical for investigating cause and effect relationships, which are particularly significant for family dynamics and child outcomes. Similarly, the strengths of using multiple informants for family dynamics documented in the literature were generally supported by the survey responses, along with caution about problems with interreliability and interpreting differences in responses among family members. Experts also supported the findings of the literature review indicating that while observational and other qualitative data collection have tremendous value, they are not practical for scaling up for large-scale population studies.

The constructs that the experts felt were most important to measure for child outcomes were the ones most commonly found in the literature and generally captured by the subscales of the twelve selected measures. Variations in terminology aside, these include parental warmth/supportiveness, communication/conflict resolution, economic well-being, parenting style/control, parental involvement, family values/community involvement, physical and mental health, and family structure/stability.

Although the experts were generally content with available measures, there was widespread recognition that socioeconomic changes in the past 20 years have been dramatic enough that measures should at least be examined for their currency, and potentially updated to reflect the changes most relevant to child outcomes. Even those with clearly articulated reasons for preferring one approach or one method over another supported the continued search for evidence of indicator validity.

Of the twelve full family functioning measures featured in this study, the measure most often used by our panel of experts was the McMaster Family Assessment Device (FAD) general functioning subscale, which was viewed as a reasonably versatile, reliable measure with little respondent burden. Another benefit of FAD is that data are available for a large, nationally representative sample via the National Longitudinal Survey of Children and Youth (NLSCY). The measure with highest awareness among experts was the Home Observation for the Measure of the Environment (HOME) scale, which has been widely used in subsamples of several large US surveys. It is important to note that the dyadic or single-factor measures beyond the scope of this study were favoured by some for their simplicity, direct applicability to their research and/or correlation to outcomes of interest in their work. Thus single-, dyadic and full family measures are not viewed as replacements nor necessarily even competition for one another; rather, all are elements of a comprehensive toolkit for the measure of the family dynamics that are thought to play a role in child development and wellbeing.

Expert opinions point to a need in Canada to have a measure that can be applied to our diverse population; scales should be normed for the Québec population, francophone and other language subgroups in other provinces, Aboriginals, immigrants, and other cultural groups, as these can all have a potent impact on survey comprehension and response. While adequate measures exist, future work should examine their currency and applicability to the broad population of interest.

#### Assessing the Measures of Family Dynamics: Final Report

Human Resources and Social Development Canada (HRSDC) commissioned the Social Research and Demonstration Corporation (SRDC) to provide an analysis of the most common approaches identified in the literature to measuring family dynamics that are thought to play a determinant role in child development. Strengths and weaknesses of the various approaches are identified, and the reliability and validity of specific indicators discussed. The purpose of the analysis is to promote a better understanding of the relationship between the current measures and child outcomes, and to identify priorities to improve the collection of data on family dynamics in Canada.

The first step of the analysis was a multidisciplinary literature review commencing with an extensive search using a list of English and French keywords on multiple databases. The second step used the findings from the literature review to prepare an online survey for experts from various disciplines that have contributed to the understanding of the relationship between family dynamics and child well-being. The experts' survey responses were analyzed and compared with findings from the literature review. Appendices include the bibliography, charts summarizing features of the selected indicators, a list of experts who took part in the survey, and survey screen-shots.

#### **I. LITERATURE REVIEW**

#### Background

The critical role of the family in child development and well-being is widely recognized, and there exists an extensive body of research on family assessment. The wealth of literature across disciplines was noted over thirty years ago by Fisher (1975), who reviewed the content and methodology of existing clinical and experimental research on family assessment dimensions with the aim of accelerating the process of integrating relevant information found across the literature. Today, the literature on family assessment remains very broad, with contributions from many academic fields including but not limited to psychology, sociology, family therapy, economics, health and social work. The breadth of academic interest is also reflected in the vast number of measures developed to assess family dynamics<sup>3</sup>, the many variations in their application, and the models or theories upon which they are based. Systems theory, family systems theory, the life course framework, models including the ecological model, social relations model, McMaster model, Circumplex model, and Beavers Systems model are just some of the examples of supports to the development of measures of family dynamics.

Family assessment measures are employed both in research and clinical settings. Family assessment data is collected for the statistical comparison of populations, baseline data and

<sup>&</sup>lt;sup>3</sup> For example, in a search of English-language literature alone, Johnson et al. found 85 family assessment scales or indicators, not including single-factor measures.

longitudinal studies, for policy and program planning. In a clinical setting, they may be employed at intake, for treatment planning, for measuring changes over time, and at closure or for measuring outcomes.

The family dynamics literature offers measures based on various units of analysis: whole family (e.g., family functioning, family quality of life), dyadic relationships (e.g., parent-parent, parent-child), or single factor (e.g., maternal depression, positive parenting). Measures of dyadic relationships and single-factor indicators, while undoubtedly relevant to family assessment and child outcomes, are beyond the scope of this report which focuses solely on measures of whole family dynamics<sup>4</sup>.

For the literature review, searches were conducted of a number of electronic databases (e.g., PsycInfo, ERIC, CSA) as well as research centres and institutes dedicated to the subject matter (e.g., Centre of Excellences for Children's Well-Being, Canadian Council on Learning)<sup>5</sup>.

#### **Data Collection Methods**

The most common methods for collecting data for measures of family dynamics are rating scales either self-administered or by an interviewer, and observations<sup>6</sup>; less commonly, measures are derived from qualitative data gathered via semi-structured interviews, and/or self-reports of actual behaviour (e.g., diary of activities or behaviours of interest).

The advantages of self-report scales are many. They are time-efficient for the researcher or professional, thereby low-cost for administration and scoring. Self-report scales directly measure the subjective experience of respondents — their cognitions about relationships and events — information that is critical for understanding family processes. With objective and standardized scoring procedures applied to a large sample, respondents can be compared with high reliability to various populations of interest. However, the quality of self-reported data is vulnerable to deliberate distortion by respondents wishing to appease, or distortion due to self-deception of respondents. Carelessness, confusion or disinterest on the part of respondents can also reduce data quality.

Observations require more researcher/practitioner time and thus even with the inclusion of rating scales or standardized data coding structures, are more costly to administer and analyse. However, observations are most informative about interchanges amongst family members and are a valuable source of detailed information about these complex relationships. As well, since they are not prone to the potential social desirability biases of self-report scales, they may provide more accurate data<sup>7</sup>. However, although observations are not as vulnerable to distortion

<sup>&</sup>lt;sup>4</sup> The literature includes discussion about the relative merits of single factor vs. composite measures, with a general acceptance that composite measures provide a better assessment of the complex constructs underlying family dynamics (Rothbaum & Weisz 1994, Cunningham 2007).

<sup>&</sup>lt;sup>5</sup> Search keywords: family dynamics, family dynamics scale, family dynamics assessment, family system, family system scale, family system assessment, family environment, family environment, family environment scale, family environment assessment, dynamiques familiales, échelle dynamiques familiales, évaluation dynamiques familiales, système familial, échelle système familial, environnement familial, échelle environnement familial, évaluation environnement familial.

<sup>&</sup>lt;sup>6</sup> Other methods of data collection about family dynamics more commonly used in clinical settings include projective techniques such as family drawing, sentence completion, relational mapping techniques such as genograms.

<sup>&</sup>lt;sup>7</sup> An example of this is found in Rothbaum & Weisz (1994) systematic review showing that the strength of the association between externalizing child behaviour and parenting measured by parental rating scales is weaker than that for observational measures.

as self-report methods, data quality remains dependent on the competence of the observer. Interviewers must understand the concepts and responses being measured, and be trained to recognize the behaviours that represent these concepts. They must also be familiar with the characteristics of their population of observation in order to place their behaviour in context.

Family dynamics measures can be derived from data that is collected in longitudinal studies, and/or cross-sectional or "snapshot" data in other circumstances. Longitudinal indicators allow for the assessment of family functioning across multiple points in time and cumulate to show overall aspects of family life. Snapshot indicators portray experiences or characteristics at a single point in time, and do not shed insight into the causal order of family dynamics (Cernovich, 1987). Because family attitudes, values, behaviours and interactions develop and evolve over time, longitudinal indicators may be more reliable, especially when they are based on consistent or repeated measurements at various points in time. Depending on the variable in question, longitudinal indicators can generate richer data, allowing for a more comprehensive understanding of family functioning than can 'snapshot' indicators. However, the collection of longitudinal data tends to be more expensive, and maintaining a constant sample can also be difficult in multiple phase, longitudinal surveys — participants may no longer be interested, or no longer contactable. Sample attrition is a problem, and the "older" samples in longitudinal surveys tend to be less representative of the total population; this suggests that repeated crosssectional surveys are better suited to trend analysis (Anderson and Vandiviere, 2007). Another problem is the exclusion of populations having arrived after the initial phase of research. Periodicity of longitudinal surveys can also be an issue if, for example, data collection is related to seasonal activities or school year, etc.

Anderson-Moore and Vandiviere (2007) argue that many factors influencing family functioning cannot be measured in cross-sectional data, such as ongoing family communication, routines, relationships, child care, parental employment, and so on. They suggest that longitudinal data can be collected retrospectively from a single survey or by aggregating data across phases, or a combination of the two; however, collecting retrospective data can result in recall error depending on the subjectivity of the subject matter in question, potentially undermining the research with distorted responses. Generally speaking, snapshot studies will be more cost effective, and produce data that is easily managed. However, they go on to suggest that longitudinal studies can sometimes be less cumbersome as assessment is spread out over time; furthermore, they can be more cost-effective if scale items can be collapsed but asked more frequently.

The data collected for family dynamics measures may come from one informant – for example, the person most knowledgeable – or multiple sources, perhaps even all family members. Perspectives of individual informants can vary greatly (Cunningham 2007), and one person's view may not be accurate (Isaacs et al. 2007); both support a general preference for multiple source measures stated earlier (Cernovich 1987). However, integrating the discrepancies in data from multiple informants is not necessarily straightforward. Isaacs et al. (2007) point out that researchers must determine whether all family members' scores should be weighted equally, and note that an alternative consensus approach does not necessarily guarantee that all members' views will be incorporated. And although researchers have tackled the issue of integrating data from multiple informants (Offord et al. 1996; De Los Reyes & Kazdin 2005), Cunningham underscores the importance of further research to study ways to analyze and interpret data from multiple informants. It is also important to note that the literature includes research finding

convergence among multiple informants and even multiple methods among family informants; for example Park et al. (2008) found convergence in data among mother self-report, child self-report, observational and speech sample data.

Identifying the person most knowledgeable (PMK) to respond to data collection instruments is another issue in measuring family dynamics. It cannot be assumed that the mother is the PMK, although this is most often the case. Age of respondents is another consideration; with many instruments not able to collect data directly from children under the age of 11 or 12, self-report data is not available.

# HOW DO WE MEASURE THE MEASURES? RELIABILITY, VALIDITY AND OTHER PRACTICAL CONSIDERATIONS

The Alderfer et al. (2007) review of 29 family measures establishes evidence-based assessment criteria including that the measure is presented in peer-reviewed articles with different investigators, that a manual for administration and scoring is available, and that detailed statistical information is provided indicating good scale reliability and validity<sup>8</sup>. In addition to emphasizing the importance of scale psychometrics, they recommend the following factors be considered in scale selection: involvement of all family members, ethnic and cultural backgrounds, and family composition. The measures selected for this review were examined with these factors in mind. To the extent they were found in the literature, references to scale reliability and validity are included in the charts in the appendix.

All rating scales – whether administered by respondents or interviewers – are limited by the psychometric qualities of the scale. Scale reliability refers to the consistency, i.e. the confidence that similar results would be obtained repeatedly if similar procedures are used. Scale validity is the degree to which the scale measures what it intends to measure. Reliability and validity are summarized clearly by Johnson et al. (2006, adapted below):

Reliability:

- 1. Test-Retest: the degree to which generalizations can be made about test scores from one administration to the next. Higher coefficients indicate that scores are less susceptible to random changes in environment or condition of test takers.
- 2. Alternate-Form: when equivalent forms of a test are administered to the same person on two occasions, the reliability coefficient indicates the likelihood that the two forms are measuring the same characteristics.
- 3. Inter-rater: the extent to which two or more people (raters) arrive at the same result when observing the same event.
- 4. Internal consistency: As measured by Cronbach's alpha, the degree to which items within a scale or subscale are inferred to measure the same construct. If the quality of items in a scale remains high, alpha increases with the number of items; thus it is important to consider both reported alpha and the number of items.

<sup>&</sup>lt;sup>8</sup> Internal consistency (Cronbach's alpha) >=.70, Inter-rater reliability >=.70 or agreement >=.61, at least two forms of evidence of validity (concurrent/predictive/convergent).

#### Validity:

- 1. Content-related validity: the extent to which a scale is considered to adequately represent a specified area of knowledge, while avoiding the effects of unrelated variables. There is no widely-accepted standard of agreement established for retaining an item, but broader acceptance for "better scales" among independent judges.
- 2. Criterion-related validity: predicts an individual's performance against a score on an existing instrument or a future outcome. Concurrent validity is the correlation between scores on a new instrument and those from an established measure considered to be accurate. Predictive validity denotes an instrument's ability to predict future outcomes or status from scores on an instrument; differential predictive validity refers to an instrument's ability to predict these outcomes for different groups.
- 3. Construct-related validity: the degree to which an instrument successfully measures a theoretical concept. Convergent validity refers to different measures of a concept yielding similar results, and typically involves correlating two existing measures or a new one with an existing one. When concepts can be empirically differentiated, their correlations will be low and illustrate divergent validity.

Measures of family dynamics can only be as good as their fit with the sample for which they are determined. It is important to consider practical factors such as the availability of the data collection instruments in languages in which respondents are capable and comfortable responding. Similarly, the scale concepts and language must be relevant and culturally suitable, and appropriate for the developmental stage of the respondents. As well, clinical applications of family dynamics scales may also consider whether the scale is sensitive to clinical change, the point during a treatment cycle at which it can be administered, and whether it will answer questions regarding treatment. The review includes all references found in the literature to the sample population(s) for which these particular measures have been applied.

#### FAMILY DYNAMICS INDICATORS

Measures of whole family dynamics found most commonly in the literature were selected for this review and categorized as measures of family functioning, family environment, family quality of life, and "other" measures of whole family dynamics. Charts appended to this report summarize the characteristics of each of the selected measures in terms of their development, usage, format, subscales, psychometric properties, and strengths and weaknesses. This section describes each of the measures in turn, referring to data entered on the charts as well as additional information from the literature.

Other measures of whole family functioning exist in the literature but were not included in the detailed literature review either because there was a lack of detailed information about them, they were outdated, or only for clinical use.

#### **MEASURES OF FAMILY FUNCTIONING**

#### McMaster Family Assessment Device (FAD)

The McMaster Family Assessment Device (FAD) was developed by Epstein, Baldwin & Bishop in 1983 as a screening instrument to assess family organization and whole family functioning according to multiple family members' perceptions. It is based on the McMaster Model of Family Functioning and developed through the responses of 503 individuals from families of varying levels of functioning. FAD consists of a 60 item self-reported questionnaire based on a 4 point Likert-type scale rating degree of agreement with a series of statements. It requires about 20 minutes, and is completed by each member of the family over the age of 12. FAD is considered a short and economical survey, easily scored (Cunningham, 2007) and is available in at least 16 languages. The FAD is employed in clinical settings, as well as in surveys including several large-scale surveys in Canada: the <u>National Longitudinal Survey of Children and Youth (NLSCY), the Enquête longitudinale du dévélopment des enfants de Québec (ELDEQ), and the Ontario Health Survey (OHS).</u>

The reliability of the McMaster Family Assessment Device has been documented in several studies, with a range of alphas between .72 and .92, although these scales are moderately correlated (between .4-.6) (Portes et al. 2000). Test-retest reliability and internal reliability are shown to be satisfactory in community samples in North America, in China and in referred samples, but not in children less than 12 years old (Georgiades et al. 2008). The FAD internal consistency reliability is high, at .89 (Georgiades et al. 2008). The validity data provided by Epstein, Baldwin & Bishop appears satisfactory, and has been subsequently validated for large sample sizes. They found that the FAD has predictive validity for several clinically relevant outcomes among children and adults, and has proved successful at differentiating between clinical families. FAD has been shown to be a more powerful predictor of variance in morale scores for retirement adjustment and has demonstrated superior sensitivity in identifying families with clinical needs and greater correspondence between clinical rating scales and family member self-report inventories when compared to other models.

As cited in Cunningham (2007) the FAD data from the Ontario Child Health Study predicted the persistence of psychiatric disorders. In addition, FAD has been found to be highly correlated or even interchangeable with FACES and FAMIII (Johnson et al. 2006).

#### Family Assessment Measure (FAM)

The Family Assessment Measure (FAM), based on the Process Model of family functioning, was developed by Skinner, Steinhauer & Santa Barbara in 1983. At its premise is the assumption that the primary goal of every family is the successful achievement of basic, developmental, and crisis tasks. Successful task accomplishment involves differentiation, assignment, and performance of specified roles, communication, appropriate expression of affect, involvement with one another, flexibility and control, and a system of values and norms. FAM was designed to be used as an assessment tool in clinical and community contexts, as a measure of therapy process and outcome, as well as for basic and applied research. FAM consists of a 50 self-reported items on a general Likert scale completed by all members of the family. It is unique in assessing family strengths and weaknesses in that it does so from three distinct perspectives: the

family as a system (general scale), various dyadic relationships (dyadic scale) and individual family members (self-rating scale).

The reliability and validity of the Family Assessment Measure are supported by over 20 years of research. The overall FAM ratings yield high alpha coefficients (between .89 and .96) (Skinner et al. 2000). Test-retest reliabilities are also considered acceptable, particularly given the small number of items (five) on each subscale (.57 mothers, .56 fathers, .66 children) (Jacob 1995). The validity of FAM has been supported by extensive clinical and non-clinical research, although not validated for a large sample size. FAM successfully distinguishes between families with and without members with psychiatric disorders as well as clinical and non-clinical families, and has predictive validity in relation to children's problems (Skinner et al. 2000). FAM is highly correlated with the McMaster Family Assessment Device (FAD) and FACES instrument of the Circumplex Model, to the point where it has been suggested that they are interchangeable (Johnson et al. 2006).

#### North Carolina Family Assessment Scale (NCFAS)

The North Carolina Family Assessment Scale (NCFAS) was developed in 1996 by a work group including family preservation service providers, state policy makers and evaluators. Based on reviews of existing family assessment instruments, the child maltreatment literature and a comparison of practice-based instruments, the working group designed NCFAS to allow welfare caseworkers to assess family functioning at the time of intake and again at case closure. NCFAS consists of 39 items in interview format in which the interviewer rates family functioning on a six-point ordinal scale ranging from "clear strengths" to "serious problems". Modifications, including NCFAS for Reunification and NCFAS Strengths and Stressors Tracking Device, have subsequently been developed. NCFAS has successfully demonstrated the ability to detect changes in functioning over time, however, authors caution that the relatively weak capability of the intake ratings to predict placement at closure or thereafter suggest that the NCFAS should not be used as a device to screen out families from service at the time of intake.

NCFAS shows internal consistency. Acceptable coefficient alphas were found for all factors during initial testing (n=419 families), ranging from .71 to .94 (Reed-Ashcroft et al. 2008). Construct validity has been established for both early and later versions. Findings supported five of six relationships between the NCFAS domains and related factors from the other instruments (Reed-Ashcroft et al. 2008). NCFAS also appears to have some degree of predictive validity on relation to placement prevention. However, additional research with sufficiently large samples is necessary to establish predictive validity for outcomes of interest. In addition, the use of nonprobability samples used during initial testing suggest the possibility of sample bias.

#### Family Functioning Index (FFI)

The Family Function Index was developed by Pless & Satterwhite in the 1970s to examine the relationship between family functioning and the psychological adjustment of children with chronic illness, in both a clinical and research setting. The FFI was adapted from a semistructured interview schedule administered to a random sample of parents with school-aged children (N =399) in a suburban New York county. It now consists of 15 self-reported dyadic and whole family questions (yes/no and 5 point rating scale) completed by two parents. Information is obtained solely from parents and designed with two-parent families in mind. Having been developed for families with children suffering from chronic illness, it is not validated with a wide sample of families.

Pless and Satterwhite found the reliability and validity of FFI to be acceptable in most cases. Correlations between the dimensions derived from factor analysis and total scores ranged from .07 to .96 for fathers and from .21 to .95 for mothers (Pless and Satterwhite 1973). Using a portion of the original group (n=30) of families with chronically ill children 5 year test-retest reliability was found to be .83 (Satterwhite, Zweig, Iker and Pless 1976). Correlations between FFI scores for new registrants at family counseling agencies and caseworker ratings of family functioning were .48 for mothers and .35 for fathers. The correlation between ratings of paraprofessional counselors and parents' FFI scores were .39 (Pless and Satterwhite 1973). In addition, FFI correlated .80 with scores of the Family Apgar, a 5-item measure assessing satisfaction with aspects of family interaction and support used in health care and rehabilitation settings with individuals with health problems or disabilities (Hoffman, 2006).

Although FFI has not been researched extensively in recent years, it has served as a useful screening tool for physicians.

#### **MEASURES OF FAMILY ENVIRONMENT**

#### Home Observation for the Measure of Environment (HOME)

Home Observation for the Measure of Environment (HOME) was developed by Caldwell and Bradley 1984 as a tool to systematically assess the caring environment in which a child is raised. Used across diverse disciplines, HOME is the most comprehensive and widely used environmental assessment instrument in developmental research (uses include the US studies NLSY, IHDP, NICHD-SECC, PHDCN, PSID-CDS<sup>9</sup> as well as clinical use). For example, Leventhal et al. (2004) found over 230 written references to NLSY research using HOME as of November 2003. Much of this research has proven HOME's usefulness in describing the home environment of children at risk and revealing the effect of home experiences in developmental outcomes. The measure consists of a combination of observations and semi-structured interviewing methods, with age-specific versions available for infants, toddlers, early childhood, middle childhood, and early adolescents. The number of items varies among versions but ranges from 45-60, requiring approximately an hour to complete regardless of version.

HOME has been adapted for various minority and special needs populations, although weaker psychometric properties have been found with Latin American families than with European American or African American families (Fuligni et al. 2004). HOME is considered a versatile assessment tool that can be used as an input or outcome variable (Mott 2004). Mott goes on further to suggest that HOME provides the ideal psychometric battery for use in large-scale home-based longitudinal surveys. Data from HOME is useful across fields as diverse as sociology, psychology, children's health, economics, human resources and demography. However, a lack of standardized procedures for the administration of HOME has been noted (Totsika 2004).

<sup>&</sup>lt;sup>9</sup> IHDP (Infant Health and Development Program); NICHD-SECC (National Institute of Child Health and Human Development-Study of Early Child Care); PHDCN (Project on Human Development in Chicago Neighbourhoods); PSID-CDS (Panel Study of Income Dynamics - Child Development Supplement).

HOME has shown high inter-rater reliability (at least 90%) and adequate internal consistency (ranging from moderate to high). Test-retest reliability has been found to be moderate for a period of 18 months (Totsika et al. 2004). HOME has been able to predict delinquency and Peabody Individual Achievement Test (PIAT) test scores better than a longer cross-sectional measure. HOME demonstrates substantial correlation with cognitive measures, including IQ scores, verbal and reading abilities, social competence, and behaviour problems (Bradley, 1993; Jackson et al. 2000; Molfese et al. 2003). However, correlations with children's developmental status and intelligence measures are low to moderate during the first two years and moderate from 3-5 yrs of age. Some items within the subscales are not always consistent, and some items are not useful because they do not discriminate among families, for example, having 90 or 95% of families coded as affirmative (Linver et al. 2004).

Fuligni et al. (2004) found that all HOME subscales showed significant correlations with child development. Parental warmth and support for learning and language were both strongly correlated with cognitive development and language development; parental lack of hostility was associated with cognitive outcomes and lower levels of parent-reported behaviour problems. They state that while extensive research has demonstrated the validity of all subscales for cognitive and socio-emotional outcomes, many large studies cannot include all 59 items due to cost and time constraints. However, the shortened form can be used in large-scale surveys and used to form conceptually meaningful subscales.

#### Family Environment Scale (FES)

The Family Environment Scale (FES) was developed by Moos & Moos in 1986 to measure social and environmental characteristics of families. The scale is based on the general postulation that three sets of social climate factors underlie family functioning: Interpersonal relationships, personal growth, and family structure. FES consists of 90 self-reported true/false items providing standardized scores of 10 major dimensions of family climate during upbringing. A 50-question pictorial version was also developed for children 5-11. The index consists of three forms: The Real Form (Form R) measures the perception of actual family environments, the Ideal Form (Form I) measures the perception of ideal family environment, and the Expectations Form (Form E) measures the expectations of how a family would change under different settings. FES has been used with a broad spectrum of populations and in various clinical and family research settings around the world, although subscales in certain versions are thought to require culturally appropriate revision (Kim & Kim 2007).

Research has shown FES to be reliable and well validated (Moos & Moos 1994; Sheeber & Sorensen 1998). Internal consistency and test-retest (1 year) reliabilities of the Family Environment Scale averaged .71 to .70 respectively in the normative samples provided by researchers (Moos & Moos 1994). Cronbach's alphas (n=1061) ranged from .61 to .78 (Moos & Moos 1994). FES has been successful at distinguishing between functional and dysfunctional families defined by Family Assessment Checklist (FAC) and McMaster Clinical Rating Scale (MCRS) cutoff scores, as well between families with parents with and without depression. FES has shown strong convergent validity with the McMaster Family Assessment Device, the FACES tools of the Circumplex Model and the Structural Family Interaction Scale.

#### **Conflict Behaviour Questionnaire (CBQ)**

The Conflict Behaviour Questionnaire (CBQ) was developed by Prinz, Foster, Kent & O'Leary in 1979 as a means of estimating the degree of conflict and negative communication experienced within the family system, primarily for use with families of adolescents. CBQ consists of 108 yes/no self-reported items, with shorter versions of 20 and 44 items also available. Both parents and adolescents independently complete parallel versions of the CBQ, rating their interactions in the last few weeks. CBQ is thought to be quick and easy to self-administer, especially the condensed 20-question version, and easy to score (Park et al. 2008). It is useful in clinical, research and family assessment contexts. In addition, CBQ is adaptable to different family settings, although it is not designed nor validated for adolescents with developmental or psychotic disorders.

The internal consistency estimates for CBQ based on original research by Prinz et al. were .90 or above for mother and teenager reports on each subscale. Approximate mean test-retest coefficients were 0.60 for mothers, 0.70 for fathers and 0.70 for adolescents. Cronbach's alphas are .86 for children, and .90 for mothers (Park et al. 2008). CBQ has also been well validated according to Robin & Foster (1989) and has adequate psychometric properties and the ability to distinguish between distressed and non-distressed families (Sheeber & Sorensen 1998).

#### **MEASURES OF FAMILY QUALITY OF LIFE**

#### Beach Centre Family Quality of Life Scale (BCFQoL)

The Beach Centre Family Quality of Life Scale (BCFQoL) was developed within the Beach Center on Disability at the University of Kansas, with contribution from Poston et al. in 2003, who took a participatory action approach to add qualitative investigation to the constructs of family quality of life. BCFQoL was designed for use with families involving a child with disabilities in order to assess the families' perceptions of the importance of different aspects of family quality of life, as well as their level of satisfaction with their own families' quality of life. BCFQoL has since been refined on the basis of two large empirical studies. It consists of 25 items on a 5 point scale ("a little important" to "critically important") rated both on importance to the family, and satisfaction with the family members' own situation for that item. BCFQoL is used in research, program and policy support, outcome evaluation as well as the statistical comparison of groups.

All correlations in test-retest reliability in both importance and significance for each of the FQoL subscales were significant at the .01 level or beyond (Hoffman et al. 2006). Correlations between time points for importance and for satisfaction ranged from .54 to .69 and from .60 to .77 respectively. Convergent validity measures were significantly correlated with the hypothesized subscales (Summers et al. 2005). Family Apgar was found to be significantly correlated with the satisfaction mean for the Family Interaction subscales, r(87) = .68, p< .001, and Family Resource Scale significantly correlated with the mean of the five items on the Physical/Material Well-being subscale, r(58) = .60m p < .001.

#### International Family Quality of Life (IFQoL)

The International Family Quality of Life Project started in 1997 as a collaboration among researchers from Australia, Canada, Israel and the US with the goal of assessing the quality of life of families who have one or more members with an intellectual or developmental disability, and to give them a voice in identifying and enhancing aspects of their lives. In 2000, the International Family Quality of Life (IFQoL) scale was created and extensively pilot tested until 2004. In 2006, the survey was updated to reflect the first wave of research. Currently, 18 countries are taking part in the research, and the survey has been translated into many languages (http://www.surreyplace.on.ca). IFQoL is designed for the main caregiver and may be selfcompleted, or by a researcher or practitioner in interview with the main caregiver. The survey uses a 5-point scale to rate nine domains on importance, opportunities, initiative, attainment, stability, and satisfaction. Respondents are encouraged to tell or write down additional thoughts and examples from their own families, providing qualitative information that may be useful for interpretation. The scale is considered useful in research, including the provision of baseline data for further research into how the needs of families are being met through policy and services, as well as program and policy planning and clinical settings. However, taking 1.5-2 hours to complete, the survey is lengthy and not as suitable for research statistically comparing large groups, or for outcome evaluations. The survey does not make allowances for families with more than one child with an intellectual disability.

The validity and reliability of the International Family Quality of Life Scale look promising in a variety of studies but a comprehensive evaluation of the psychometric properties of the scale has not yet been carried out. A preliminary factor analysis (n=96) carried out on Canadian and Australia data found that each subscale of the survey holds as a unidimensional construct (Isaacs et al. 2007). Cronbach's alphas range from .603 to .922 for all subscales (Isaacs et al. 2007). Revision and clarification in wording and scaling has been proposed, and questions have arisen surrounding the relevance of some of the areas of family life.

#### **OTHER MEASURES OF WHOLE FAMILY DYNAMICS**

#### Family Climate Scale (FCS)

The Family Climate Scale (FCS) was developed by Schneewind et al. based on a sample of 291 participants from various UK institutions of higher education consisting of staff, faculty and students, and later revised by Averbeck et al. in 1996. The scale was developed as a tool for researchers and practitioners to better understand the role of family dynamics in business-owning families. It was designed primarily for research purposes and specifically for use in the context of family business. It is based on theoretical underpinnings which suggest that poor family functioning and conflict are not only detrimental to family firms but also damage the health of individual members. FCS is a multi-level, self-report survey for adults and adolescents. As with all self-report instruments, it may miss subtle complexities and levels of family functioning, and it is unable to capture "in-event" (real time) family interactions because respondents are requested to make summary judgments based on a history of interaction and a life-long acquaintance. Finally, the longitudinal stability of the scales has yet to be demonstrated.

FCS shows a high level of internal consistency, with Cronbach's alphas ranging from .75 to .89 (Bjornberg 2007). Correlation analyses of all subscales indicate a high degree of positive intercorrelation among dimensions – except for Intergenerational Authority, which was negatively correlated to Adaptability and Open Communication (Bjornberg 2007). Further work is needed to establish discriminative, concurrent, predictive and criterion-related validity.

#### **Beavers Model of Family Assessment**

The Beavers Model of Family Assessment consists of three instruments developed by Beavers & Hampson in 1990 to assess parenting practices using self-report and observational methods. It consists of the Beavers Self Report Family Inventory (SRFI), the Beavers Interactional Style Scale (BISS), and the Beavers Interactional Competence Scale (BICS), the latter two using observer ratings of parenting style and competence based on 10-minute semistructured episodes of family interaction (Beaver and Hampson 2000). The SFRI is a 36 item Likert-type scale completed by family members 11 years or older. The Beavers Model proves a useful tool for clinicians for assessment, screening, diagnosis, treatment planning and monitoring progress.

There is high reliability (internal consistency) in all three of the BICS, BISS and SRFI scales, with Cronbach's alphas ranging from .84 to .94, and Kappa coefficients from .76 - .88 (Beavers and Hampson 2000, n = 1800). Test-retest reliability is also high (.85 or better) for the SRFI. The BICS has been shown to reliability discriminate between clinical and non clinical families and have high construct validity. The competence subscale is correlated with the General Functioning subscale of the FAD (Beavers and Hampson 2000). The SRFI health/competence subscale is correlated with the General Functioning subscale of the FAD (r=.77) and the cohesion subscale correlates with the cohesion subscale of FACES III. BISS validation research is still underway.

#### **Circumplex Model**

The Circumplex Model is a series of instruments developed by Olson, Russell and Sprenkle in the late 1970s that seek to integrate 3 dimensions of family functioning: communication, cohesion and flexibility. The model's main hypothesis is that balanced levels of cohesion and flexibility are most conducive to healthy family functioning. The Family Adaptability and Cohesion Scale (FACES) is of particular interest for this review. FACES consists of a self-report questionnaire (Circumplex Assessment Package) which provides the "insider's perspective", and a Clinical Rating Scale, providing the "outsider's perspective". As a three-dimensional design, FACES is conceptually and empirically more closely related to other family models such as the Beavers System Model and the McMaster Family Functioning Model. FACES incorporates first and second order change in family systems over time (Olson 2000), but it does not adequately measure the unbalanced (extreme high and low) areas of cohesion or flexibility (Olson et al. 2007). With strong empirical support for its main hypothesis, FACES is useful in clinical assessment, treatment planning and family intervention research.

The internal consistency and test-retest reliability of FACES is consistently high (r=.80) (Olson 2000). Cronbach's alphas for FACES IV (latest revision) range from .77 to .89 (Olson et al. 2007). The measure is able to distinguish between problem and non-problem families, showing discriminative validity (Olson 1986). In addition, for clinical work with couples, there

are two comprehensive inventories that use FACES; the "Prepare" inventory is for premarital couples and predicts future divorce with 80 to 85% and 90% accuracy. The "Enrich" inventory can distinguish happy, non-clinical married couples from clinical pairs with 90% accuracy. Both the Prepare and Enrich inventories have norms based on over 500,000 couples (Olson, 2000).

#### DISCUSSION

This multidisciplinary literature review searched for measures of family dynamics. Twelve measures were identified for closer examination of their current and potential usage, and reliability and validity. The twelve measures are categorized according to their own description as measures of: family functioning, family environment, family quality of life, or "other". Regardless of category, there is considerable overlap amongst the indicators in terms of their subscales or the constructs they purport to measure. The quality of life measures were generated initially for families who have a member with a disability, yet contain similar domains (e.g., family relationships, various types of well-being) found in other scales<sup>10</sup>. The Family Climate Scales were designed primarily for use in the context of family business, but include subscales for cohesion and communication comparable to other measures. Subscales for the four "family functioning" measures are very similar to one another, including communication, roles, well-being, control, involvement, affective responsiveness, cohesion, interactions. Most of these same constructs are found in the family environment and "other" measures as well, although the terminology differs among them.

It is interesting to note that the commonalities among constructs was remarked upon by Fisher in 1975, when he found a "surprising comparability" across the dimensions of family assessment described in the literature. Further, he found that most family assessment criteria were based upon partial theories or multiple theories and called for the need to focus on the relationship among criteria than on the creation of new measures. Despite the significant research and advances in the measurement of family dynamics since then, Turnbull et al. (2007) conclude after their literature review that there is an absence of outcome definitions, frameworks and theory. Regardless of age, measures must be tested on randomized populations and normed to the populations for which they are intended.

Other recommendations cited in recent literature include that scales should undergo further validity and reliability testing (Alderfer et al. 2007), that because of the age of some scales (over 20 years) they may be outdated and should be re-examined for relevance (Turnbull et al. 2007). Scales may need to be adapted to new family realities (e.g., same-sex parents).

Different data collection methods are found among the twelve measures in this review. Most are self-report (FAD, FAM, FFI, FES, CBQ, FCS), some can be either self-completed or by an interviewer (FQoL, IFQoL), by interviewer (NCFAS), while others have self-report and observational components (Beavers, FACES) or interviewer and observational components (HOME). All have been tested to a greater or lesser extent in terms of their reliability and validity. Some have been compared to one another, and found to be associated. In the case of FAD, FAM and FACES, it has been suggested (Johnson et al. 2006) that they are interchangeable. The FES has convergent validity with FAD, FACES and SRFI. Perhaps the

<sup>&</sup>lt;sup>10</sup> The International Quality of Life Scale has a general version for families that do not have a member with a disability.

most widely-validated scale, HOME, has been shown to have predictive validity with PIAT scores, IQ scores, and to be associated with many other outcomes.

From this review, we see that various measures of family dynamics are apparently applied with success, achieving at least some of their intended purposes. There does not appear to be one instrument that is the optimal choice across all purposes. In survey research with randomized populations, the HOME and FAD measures are by far the most widely used; and while they measure similar constructs, they employ different methodologies, each of which could be considered the most appropriate choice given circumstances.

#### **II. SURVEY OF EXPERTS**

#### Methodology

A list of twenty experts across academic disciplines was identified at the start of this project. Invitations to participate in the Family Dynamics survey were sent to them by email. The invitations explained the study and their proposed role in providing expert advice via an online survey; they were informed that they would receive an honorarium in appreciation for their time, and that they might be contacted by SRDC afterwards to clarify their survey responses. Sixteen of the twenty experts invited completed the survey. Reasons for not completing included being out of the country and/or having other commitments that precluded participation, or not considering themselves to have enough experience in the use of measures of family dynamics.

The survey was programmed using the web-based "Surveymonkey" software package. The 15-question survey included open-ended questions as well as 4-point Likert agree/disagree responses to statements, to which respondents were invited to explain their response in open-ended fashion. It also included a bank of yes/no responses for their awareness and use of the twelve measures of whole family functioning identified in the literature review. Screenshots of the survey application are included in the appendices to this report.

In general, all questions were completed and responses were reasonably thorough and clear, requiring little follow-up with the experts. Survey data were analyzed first by question and then by respondent, to seek perspectives of combined responses, as well as those of the individual expert. The latter is done expressly to understand the context for each individual expert opinion. In the question-by-question analysis, agreement amongst responses and negative cases were sought and are presented below.

#### **Survey Responses**

## 1) What are the most important constructs to be included in measures of family dynamics, and how do they relate to child outcomes?

As might be anticipated given the diversity of academic backgrounds of our panel, responses to this question were varied. However, they included the constructs most commonly found in the literature and generally captured by the subscales of the twelve measures in our study. Variations in terminology aside, these include parental warmth/supportiveness, communication/conflict resolution, economic well-being, parenting style/control, parental involvement, family values/community involvement, physical and mental health, and family structure/stability. Some

of the less frequent responses included: violence, addiction, presence of books in the home and reading to children, child temperament, satisfaction with available services, and parental time use and availability. It is interesting to note that the latter construct – parental time use – was mentioned by more than one respondent and described as being increasingly relevant over the past decades with more parents in the labour force and longer commute times; one reasoned that this was a potentially important factor in child outcomes because the economic benefits of working are offset by the negative effects on time use and parenting time.

Interestingly, multiple respondents noted stress, parent stress or family stress as being important to measure, although this may not be a main variable of interest but rather a mediating variable that in turn influences family dynamics and child outcomes.

Two responses included constructs not directly measured in any of the twelve selected scales: acceptance of differences or diversity among family members, and experience with unemployment and how this may affect providing for children's needs.

One of the economists in the panel suggested a tendency in the field of economics to focus on individual measures that can perhaps be more easily measured and understood, than on comprehensive measures with subscales and weighting factors. Others in the field paid more emphasis on the economic characteristics which in turn are associated as causes and consequences for other aspects of family functioning and child outcomes.

#### 2) Many factors may play a role in the selection of scales, including their reliability and validity as well as operational concerns such as their method of administration. What are the most important considerations in selecting a measure?

Most often, responses to this question cited that the psychometric properties of the scales are paramount; within this, researchers must be clear to identify the questions they are trying to ask, and for what purposes they will use the collected data. One expert noted an apparent dichotomy in scale selection: while it is important to select measures and even customize according to the research questions and the particular outcomes to be assessed, the second most important consideration is that the measure is frequently used and common in the literature in order to promote comparability with other studies and achieve a level of acceptance in the field.

Secondly, respondent-related factors were listed, notably reducing respondent burden (through brevity and clarity) and having questions that are appropriate from the respondent perspective and sensitive to context. Some felt it critical that measures can be included in large-scale surveys since in their opinion repeated assessments – longitudinal data – are required; this bolstered the argument for having scales with fewer items, and questions that are accessible to all segments of the population including those with lower literacy. It was reported that measures should be generally applicable across age spans of children, and gender.

Again there was some distinction in responses from economists, who in this study indicated that they do not tend to use these comprehensive scales, and when they do, accept them as the existing measures in data sets. The multiple-subscale measures with weighting factors are viewed with skepticism, according to one respondent. Another emphasized that economic measures must come from reliable measures and be continuous; for example, the preferred source for income data is sequential tax records.

# 3) In our literature search, we identified twelve measures of whole family dynamics for detailed study. These scales met the criteria of being found in peer-reviewed articles with different investigators, and having some statistical information indicating good scale reliability and/or validity. For each measure, please indicate your awareness and usage of the scale.

Following this instruction, each of the twelve measures was listed, with a checkbox for "aware" and then for "use". Twelve of the experts reported awareness of the Home Observation for the Measure of the Environment (HOME) scale, including four who had used it at some point. The most frequently used scale amongst our panel was the McMaster Family Assessment Device (FAD), with seven experts having used it, and another four aware of it. Awareness of the Family Functioning Index (FFI), Family Environment Scale (FES) and Conflict Behaviour Questionnaire (CBQ) ranged from 8-11 responses, but usage was lower, ranging from 2-3 each. The other seven measures had awareness from 0-4, and no usage.

### 4) Please list any measures of whole family dynamics not on this list that you think we should have included, and whether or not you have used them:

Responses to this question yielded one suggestion for an additional approach to assessing whole family functioning for consideration: The Flourishing Families Survey (FFS) by Professor Randal Day. An online search found this to be from the Family Studies Center at Brigham Young University. However, as the FFS webpage was not accessible at time of writing, we contacted our expert who then put us in touch with Dr. Day, who sent us a description of the project and the survey codebook. The FFS uses the general functioning subscale of the FAD to assess family functioning. Thus while it is not a new measure to be examined, it is of interest as another and current application of the FAD in a project that collects extensive and detailed information about many aspects of families (individual, dyadic and full family measures) that are related to child outcomes. The survey enrolled 687 families in Seattle and Utah that had an 11 year old at the time of the first wave; family members – mother, father and child – are all interviewed in successive waves until the target child leaves home and/or begins early adulthood. He describes the theme of the project as describing how economic distress influences couple well-being and consequently child outcomes. Surveys are done in-home by interviewers, and via video interaction in the home; biomarkers are expected to be added to the data collection soon.

Otherwise, respondents either had no suggestions regarding additional measures and felt that the list included the main measures. However, several general comments about the use of measures of whole family functioning were offered in the responses, not directed towards any measure in particular. One commented that mixing parental and child characteristics in one construct posed difficulties for understanding family dynamics and that they must be distinguished from one another. A second problem with some of the scales – noted in responses to other questions as well – is that they do not appropriately adjust for different ages of respondent children. One expert described how in response to this, the ELDEQ developed a new scale to assess relevant parenting dimensions which has been reliably used in this population-based representative longitudinal study when children were 5 months, 18 months and 30 months.

Another expert offered that a parent stress index is required to fully understand family dynamics, as well as a conflict and disciplinary tactics scale.

# 5) Describe your use of family dynamics measures, whether for data collection, clinical use, predicting child outcomes, other research etc. Please include a description of the sample, how and why that measure was selected, and the strengths or shortcomings of the measure.

Many of the experts had experience with data from NLSCY, and/or Ontario Child Health Study, and/or Understanding the Early Years, and thus the FAD general functioning subscale. Respondents reported that this subscale predicted child outcomes well, was shown to have association with child behavioural development, anxiety, child emotional-behavioural regulation, and early aggression. FAD has been used in a longitudinal outcome evaluation of an early intervention program for over 1500 young children and their families from disadvantaged neighbourhoods in Ontario; in this study it showed intervention effects. Family dynamics as measured by the FAD has been employed as a mediating variable in studying the effects of main variables on child outcomes, and has been used as a control measure. For example, in a study on the effects of child care on children's development, family dynamics is being used to control for selection effects; no results are yet available for this study. Reasons for selecting the FAD included that it is relatively short, psychometrically sound and is available for a large, nationally representative sample.

FAD and the Conflict Behaviour Questionnaire (CBQ) have together been effectively used in a study of an intervention for children with autism, looking from both behavioural and neuroscientific perspectives. The effects of this Developmental, Individual Differences, Relationship-based approach (DIR) intervention on family dynamics is being measured. While the researchers' main focus is on child outcomes, they have found a very strong correlation between child outcomes and family dynamics; in fact, the conclusion is that family dynamics are the key to favourable child outcomes, far more than are biological challenges. The researchers also found that family dynamics cuts across SES, and that family/parenting factors are more important than external social factors in child outcomes. Researchers on this project also utilized a recently-developed, not yet normed, Social Emotional Growth Chart (Greenspan) to assess the functional/emotional capacities of the children in the youngest cohort (infants-toddlers) in their study.

One respondent described the ELDEQ's use of the Parental Cognitions and Conduct Toward the Infant scale (PACOTIS) which measures 5 dimensions of parenting: 1) hostile-reactive parenting behaviours 2) parental overprotection 3) parental self-efficacy 4) perception of parental impact 5) parental warmth. According to this researcher, these have been demonstrated to be reliable, and additional research has been conducted with this scale and a modified version of the scale – the Parenting Perceptions and Behaviours Scale in which the fifth dimension was dropped -- quite successfully.

Experts spoke about using other measures, most often dyadic or single-variable measures selected for their lower respondent burden, better suitability to the study content and/or population. For example, combined measures such as FAD are not contained in the population level datasets used by some of our panel; in these cases, individual items that suggest family dynamics such as social support or stress have been substituted to understand the relationship between family dynamics and children's health and development. One expert described the available measures of family functioning as complex, lengthy and more suited to middle-class families. Another described her research interests in SES and child outcomes, for example using

multi-period averages in family income, and studying the relationship between parental paid hours and child outcomes, rather than family dynamics in the broader sense.

Another reason cited for not using the selected measures was that the use of surveys is problematic in two ways: sensitivity around key factors of interest, and a biasing tendency for social desirability. One of the experts noted that for this reason, she uses short study-specific questionnaires and observational techniques such as video-taping.

#### 6) The most common methods for collecting data for measures of family dynamics are rating scales either self-administered or by an interviewer, and observations; less commonly, measures are derived from qualitative data gathered via semi-structured interviews, and/or self-reports of actual behaviour (e.g., diary of activities or behaviours of interest). The literature proposes pros and cons of the various methods. Do you have any comment about methodology based on your experience?

Responses to this question clearly supported the findings from our literature review. Experts from various backgrounds agreed that there are benefits to both quantitative and qualitative methods, with one adding that the best research draws on both. However, while observational strategies were viewed as offering rich and heuristic data, they cannot reasonably be scaled up although depending on budget and research objective, they can be used in a random sub-sample of a larger representative sample. Potential pitfalls of subjectivity of coding and sheer volume of coding were noted. Interestingly, much as one expert relied on observational data to provide an "accurate" picture of family interactions, others felt that self-report scales were more likely to provide objective data, arguing that subjects do not behave naturally under observation because they cannot help but want to give a good impression to their observer, even if via videotape.

In terms of interviewer vs. self-report methods, it was suggested that although scores on self-reports are likely to be inflated, at least the social bias associated with being interviewed is removed, and the respondent is more likely to be objective when responding to questions in the privacy of their own mind. She cited as evidence a study in which respondents to a sensitive health survey much preferred a paper and pencil condition over the interview condition. Several respondents noted that self-report methods are more cost-effective for large-scale general population studies.

It was reported that the FAD general functioning subscale had been administered both by inperson and telephone interviews (and in a variety of languages across cultures) with equal success. A different expert stated that the FAD subscale had yielded surprisingly useful information for a relatively short bank of questions. According to one of the other experts, it is imperative that rating scales administered by telephone are short and simple, and appropriate for diverse samples, adding that such scales are scarce.

Two of the experts noted that they had used multiple methods to collect the same data, and found strong correlations, which gave confidence about each approach in its relevant context. However, one of the experts cautioned strongly that it was not the particular methods themselves of relevance, but that they were applied appropriately and rigorously.

#### 7) Longitudinal indicators allow for the assessment of family functioning across multiple points in time and cumulate to show overall aspects of family life, whereas snapshot indicators portray experiences of characteristics at a single point in time. Do you have a preference for one over the other?

While our literature review covered potential pros and cons of both longitudinal and snapshot data collection cycles, the literature on family dynamics leans towards favouring longitudinal data. Our experts generally agreed with this perspective, some pointing out that longitudinal data is critical for investigating cause and effect relationships, and that this is particularly significant for studying family dynamics. Family functioning and child behaviour are often reciprocal processes necessitating data to explore cause-and-effect. One felt that longitudinal assessments of parenting behaviours – trajectories – are particularly important to capture as his research found dramatic changes in parenting behaviours from age 6 months to 30 months, especially with respect to hostile-reactive parenting; the longitudinal data illustrated how the age of the child impacts on parenting behaviours. This phenomenon was noted as well by an NLSCY researcher who found that parenting styles change markedly as children get older. A third researcher supported this with her description of NLSCY analyses in which parents who identified their practices as authoritative when their children were in infancy switched to becoming authoritarian as the kids reached a new developmental stage (school-aged); it was longitudinal data that made it possible to detect this switch, as well as helping to understand the issues with behaviour and control that likely play a role in it.

Longitudinal indicators also have more substantive power, e.g., long-term poverty is more significant than a brief episode of poverty. Thus, having knowledge of the length of phenomena or conditions can be important in examining child outcomes. At the same time, the strength of longitudinal data relies on using the same measures the same way over time, as any deviation in the scale or the application negates the longitudinal benefit.

One of the experts who focuses on economic factors and child outcomes was particularly insistent in his preference for longitudinal data, because of the large variation over time in the level of income and paid work for both individuals and families. Hence, a single snapshot gives a potentially error-laden measure of the longer run level of economic resources and activity. Another independently gave the example that a short spell of low income does not have the same consequences on child outcomes as longer term poverty, hence the need for longitudinal data.

One respondent pointed out that sequential snapshots can be used to create longitudinal datasets, while several others pointed out the benefits of having both longitudinal and snapshot data. According to one respondent, the problem with longitudinal indicators is well-known in terms of keeping families involved and avoiding self-selection bias, but the data is so incredibly useful that whenever possible he does both longitudinal and cross-sectional analyses.

At the same time, there were responses supporting snapshot data, for the reasons included in the literature review: they are more affordable, less often compromised by sample attrition, and therefore more amenable to representativeness. Longitudinal studies involving families are particularly complicated, as family composition can change due to dissolution or new family formation, births, deaths, adoptions, and children aging out of the home.

One researcher affirmed the literature proposing that retrospective questions can be asked in a cross-sectional survey to provide cumulative information; although the reliance on respondent memory can affect data reliability, this partially compensates for the lack of longitudinal data.

Repeated cross-sectional measurement can also be of value in monitoring local or societal trends. As well, an interesting point was raised that was not evident in our literature search: at the family level, collecting longitudinal data is a conceptual challenge as well as a data collection challenge; this is because activities, communication and family rituals can and do all change naturally and appropriately across the lifecourse of a family. Thus the interpretation of changes can be very challenging.

# 8) The data collected for family dynamics measures may come from one informant – for example, the person most knowledgeable – or multiple sources, perhaps even all the family members. Do you have a preference for one over the other?

Our literature review summarized pros and cons of both the single and multiple informant approaches. For this question, the responses of our experts reflected these pros and cons, with most indicating a preference for multiple respondents in principle because they represent multiple sources of data. There were, however, a few who felt the single response approach was adequate – especially for population surveys – and one who preferred it regardless because of difficulties with inter-reliability and interpreting differences in responses from multiple sources. One expert acknowledged the problems correlating multiple responses but felt that since they were all likely related to child outcomes, it was preferable to have multiples.

In follow-up to the survey responses, one expert underscored the importance of learning more about the substantive implications of using a single-informant strategy. Based on research he and colleagues had done using the Ontario Child Health Survey dataset (included in our literature review), there is considerable, unexplained variability in assessments among family members, particularly dependents. He felt that their work strongly supported efforts to measure whole family functioning directly, and that the ratings obtained from multiple family members can be combined to further our understanding of family processes. They also examined assessments by SES and found that it operates on two levels: (a) at the family level, it has a substantive influence on levels of functioning overall, (positive association between SES family functioning) and (b) at the individual level, higher SES was associated with more within-family variability, indicating it has a substantive influence on informant discrepancies. They suggest that in studies restricted to one informant, the same informant (e.g., the mother) be used across families.

Two experts offered that in terms of reporting on children, they felt that by the age of 11 children could and should be asked to self-report rather than relying on a parent as PMK.

Responses varied about the likelihood that different family members respond the same way to survey questions. One expert stated that mothers and fathers may not view things the same way and there is a current lack of data from fathers' perspectives; another said that we simply do not know enough yet about whether mothers, fathers and children have the same perspectives of family dynamics. A third researcher said that based on the parent identifiers for PMK on NLSCY, there is little difference in response between mothers and fathers. A fourth expert supported this idea with his experience showing that that mother and father reports tend to agree, whereas children's views tend to differ.

Aside from the stated need to hear from more than one family member in order to fully understand family dynamics, there was some controversy about the utility of the "person most knowledgeable" or PMK approach compared to the former practice of assigning the mother as family respondent. While the PMK seemed acknowledged as a natural evolution reflecting increased co-parenting or father-parenting, one researcher noted that for consistency and to be more congruent with the literature, mother would be selected as the sole informant. Another was insistent that the mother remains the best informant for his area of study because (gender-equity perspective notwithstanding) it is almost always the mother who knows the most and it is the mother's characteristics – wage and conditions of work – that most influence the child care choices made. He does not support the PMK approach, adding that for the NLSCY it has been found that when fathers act as PMKs it is not because they are most knowledgeable but because the mother is too busy.

One expert stressed that income and work data should be collected from the person to whom they apply; thus in a family with two parents, there need be two informants. He stated this in addition to the rationale that multiple informants provide two sources of data.

-----

**NOTE regarding methodology:** The remaining seven questions were statements to which respondents were asked to report their agreement or disagreement on a 4-point Likert scale.

#### \_\_\_\_\_

# 9) "There exists at least one measure of family dynamics that I consider to be broadly applicable for Canadian families regardless of child gender and age, and that provides generally reliable information for my purposes." (4-point Likert scale agree or disagree)

While most of the experts disagreed with this statement, there were a few who felt that the general functioning subscale of the FAD had been shown to be widely applicable in Canada, was relatively short, and useful. Another expert felt that the FAD comes close to fulfilling this purpose, but does not tap into all the aspects of the dynamic, and not enough is known about how well it works with non-PMKs (mainly fathers). The majority who disagreed that a broadly applicable measure exists felt that there was not enough evidence or support in the literature indicating that any measure was applicable across age groups or gender, suggesting that more study is needed to determine this. A couple of respondents felt it unlikely that one measure could suffice across the diverse linguistic and cultural groups in Canada's population, although one of them felt it possible that a measure could address a broad range of issues and then create subscales that are validated for different groups.

#### 10) "Indicators that were developed over 20 years ago are outdated and must be revised to reflect changes in families (e.g., rising numbers of single parent families, blended families and same-sex couples), cultural diversity, and greater knowledge about child developmental disorders and health."

By and large, respondents agreed that measures were outdated and needed revision to consider socioeconomic changes such as those listed above, as well as the economic role of women, economic inequality, and the increase in "time poverty". Three felt strongly that measures need to be updated not only to reflect these phenomena, but because of the tremendous amount that has since been learned about child development, developmental pathways, mental health, and family dynamics themselves.

One pointed out that there was great value in continuity for the assessment of changes over time, suggesting that both old and new measures be used.

There were three responses indicating that the theoretical basis for some of the older measures still hold, or while acknowledging socioeconomic changes felt that the measures (FAD in particular was cited) were still applicable. One stated that women today had higher education than 20 years ago, but that there were as many working outside of the home then; she felt that the only significant difference was having better and more programs for early and after-school child care. One expert said that even though the measures were still applicable, because of increasing cultural diversity and countries of origin, there was good rationale for conducting measurement equivalence studies.

In supporting her agreement that the scales are outdated, one expert suggested researching trends in the data, for example, looking at whether means have shifted over time.

# 11) "In order to achieve standard measures of family dynamics across Canada, it is critical to use scales which are equally effective in both official languages and which have been normed specifically for Québec populations."

Most agreed or strongly agreed with this statement. Supporting comments included that the two official languages carry differences in cultural interpretations of family life, and that Québecois differ from the rest of Canada in family policy and history of family policy, as well as attitudes to marriage/cohabitation and so on. However, in direct opposition to this, an expert from Québec felt that simply translating the questions and including reference to province-specific institutions and/or services sufficed and that no special tools were needed for the Québec population. A second expert offered the example of the Québec child care policy to illustrate that any differences are more likely due to policy than language or culture. Another did not anticipate big English-French differences in measurement performance on family functioning and that the measures' applicability to recent immigrants from Asia, the Middle East and Africa where culture and language may have a potent effect on response. Another suggested that norming should only be done if acceptable to the academic community.

Several others who supported norming the measures pointed out that it was necessary not just for Québec populations, but for Aboriginals, immigrants, or all other major social groups in Canada. One expert suggested that a normed French language component was necessary not only for Québec but also for New Brunswick, Manitoba, Ontario and other provinces with a "strong" francophone population and services.

One expert described it as being simultaneously important, difficult and yet feasible to have common measures for varied families; in her experience it was found that there is a lot of commonality across family types in terms of what is empirically important, but that it is quite challenging to get the words and constructs right for varied families.

One respondent went so far as to suggest that provincial policy differences in effect provide natural experiments in the Canadian context, and thus having measures that can be applied nationally would be very useful for policy development.

#### 12) "I see no need to develop new measures of family dynamics at this time."

Naturally, those who were more satisfied with existing measures tended to agree that there was no need to develop new measures at this time. One expert described himself as somewhat neutral on this point; in his opinion, a measure of family dynamics is not as critical as understanding parenting styles, parental engagement, time use, for example. Another who mildly agreed with the statement felt the case needs to be made for developing and evaluating new measures, and that this case depends to large extent on the objectives of measurement.

However, those who saw no need for scale development were outnumbered by those who would welcome the development of new measures for reasons of relevance to greater cultural diversity in Canada, improved validity, changes in time use, technology and activities. One criticized existing scales as being middle class, white, poorly worded, long and complex. Another noted that because our society is changing at a remarkably rapid pace, the challenges that families have to deal with are also changing rapidly, and our scientific knowledge about development is likewise changing rapidly; all of this should be reflected in a constant process of developing new measures of family dynamics.

One respondent stated the need for measures that can account for the family dynamics component of neighbourhood differences in child development, and that nothing has been validated for this so far.

### 13) "Measures of family dynamics must be firmly grounded in articulated theory in order to be useful."

Most agreed or strongly agreed with this statement from a general principle that all measures should be grounded in theory or that good measures have strong theoretical underpinnings as well as strong empirical support. More specifically, as one expert stated, measures of family dynamics measure something; that something and the interpretation of it, are not value-free and the theoretical assumptions behind the interpretations need to be clearly articulated and shared amongst researchers using the same instruments. One of the experts who strongly agreed with this statement supported his answer by saying that the whole point of studying developmental pathways is to understand the role of family dynamics on the development of the child, the parents themselves, and the family as a unit; unless you have a theory which explains these dynamic interactions you will simply be confronted with a number of correlations.

However, it is important to note that there was disagreement about this statement as well. One expert felt that theory, rather than empirical evidence, had driven too much of the field of parenting; he added that clearly while measures of family dynamics should be grounded in clear thinking about the phenomenon and its relative components, they should not be the slave of dominant theories especially when they are overly prescriptive, such as attachment theory. In his opinion, there was much knowledge to be gained by adopting an inductive approach in research about family dynamics. Another expert challenged that if a measure has predictive validity but does not come from theory, then maybe the theory needs to be revised. A third respondent who disagreed with this statement felt that measures must be grounded in articulated constructs, but perhaps not one theory as this could be limiting since there are so many theories; he felt it might be more useful to base measures on a set of constructs that are common to most theories and/or are widely used.

## 14) "Researchers generally agree about which psychometric properties are most important."

With a few exceptions, most agreed with this statement, although not many added explanations to their response. One suggested that because there are standard conventions for determining reliability and validity, there was little room for disagreement. However, another felt that a lack of agreement on so-called standards was a source of contention amongst researchers. Another answered that while reliability and validity are generally thought to be important, there are some properties on which some researchers place more importance than others, for example, construct validity.

One who disagreed with this statement expressed that researchers tend to have a micro view of their research area and only work in one discipline; she works across several disciplines and is not overly focused on one micro area particularly given the intercorrelations among factors in family functioning. Another felt that researchers do not even agree on the use of scales, let alone their properties. The third expert who disagreed with this statement opined that there is need for work comparing the relative importance of well-conceptualized and well-measured constructs.

## 15) "There exists adequate information about the psychometric properties of measures of family dynamics."

Most of the experts disagreed with this statement, but few offered explanations. One supported his response by stating that this is the weakest aspect of the measure; often they are too broad to develop strong measures of consistency or validity, and reliability over time is a serious concern. Another researcher felt strongly that a longitudinal confirmatory factor analysis, for example, was needed for all the measures listed in this survey. A third expressed that most studies have examined only their own reliability and that less is known about validity, even less known about differential item functioning (DIF) across cultures. A fourth said that much of what is known about the psychometric properties of family measures is a by-product of addressing substantive research questions not the product of measurement evaluation studies.

#### CONCLUSION

Responses to the survey of experts reaffirmed the findings from the literature review. There is no one clearly superior approach to the measure of family dynamics. Rather, different approaches and different measures have relative merit depending on the research questions, population of interest, sample size, budget, and intended analyses. For example, observational and other qualitative data collection were viewed as having value but not being practical for large-scale population studies. Further, the strengths of longitudinal data and multiple informants were well-documented, yet with acknowledgement that the alternative approaches are meritorious – or the only ones feasible – in some cases. Although some were content with existing measures, there was widespread recognition that socioeconomic changes in the past 20 years have been dramatic enough that measures should at least be examined for their currency, and potentially updated to reflect the changes most relevant to child outcomes.

We also learned from the survey that the lack of consensus among experts does not mean that the current ways of measuring family dynamics are not adequate. Instead, overall they indicated reasonable satisfaction with the particular measures they used, while at the same time agreeing that there is room for improvement in methods and/or more research needed to understand more about the validity of indicators. Even the experts who had clearly articulated reasons for preferring one approach or one method over another supported the continued search for evidence of indicator validity.

In terms of measures of full family functioning, only one suggestion was received for examining a measure not included in our list of twelve: the Family Flourishing Survey (FFS). Subsequent communication with the FFS project director clarified that it is the general functioning subscale of the FAD that is used to assess family functioning in FFS. Thus, the FFS represents another approach to measuring the relationship between family dynamics and child outcomes, as opposed to presenting another indicator of full family functioning. Because the FFS collects extensive and comprehensive data it will be very interesting to see how the FAD correlates with the many other measures in FFS and the child outcomes of the participating families. It is also worthy of note that this is an example of the application of the FAD in a US study of considerable scope.

Of the twelve full family functioning measures featured in this study, the measure most often recognized and used by our panel of experts was the FAD general functioning subscale, which was viewed as a reasonably versatile, reliable measure with little respondent burden. However, it is important to note that the dyadic or single-factor measures beyond the scope of this study were favoured by some for their simplicity, direct applicability to their research and/or correlation to outcomes of interest in their work. Thus single-, dyadic and full family measures are not viewed as replacements nor necessarily even competition for one another; rather, all are elements of a comprehensive toolkit for the measure of the family dynamics that are thought to play a role in child development and wellbeing.

Assessing the Measures of the Dynamics within Families with Children:

**Final Report** 

Appendices

#### References

- Alderfer, M.A., Fiese, B.H., Gold, J.I., Cutuli, J.J., Holmbeck, G.M., Goldbeck, L., Chambers, C.T., Abad, M., Spetter, D. & Patterson, J. (2007). Evidence-based Assessment in Pediatric Psychology: Family Measures, *Journal of Pediatric Psychology*, 2007: 1-16.
- Anderson-Moore, K. & Vandivere, S. (2007). Longitudinal Indicators of the Social Context of Families: Beyond the Snapshot, *Social Indicators Research*, 83: 55-85.
- Beavers, R & Hampson, R.B. (2000). The Beavers System Model of Family Functioning, *Journal of Family Therapy*, 22(2): 128-143.
- Björnberg, A. & Nicholson, N. (2007). The new family climate scales-Development of a new measure for use in family business research, *Family Business Review*, 20(3): 229-246.
- Byles, J., Byrne, C., Boyle, M.H., Offord, D.R (1988). Ontario Child Health Study: Reliability and Validity of the General Functioning Subscale of the McMaster Family Assessment Device, *Family Process*, 27: 97-104.
- Byrne, C.M., Offord, D.R. & Boyle, M.H. (1992). Family functioning and emotional/behavioural disorders in children: Results from the Ontario Child health Study. Ottawa, ON: Ministry of Community and Social Services.
- Centre d'excellence sur le développement des jeunes enfants. (2008). Parenting skills, *Encyclopedia on Early Childhood Development*, Retrieved from the Web on November 24, 2008: http://www.child-encyclopedia.com/pages/PDF/parenting\_skills.pdf
- Cernkovich, S.A. & Giordano, P.C. (1987). Family Relationships and Delinquency, *Criminology*, 25(2): 295-321.
- Children's Bureau of Los Angeles. (2005). Family Assessment Form. Retrieved from http://www.familyassessmentform.com.
- Cook,W.L. (2005). The SRM Approach to Family Assessment: an Introduction and Case Example, *European Journal of Psychological Assessment, 21*(4): 216-225.
- Charlot, B. & Rochex, J.Y. (1996). « L'enfant-élève : dynamiques familiales et expérience scolaire », *Lien Social et Politiques*, 35 : 137-151.
- Cunningham, Charles E. (2007). A Family-Centered Approach to Planning and Measuring the Outcome of Interventions for Children with Attention-Deficit/Hyperactivity Disorder, *Journal of Pediatric Psychology*, *32*(*6*): 676-694.
- Day, R.D. "Flourishing Families." Email to Sheila Currie. 9 June 2003.
- Epstein, N.B., Baldwin, L.M., & Bishop B.S. (1983). The McMaster Family Assessment Device, Journal of Marital and Family Therapy, 9(2): 171-180.
- Fisher, L. (1976). Dimension of Family Assessment: a Critical Review, *Journal of Marriage and Family Counseling*, October 1976: 367-382.
- Fomby, P. & Cherlin, A.J. (2007). Family instability and Child Well Being, *American Sociological Review*, 72: 181-204.

- Fuligni, A.S, Han, W. & Brooks-Gunn, J. (2004). The Infant-Toddler HOME in the 2<sup>nd</sup> and 3<sup>rd</sup> Years of Life, *Parenting*, 4(2): 139-159.
- Georgiades, K., Boyle, M.H., Jenkins J.M. & Sanford, M. (2008). A Multilevel Analysis of Whole Family Functioning Using the McMaster Family Assessment Device, *Journal of Family Psychology*, 22(3): 344-354.
- Hoffman, L., Marquis, J., Poston, D., Summers, J.A. & Turnbull, A. (2006). Assessing Family Outcomes: Psychometric Evaluation of the Beach Center Family Quality of Life Scale, *Journal* of Marriage and Family, 68: 1069-1083.
- Kim, H.-S. & Kim, H.-S. (2007) Development of a Family Dynamic Environment Scale for Korean Adolescents, *Public Health Nursing*, 24(4): 372-381.
- Isaac, B.J., Brown, I., Brown, R.I., Baum, N., Myercough, T., Neikrug, S., Roth, S., Shearer, J. & Wang, M. (2007). The International Family Quality of Life Project: Goals and Description of a survey tool, *Journal of Policy and Practice in Intellectual Disabilities*, 4(3): 177-185.
- Johnson, M.A., Stone, S., Lou, C., Vu, C. Ling, J. Mizrahi, P. & Austin, M.J. (2006). Family Assessment in Child Welfare Services: Instrument Comparisons, Retrieved from the Web on November 24, 2008: http://cssr.berkeley.edu/bassc/public/BASSC\_FamilyAssessment\_FULL\_REPORT091406.pdf.
- Johnson, Michelle, & Wells, Susan (2000). Measuring Child and Family Functioning. A National Study of Outcome Measurement in Public Child Welfare Services: Results and Recommendations, Children and Family Research Center, University of Illinois at Urbana-Champaign. Retrieved from the Web on November 28, 2008: http://www.cfrc.illinois.edu/pubs/Natl.Surv/pdfs/func.pdf.
- Leventhal, T., Selner-O'Hagan, M.B., Brook-Gunn, J., Bingenheimer, J.B. & Earls, F.J. (2004). The Homelife Interview from the Project on Human Development in Chicago Neighborhoods: Assessment of Parenting and Home Environment for 3 to 15 years old, *Parenting*, 4(2): 211-241.
- Linver, M.R., Brook-Gunn, J. & Cabrera, N. (2004). The HOME Observation for Measurement of the Environment (HOME) Inventory: The Derivation of Conceptually Designed Subscales, *Parenting*, 4(2): 99-114.
- Lowman, J.C. (1980). Measure of Family Affective Structure, *Journal of Personality Assessment*, 44: 130-141.
- Mott, F.L. (2004). The Utility of the Home-SF Scale for Child Development Research in a Large National Longitudinal Survey: The National Longitudinal Survey of Youth 1979 Cohort, *Parenting*, 4(2): 259-270.
- Olson, D.H. (2000). Circumplex Model of Marital and Family System, *Journal of Family Therapy*, 22:144-167.
- Olson, D.H., Gorall, D.M., & Tiesel, J.W. (2007). FACES IV & the Circumplex Model: Validation Study, Retrieved from the Web on November 24, 2008: http://www.facesiv.com/pdf/2.development.pdf.
- Pagani, L., Japel, C., Girard, A., Farhat, A., Côté, S., & Tremblay, R.E. (2006). Middle childhood life course trajectories: Links between family dysfunction and children's behavioral development. In A.C. Huston & M.N. Ripke (Eds.) *Developmental Contexts in Middle Childhood*. (pp. 130-149). New York: Cambridge University Press.

- Pagani, L.S., Japel, C., Vaillancourt, T., Côté, S. & Tremblay, R.E. (2007). Links Between Life Course Trajectories of Family Dysfunction and Anxiety During Middle Childhood, *Journal of Abnormal Child Psychology*, 36: 41-53.
- Park, I.J.K., Garber, J., Ciesla, J.A. & Ellis, B.J. (2008). Convergence among Multiple Methods of Measuring Positivity and Negativity in the Family Environment: Relation to Depression in Mother and Children, *Journal of Family Psychology*, 22(1): 123-134.
- Portes, P.R., Brown, J.H., Saylor, K. & Sekhon, M. (2005). Assessing Children's Adjustment to Divorce Stress: A Validation of the Divorce Adjustment Inventory-Revised Scales Through Family Functioning and Child Adjustment Standard Measures, *Journal of Divorce and Remarriage*, 44(1/2): 47-70.
- Racine, Y. & Boyle, M.H. (2002). Family functioning and children' behaviour problems, in Vulnerable Children: findings from Canada's National Longitudinal Survey of Children and Youth, J.D. Willms (ed.) University of Alberta Press.
- Reed-Ashcraft, K., Kirk, R.S. & Fraser, M.W. (2001). The Reliability and Validity of the North Carolina Family Assessment Scale, *Research on Social Work Practice*, *11*: 503-520.
- Repetti, R.L., Taylor, S.E., & Seeman, T.E. (2002). Ryskies Families: Families Social Environments and the Mental and Physical Health of Offspring, *Psychological Bulletin*, *128*(2): 330-66.
- Rothbaum, F. & Weisz, J.R. (1994) Parental caregiving and child externalizing behaviour in non-clinical samples: a meta-analysis. Psychological bulletin, 116, pp.55-74.
- Schmidt, F., Cuttress, L.J., Lang, J., Lewandowski, M.J., Rawana, J.S. (2007). Assessing the Parent-Child Relationship in Parenting Capacity Evaluations: Clinical Applications of Attachment Research, *Family Court Review*, 45(2): 247-259.
- Skinner, H., Steinhauer, P. & Sitarenios, G. (2000). Family Assessment Measure and Process Model of family functioning, *Journal of Family Therapy*, 22: 190-210.
- Summers, J.A., Poston, D., Turnbull, A.P, Marquis, J., Hoffman, L., Mannan, H. & Wang, M. (2005). Conceptualizing and Measuring Family Quality of Life, *Journal of Intellectual Disability Research*, 49(10): 777-783.
- Surrey Place Center. (2007). International Quality of Life Project. Retrieved from http://www.surreyplace.on.ca.
- Totsika, V. & Sylva, K. (2004). The Home Observation for the Measurement of Environment Revisited, *Child and Adolescent Mental Health*, *9*(1): 25-35.
- Turnbull, A.P., Summers, J.A., Lee, S.H., & Kyzar, K. (2007). Conceptualization and Measurement of Family Outcomes Associated with Families of Individuals with Intellectual Disabilities, *Mental Retardation and Developmental Disabilities Research Reviews*, 13: 346-356.
- Wilkinson, I.A. and Stratton, R. (1991). The Reliability and Validity of a System for Family Assessment. *Journal of Family Therapy*, 13: 73-94.
- Wise, R.A. & King, A.R. (2008). Family Environment as a Predictor of the Quality of College Students' Friendship, *Journal of Family Issues*, 29(6): 828-848.

#### I. Panel of Experts

#### **Kristin Anderson Moore**

Child Trends 4301 Connecticut Avenue NW, Suite 350, Washington, DC 20008

(202) 572-6000 KMoore@Childtrends.org

#### **Michel Boivin**

École de psychologie Pavillon Félix-Antoine-Savard 2325, rue des Bibliothèques Université Laval Québec, QC G1V 0A6

(514) 656-2131, ext. 2825 Michel.Boivin@psy.ulaval.ca

#### **Michael H. Boyle**

Offord Centre for Child Studies Chedoke Site, Patterson Building 1200 Main Street West Hamilton, ON L8N 3Z5

(905) 521-2100 ext. 77365 boylem@mcmaster.ca

#### **Gordon Cleveland**

Division of Management U of Toronto at Scarborough 1265 Military Trail, Scarborough, ON M1C 1A4

(416) 287-7317 cleveland@utsc.utoronto.ca

#### Lori Curtis

Department of Economics University of Waterloo HH 240, 200 University Ave. Waterloo, ON N2L 3G1

(519) 888-4567, ext. 33162 ljcurtis@uwaterloo.ca Dr. Moore is a social psychologist who studies trends in child and family well-being, positive development, the determinants and consequences of early sexual activity and parenthood, fatherhood, the effects of family structure and social change on children, and the effects of public policies and poverty on children. Dr. Moore was a founding member of the Task Force on Effective Programs and Research at the National Campaign to Prevent Teen Pregnancy, a member of the NICHD Advisory Council, and served as a member of the bipartisan federal Advisory on Welfare Indicators. Moore was executive director and then president of Child Trends from 1992 through 2006. Currently, Moore heads the Youth Development research area at Child Trends.

Dr. Boivin is a Professor of Psychology and, since 2004, Canada Research Chair on Child Social Development at the School of Psychology of Laval University. He completed his Ph.D. in psychology in 1986 and is now member of the executive committee, and director at Laval University, of the Research Unit on Children's Psycho-Social Maladjustment (GRIP), an interdisciplinary and inter-university research center investigating risk and protective factors influencing children's development. He also chairs the Scientific Committee of the Knowledge Center for Early Childhood Learning.

Dr. Boyle is a professor in Psychiatry & Behavioural Neurosciences at McMaster University. He is also the Canada Research Chair in the Social Determinants of Child Health and a Associate Member of Clinical Epidemiology & Biostatistics. His expertise cluster around the issues of child health and development.

Dr. Cleveland is a senior lecturer in economics in the Division of Management at the University of Toronto at Scarborough. In 1990 he received in Ph.D in Economics from the University of Toronto for work entitled "The Choice of Child Care Arrangements by Employed Mothers: Canadian Evidence and Policy Rationale."

Dr. Curtis is an Associate Professor of Economics and the Canada Research Chair in Health Economics and Technology. She is currently setting up the Waterloo Health and Economics Data Laboratory, is an active member of SEDAP, and the Canadian Obesity Network. She obtained a Nursing Diploma (Durham College), B.Sc. (Honours Economics, Trent), MA (Economics, McMaster), Ph.D (Economics, McMaster). Her research interests are Health Economics related to social policy, social determinants of health and health-care utilization, and Labour Economics related to social policy and health

#### **Martin Dooley**

Department of Economics Kenneth Taylor Hall Rm 410 1280 Main ST W McMaster University Hamilton ON L8S 4M4

(905) 525-9140 x23810 dooley@mcmaster.ca

#### **Clyde Hertzman**

School of Population and Public Health James Mather Building 5804 Fairview Avenue Vancouver, BC V6T 1Z3

(604) 822-3002 clyde.hertzman@ubc.ca

#### Linda Pagani

École de psychoéducation C. P. 6128, succ Centre-ville Montréal, QC H3C 3J7

(514) 343-6111 #1-252 linda.s.pagani@umontreal.ca

#### **Ray Peters**

Psychology Department Queen's University 62 Arch Street Humphrey Hall Room 232 Kingston, ON K7L3N6

(613) 533-2876 ray.peters@queensu.ca

#### **Shelley Phipps**

Dalhousie University Department of Economics 6214 University AVE Halifax NS B3H 3J5

(902) 494-6987 Shelley.Phipps@Dal.Ca Dr. Dooley is a professor of Economics and a Research Associate of the Canadian International Labour Network. Dr. Dooley's general research interests include labour economics and the economics of the family. His current research projects include the socioeconomic determinants of child health and development, social assistance (welfare) use and marital stability.

Dr. Hertzman is Director of the Human Early Learning Partnership (HELP), the College for Interdisciplinary Studies at UBC; Canada Research Chair in Population Health and Human Development; and Professor in the School of Population and Public Health at UBC. Dr Hertzman has played a central role in creating a framework that links population health to human development, emphasizing the special role of early childhood development as a determinant of health. His research has contributed to international, national, provincial, and community initiatives for healthy child development.

Dr. Pagani is a Professor at the École de Psychoéducation in Montréal. In 1997, she launched a major longitudinal-experimental study that evaluates the long-term effects of the Montreal Head Start Program on children from impoverished areas of the city. Her recent work has focused on understanding the impact of poverty and family processes on children's adjustment.

Dr. Peters is a Professor of Psychology at Queen's University in Kingston, Ontario and Research Director for the Better Beginnings, Better Futures Project. His major research interests concern the promotion of children's well-being and the prevention of children's mental health problems. Dr. Peters has been a member of the Executive Committee of the Banff International Conference on Behavioural Science since 1981, and chaired the March 2003 meetings on "Effective Progress for Early Childhood Development." He has also served as a member of the Expert Advisory Committee for the Canadian National Longitudinal Survey of Children and Youth, and is a member of the Directing Counsel for the Health Canada Centre of Excellence for Early Childhood Development.

Dr. Phipps is a Professor in the Department of Economics at Dalhousie University, holder of the Maxwell Chair in Economics since 2000 and a Fellow of the Canadian Institute for Advanced Research since September 2006. Dr. Phipps has studied EI and work-life balance and of the EI Maternity and Parental Benefits Program as well as looked at international comparisons of policies for families with children. She has studied decisionmaking within families and the implications of (traditionally) women's care-giving responsibilities for their health and labour market outcomes. Phipps continues to examine determinants of the health and well-being of Canadian children.

#### **Stuart Shanker**

Department of Philosophy York University S428 Ross Building, 4700 Keele Street, Toronto, ON M3J 1P3

(416) 736-5113 shanker@yorku.ca

#### **Arjumand Siddiqi**

University of North Carolina Rosenau Hall 334A 135 Dauer Drive Campus Box 7440 Chapel Hill 27599-7440

(919) 843-6580 asiddiqi@email.unc.edu

#### **Brenda Smith-Chant**

Department of Psychology Otonabee College 144 Trent University Peterborough, ON K9J 7B8

(705) 748-1011 ext. 7780 bresmith@trentu.ca

#### **Tracy Vaillancourt**

Department of Psychology, Neuroscience, & Behaviour 1280 Main Street West Hamilton ON L8S 4L8

(613) 562-5800 ext. 4134 tracy.vaillancourt@uottawa.ca

#### J. Douglas Willms

Canadian Research Institute for Social Policy University of New Brunswick Suite 300, Keirstead Hall Fredericton, NB E3B 5A3

(506) 447-3124 willms@unb.ca Dr. Shanker is Distinguished Research Professor of Philosophy and Psychology at York University. Among his awards are a Canada Council Doctoral Fellowship and Postdoctoral Fellowship; a Calgary Institute for the Humanities Fellowship; a University of Alberta Mactaggart Fellowship; an Iszaak Walton Killam Fellowship; and the Walter L. Gordon Fellowship at York University. In addition to serving as Director of MEHRI, Dr. Shanker is currently Director of the Council for Human Development and Past President of the Council of Early Child Development. He is also Director of the Cuba-Mexico-Canada Research Initiative, an international, multi-disciplinary investigation into preventative mental health.

Dr. Siddiqi is an Assistant Professor in the Department of Health Behavior and Health Education, University of North Carolina (UNC). She is also a Faculty Fellow at the Carolina Population Center, and was a member of the World Health Organization's Early Child Development Knowledge Hub. Dr. Siddiqi is a social epidemiologist interested in the role of social and economic aspects of societies in shaping inequities in population health and human development.

Dr. Smith-Chant is an Associate Professor in Psychology at Carleton University. Her research focuses on cognitive development suggesting that the experiences of children during the development and acquisition of basic cognitive skills, such as reading and arithmetic, has a fundamental influence on how information is organized in their memory as adults.

Dr. Vaillancourt is a Canada Research Chair in Children's Mental Health and Violence Prevention at the University of Ottawa in the Faculty of Education and the School of Psychology. She is also an adjunct professor in the Department of Psychology, Neuroscience & Behaviour at McMaster University, and a core member of the Offord Centre for Child Studies. Dr. Vaillancourt's research examines the links between aggression and bio-psychosocial functioning, with particular focus on bully-victim relations. She is currently leading a Community-University Research Alliance on the prevention and intervention of bullying which is funded by the Social Sciences and Humanities Research Council of Canada.

Dr. Willms is a Professor and Director of the Canadian Research Institute for Social Policy at the University of New Brunswick (UNB). He holds the Canada Research Chair in Human Development and is a Fellow of the Royal Society of Canada and the International Academy of Education. Dr. Willms played a lead role in developing the questionnaires for Canada's National Longitudinal Survey of Children and Youth (NLSCY) and the OECD's Programme for International Student Assessment (PISA). Recently, Willms and his colleagues designed the Early Years Evaluation (EYE), an instrument for the direct assessment of children's developmental skills at ages 3 to 6, and *Tell Them From Me*, an evaluation system for the continuous monitoring of school climate and student engagement and wellness.

#### Jennifer M. Stewart

School of Public Policy and Administration Room 1001, Dunton Tower Carleton University 1125 Colonel By Drive Ottawa, ON K1S 5B6

(613) 520-2600 x2632 stewart@connect.carleton.ca Dr. Stewart is an Assistant Professor with the School of Public Policy and Administration at Carleton University. Dr. Stewart's expertise focuses on health and labour economics.

#### II. Selected Measures

Indicator	Development & Objectives	Usage	Method & Versions	Subscales/Factors
McMaster Family Assessment Device (FAD) Epstein, Baldwin & Bishop, 1983	Designed as a screening instrument; based on McMaster Model of Family Functioning. Based on responses of 503 individuals from families of varying levels of functioning Designed to assess whole family functioning according to multiple family members' perceptions	<ul> <li>Clinical</li> <li>National Longitudinal Survey of Youth (NLSCY)</li> <li>Ontario Health Survey (OHS)</li> <li>Quebec Longitudinal Study of Child Development (QLSCD)</li> </ul>	<ul> <li>Questionnaire (20 mins) completed by each family member</li> <li>60-item self-report</li> <li>4 point Likert-type scale (SA,A,D,SD) rating level of agree with statements</li> </ul>	<ul> <li>Problem-solving</li> <li>Communication</li> <li>Roles</li> <li>Affective responsiveness</li> <li>Affective involvement</li> <li>Behaviour control</li> <li>General functioning (overall health, pathology of family)</li> </ul>
Family Assessment Measure (FAM) Skinner, Steinhauer & Santa Barbara, 1983	Based on Process Model of FF; primary goal of every family is the successful achievement of basic, developmental, and crisis tasks. Successful task accomplishment involves differentiation, assignment, and performance of specified roles, communication, appropriate expression of affect, involvement with one another, flexibility and control, and a system of values and norms. Unique in assessing family strengths and weaknesses from perspectives on three scales: the family as a system (general scale), various dyadic relationships (dyadic scale) and individual family members (self-rating scale). Designed to be used as an assessment tool in clinical and community contexts, as a measure of therapy process and outcome, as well as for basic and applied research	<ul> <li>Clinical</li> <li>Therapy</li> <li>Research</li> </ul>	<ul> <li>Self-report of family functioning in the past week</li> <li>50 item general Likert scale</li> <li>FAMIII is 94-item scale</li> <li>Completed by family members at least 10-12 years of age</li> </ul>	<ul> <li>Task accomplishment</li> <li>Role performance</li> <li>Communication</li> <li>Affective expression</li> <li>Involvement</li> <li>Control</li> <li>Values and norms</li> <li>Social desirability</li> <li>Defensiveness</li> </ul>
North Carolina Family Assessment Scale (NCFAS)	Developed in 1996 by a working group including FPS providers, state policy makers and evaluators. It was designed to allow welfare caseworkers to assess family functioning at the time of intake and again at case closure. Based on reviews of existing family assessment instruments, the child maltreatment literature and a comparison of practice-based instruments.	• Clinical	<ul> <li>39 item interview format, later reduced to 25 items</li> <li>Interviewer rates family functioning on a six-point ordinal scale ranging from "clear strengths" to "serious problems"</li> <li>NCFAS for Reunification</li> <li>NCFAS Strengths and Stressors Tracking Device are both modifications of the NCFAS</li> </ul>	<ul> <li>Environment</li> <li>Parental capabilities</li> <li>Family interactions</li> <li>Family safety</li> <li>Child well-being</li> </ul>

#### INDICES OF FAMILY FUNCTIONING (Page 1 of 4)

#### INDICES OF FAMILY FUNCTIONING (Page 2 of 4)

Indicator	Development & Objectives	Usage	Method & Versions	Subscales/Factors
Family Functioning Index (FFI) Pless & Satterwhite 1973	Developed for clinical and research use to examine the relationship between family functioning and the psychological adjustment of children with chronic illness Adapted from semi-structured interview administered to a random sample of parents with school-aged children (N =399) in suburban New York county (equal number healthy/suffering from a chronic physical disorder)	<ul> <li>Clinical</li> <li>Research</li> <li>Screening tool for physicians</li> </ul>	<ul> <li>15 item self-report questionnaire completed by parents (parallel forms for each spouse)</li> <li>Y/N and 5 point rating scale</li> <li>Dyadic and whole family questions</li> </ul>	<ul> <li>Intrafamily communication</li> <li>Cohesiveness</li> <li>Decision Making</li> <li>Marital Satisfaction</li> <li>Happiness</li> <li>Closeness</li> </ul>

Indicator	Reliability	Validity
McMaster Family Assessment Device (FAD)	<ul> <li>Reliability improved over other scales by using MMFF to define domains to assure adequate coverage; equal number of positive and negative functioning for each dimension; selected smallest subset to produce scale with highest reliability (Chronbach's alpha). Most highly intercorrelated items across scales were pulled out and comprise General Functioning scale. Went back to initial items and selected for each scale based on 3 criteria: 1 had to be written for that dimension; 2 set of items had to be highly intercorrelated for maximal internal consistency; 3 each item must correlate more highly with that scale than with any others including the Genl one. Recursive construction process.</li> <li>Reliability has been documented in several studies</li> <li>Range of alphas on final scales between .72 and .92 (Portes et al. 2000)</li> <li>Test-retest reliability and internal reliability good in community samples in North America, in China and in referred samples, but not in children less than 12 years old. Internal consistency reliability was .89. (Geogiades et al. 2008)</li> </ul>	<ul> <li>More powerful predictor of variance in morale scores for retirement adjustment</li> <li>Predicts clinically-presenting vs. non in further testing</li> <li>Validity documented in several studies</li> <li>Predictive validity for several clinically relevant outcomes among children and adults</li> <li>Differentiates between clinical and non-clinical families</li> <li>Predicts the persistence of psychiatric disorders (Ontario Child Health Study)</li> </ul>
Family Assessment Measure (FAM)	<ul> <li>Substantial Alpha coefficients (Skinner et al. 2000): Adults General Scale: .93 Adults Dyadic Relationships: .95 Adults Self-rating: .89 Children General Scale: .94 Children Dyadic Relationships: .94 Children Self-Rating: .96</li> <li>Test-retest reliabilities good given the small number of items (five) on each subscale (.57 mothers, .56 fathers, .66 children) (Jacob 1995)</li> </ul>	<ul> <li>Distinguishes between families with and without members with psychiatric disorders</li> <li>Differentiates between clinical and non-clinical families</li> <li>Predictive validity in relation to children's problems</li> </ul>
North Carolina Family Assessment Scale (NCFAS)	<ul> <li>Shows internal consistency (Reed-Ashcroft et al. 2008)</li> <li>Acceptable coefficient alpha's were found for all factors, ranging from .71 to .94 (n=419 families) (Reed-Ashcroft et al. 2008)</li> </ul>	<ul> <li>Construct validity has been established for both early and later versions.</li> <li>Findings supported five of six relationships between the NCFAS domains and related factors from the other instruments (Reed-Ashcroft et al. 2008)</li> <li>Appears to have some degree of predictive validity on relation to placement prevention</li> </ul>
Family Functioning Index (FFI)	<ul> <li>Correlations between the dimensions derived from factor analysis and total scores ranged from .07 to .96 for fathers and from .21 to .95 for mothers (Pless and Satterwhite 1973)</li> <li>Using a portion of the original group (n=30) of families with chronically ill children 5 year test-retest reliability was found to be .83 (Satterwhite, Zweig, Iker and Pless 1976)</li> </ul>	<ul> <li>Correlations between FFI scores for new registrants at family counseling agencies and caseworker ratings of family functioning were .48 for mothers and .35 for fathers. The correlation between ratings of paraprofessional counselors and parents' FFI scores were .39 (Pless and Satterwhite 1973)</li> <li>FFI correlated .80 with scores of the Family Apgar</li> </ul>

#### INDICES OF FAMILY FUNCTIONING (Page 3 of 4)

Indicator	Strengths	Criticisms/Future Work
McMaster Family Assessment Device (FAD)	<ul> <li>Economical pencil and paper survey</li> <li>Available in at least 16 languages</li> <li>Chinese and Spanish versions of FAD appear to possess good psychometric properties</li> <li>Highly correlated with FACES and FAMIII (interchangeable)</li> <li>Validated with large samples</li> <li>Demonstrated superior sensitivity in identifying families with clinical needs and greater correspondence between clinical rating scales and family member self-report inventories when compared to other models</li> </ul>	• Set of scales intercorrelated (but aspects of family functioning cannot be expected to be independent)
Family Assessment Measure (FAM)	<ul> <li>Has demonstrated sensitivity to change in treatment</li> <li>Been developed and tested with clinical and non-clinical families</li> <li>20 years of research support its efficacy</li> <li>Highly correlated with FAD and FACES (interchangeable)</li> <li>Useful for monitoring treatment outcome</li> <li>Validity supported by research in a variety of clinical and non-clinical settings</li> <li>Unique in its ability to assess family strengths and weaknesses from three perspectives: the family as a system (general scale), various dyadic relationships (dyadic scale), and individual family members (self-rating scale).</li> <li>Numerous studies attest to the clinical utility of the FAM III, including its ability to differentiate between clinical and non-clinical families and its predictive validity in relation to children's problems</li> </ul>	Not validated for large representative sample (n=126)
North Carolina Family Assessment Scale (NCFAS)	NCFAS is able to detect changes in functioning over time	<ul> <li>Non-probability samples used – possibility of sample bias</li> <li>Authors caution that the relatively weak capability of the intake ratings to predict placement at closure or thereafter suggest that the NCFAS should not be used as a device to screen out families from service at the time of intake</li> <li>Additional research with sufficiently large samples is necessary to establish predictive validity for outcomes of interest</li> </ul>
Family Functioning Index (FFI)	• Quick and easy to administer (designed to provide a rapid indication of families in need of assistance with coping with stressful events)	<ul> <li>Response format of FFI can be inconsistent and confusing to score</li> <li>Designed exclusively for two-parent families (outdated)</li> <li>Information obtained solely from parents (not children)</li> <li>Designed for families with children with chronic illness – not validated with a wide sample of families</li> </ul>

#### INDICES of FAMILY FUNCTIONING (Page 4 of 4)

Indicator	Development & Objectives	Usage	Method & Versions	Subscales/Factors
Home Observation for the Measurement of Environment (HOME) Caldwell & Bradley 1984	Developed to assess the emotional support and cognitive stimulation received by children through their home environment, planned events and family surroundings. Most comprehensive and widely used measure that assesses patterns of social interaction and parenting practices, as well as family's capacity to fulfill basic needs.	<ul> <li>Clinical</li> <li>National Longitudinal Survey of Youth (NLSY)</li> <li>Infant Health and Development Program (IHDP)</li> <li>National Institute of Child Health and Human Development - Study of Early Child Care (NICHD-SECC)</li> <li>Project on Human Development in Chicago Neighborhoods (PHDCN)</li> <li>Panel Study of Income Dynamics - Child Development Supplement (PSID-CDS)</li> <li>Québec Longitudinal Study of Child Development (QLSCD)</li> </ul>	<ul> <li>Combination of observations and semi-structured interviewing methods</li> <li>Age-specific versions available: families with infants, toddlers (0-3), early childhood (3-6), middle childhood (6-10), early adolescents (10-15).</li> <li>Different versions vary in the number of items, ranging from 45-60.</li> <li>Approx. 1 hour to complete (regardless of age-specific version)</li> <li>Versions adapted for minority and special needs populations also available</li> </ul>	<ul> <li>Varied according to age-specific version, but generally incorporating measures of cognitive stimulation and warmth available to child, family's capacity to fulfill basic needs and patterns of social interaction and parenting practices</li> <li>IT-HOME: Emotional and verbal responsibility of mother, Avoidance of restriction and punishment, Organization of physical and temporal environment, Provision of appropriate play materials, Maternal involvement with child, Opportunities for variety in daily stimulation</li> <li>EC-HOME: Learning stimulation, Language stimulation, Physical environment, Warmth and acceptance, Academic Stimulation, Modeling, Variety in experience, Acceptance</li> <li>MC-HOME: Emotional and verbal responsibility, Encouragement of maturity, Emotional climate, Growth fostering materials and experiences, Provision for active stimulation, Family participation in developmentally stimulating experiences, Aspects of the physical environment</li> <li>EA-HOME: Physical environment, Learning materials, Modeling, Fostering self-sufficiency, Regulatory activities, Variety of experiences, Acceptance and responsivity</li> </ul>

#### INDICES OF FAMILY ENVIRONMENT (Page 1 of 4)

#### INDICES OF FAMILY ENVIRONMENT (Page 2 of 4)

Family Environment Scale and Family Dynamic Environment Scale (FES) Moos and Moos 1986	Developed to measure social and environmental characteristics of families. The scale is based on a three- dimensional conceptualization of families. Based on the general formulation that three sets of social climate factors underlie family functioning; Interpersonal relationships, personal growth, and family structure. The three superordinate domains were conceptually developed and the subscales rationally created, not empirically derived.	<ul> <li>Clinical</li> <li>Research</li> <li>Family counseling (used with broad spectrum of populations and in various settings in family research around world identified in either the title or abstract of over 1,400 published studies)</li> </ul>	<ul> <li>Self-report 90 T/F items provide standardized scores of 10 major dimensions of family climate</li> <li>50 question pictorial version developed for children 5-11 Three forms:</li> <li>The Real Form (Form R): measures perceptions of family</li> <li>The Ideal Form (Form I): measures preferences</li> <li>The Expectations Form (Form E): measures expectations about outcomes</li> </ul>	Relationship dimension:         Cohesion         Expressiveness         Conflict         Personal growth dimension:         Independence         Achievement orientation         Intellectual-cultural orientation         Active-recreational orientation         Moral-religious emphases         System maintenance dimension:         Organization         Control
Conflict Behaviour Questionnaire (CBQ) Prinz, Foster, Kent & O'Leary 1979	Developed as a means of estimating the degree of conflict and negative communication experienced within the family system, primarily for families with adolescents	<ul> <li>Clinical</li> <li>Research</li> <li>Family assessment</li> </ul>	<ul> <li>Self-report</li> <li>Parents and adolescents independently complete parallel versions of the CBQ, rating their interactions in the last few weeks</li> <li>108 items, shorter version of 20 and 44 yes/no items also available</li> </ul>	<ul> <li>Maternal appraisal of Adolescent</li> <li>Maternal appraisal of Mother-Teen Dyad</li> <li>Adolescent Appraisal of Mother</li> <li>Adolescent Appraisal of Mother</li> <li>Adolescent Appraisal of Mother-Teen Dyad</li> <li>Adolescent Appraisal of Mother-Teen Dyad</li> <li>Adolescent Appraisal of Mother-Teen Dyad</li> <li>Adolescent Appraisal of Father</li> <li>Adolescent Appraisal of Father</li> <li>Adolescent Appraisal of Father</li> <li>Adolescent Appraisal of Father</li> </ul>

Indicator	Reliability	Validity
Home Observation for the Measurement of Environment (HOME)	<ul> <li>High inter-rater reliability (at least 90%) and adequate internal consistency (ranging from moderate to high) (Totsika et al. 2004)</li> <li>Test-retest reliabilities moderate for a period of 18 months (Totsika et al. 2004)</li> </ul>	<ul> <li>Predicted delinquency and PIAT test scores better than a longer cross-sectional measure</li> <li>Correlations with children's developmental status and intelligence measures are low to moderate during first two years and moderate from 3-5 years of age</li> <li>HOME scores associated with developmental outcomes including IQ scores, verbal and reading abilities, social competence, and behaviour problems (Bradley, 1993; Jackson et al. 2000; Molfese et al. 2003)</li> </ul>
Family Environment Scale and Family Dynamic Environment Scale (FES)	<ul> <li>Internal consistency and test-retest (1 year) reliabilities averaged .71 to .70 respectively (Moos &amp; Moos 1994)</li> <li>Cronbach's alphas: Cohesion: .76 to .85 Expressiveness: .48 to .65 Conflict: .77 to .82 Independence :38 to .48 Achievement: .51 to .63 Intellectual/cultural: .67 to .78 Active-recreational: .62 to .74 Moral-religious: .74 to .81 Organization: .55 to .76</li> </ul>	<ul> <li>Well-validated (Moos 1990; Moos 1994)</li> <li>Distinguishes between functional and dysfunctional families defined by FAC and MCRS cut-off scores</li> <li>Distinguishes between families with parents with and without depression</li> <li>Various convergent validity with FAD, FACES, SFIS</li> <li>Greater cohesion and less conflict is related to fewer internalization and externalizing symptoms among children</li> <li>Intellectual/cultural scale associated with observed 'enriched home environment' and parent education</li> </ul>
Conflict Behaviour Questionnaire (CBQ)	<ul> <li>Internal consistency estimates on the bases of the Prinz et al (1979) samples were .90 or above for mother and teenager reports on each subscale. Approximate mean Test-retest coefficients were 0.60 for mothers, 0.70 for fathers and 0.70 for adolescents</li> <li>Cronbach's alphas: (Park et al 2008) Child .86 Mother .90</li> </ul>	<ul> <li>Well validated by original authors (Robin &amp; Foster, 1989)</li> <li>Differentiated between distressed and non-distressed parent-child dyads (Robin &amp; Foster, 1989)</li> <li>CBQ scores significantly decrease after behavioural and non-behavioural treatment indicating treatment sensitivity (Robin &amp; Foster, 1989)</li> <li>Lack of up-to-date validation data</li> <li>Shorter versions not yet validated</li> </ul>

#### INDICES OF FAMILY ENVIRONMENT (Page 3 of 4)

		-
Indicator	Strengths	Criticisms/Future Work
Home Observation for the Measurement of Environment (HOME)	<ul> <li>Used in a number of studies with minority and special needs populations – separate versions for these populations available</li> <li>Widely used; for example - a 2003 meta-analysis found over 230 written references to research using HOME data from NLSY (Mott 2004)</li> <li>Versatile assessment that can be used as an input or outcome variable (Mott 2004)</li> <li>Used across diverse disciplines including sociology/family, psychology, economics, children/children's health, human resources, demography, etc (Mott 2004)</li> </ul>	<ul> <li>Any observational method is time consuming both for family and assessor; behaviour of families in assessment setting may not generalize to the real world; observations can generate vast amounts of data which are both difficult and expensive to reduce to clinically meaningful dimensions</li> <li>Has weaker psychometric properties with Latin American families than with European American or African American families</li> <li>Variation in application both in terms of content and operationalization of HOME complicates compare data across datasets (Linver et al. 2004)</li> <li>Some items within subscales not always consistent (Linver et al. 2004)</li> <li>Some items not useful because they do not discriminate among families, for example, having 90 or 95% of families coded as affirmative (Linver et al. 2004)</li> </ul>
Family Environment Scale and Family Dynamic Environment Scale (FES)	<ul> <li>Successfully used in a broad spectrum of populations and various settings in family research throughout the world (Kim &amp; Kim 2007)</li> <li>Efficient and economical to administer _ especially.</li> </ul>	<ul> <li>Six subscales of the Chinese version requires culturally appropriate revision (Kim &amp; Kim 2007)</li> <li>FES does not capture all aspects of family environment.         <ul> <li>e.g. It does not assess an individual's working model of relationships as derived from parental attachment or the nature of the relational skills learned in the individuals family</li> <li>Self reported retrospective account of family environment</li></ul></li></ul>
Questionnaire (CBQ)	<ul> <li>Efficient and economical to administer – especially condensed CBQ -20 version – allows for repeated use of instrument at various treatment intervals</li> <li>Easily adaptable to different family settings</li> </ul>	<ul> <li>CBQ not designed or validated for adolescents with developmental or psychotic disorders</li> <li>Lack of recent validation data available</li> </ul>

#### INDICES OF FAMILY ENVIRONMENT (Page 4 of 4)

#### INDICES OF FAMILY QUALITY OF LIFE (Page 1 of 3)

Indicator	Development & Objectives		Usage		Method & Versions		Subscales/factors
Beach Centre Family Quality of Life (FQoL) Beach Center on Disability at the University of Kansas Park et al. 2003; Poston et al. 2003	Developed within the Beach Center on Disability at U of Kansas Park et al. 2003 with contribution by Poston et al. 2003 who took a participatory action approach to do qualitative investigation of family quality of life (FQoL). Designed for use with families with a child with disabilities to assess families' perceptions of the importance of different aspects of FQoL as well as their level of satisfaction with their own families' QoL. Later refined on the basis of two large empirical studies.	•	Research Program and policy support Outcome evaluation Statistical comparisons of groups	•	25 items administered by researcher Rates both on importance to the family, and satisfaction with their own situation for that item 5-Point Scales; "not at all important" to "very important"; later revised to encourage variability to "a little important" to "critically important"	5 de	omains: Family interaction Parenting Emotional well-being Physical/material well-being Disability-related supports
International Family Quality of Life Survey (IFQoL) International Family Quality of Life Project – collaboration between a team of researchers from Australia, Canada, Israel and the US beginning in 1997	Family Quality of Life Project started in 1997 aiming to conceptualize family QoL and develop a survey tool. Joint project begun with researchers from Canada, Israel, Australia and the US; currently 18 countries are taking part. FQoL survey was updated in 2006 after wave 1.	•	Program and policy planning Clinical – to assess needs and help program design Research , including the provision of baseline data for further research into how needs of families are being met through policy and services	•	Main caregiver only May be self-completed or by researcher/practitioner in interview with main caregiver Rates all 9 domains on importance, opportunities, initiative, attainment, stability, and satisfaction using 5-point scales. Respondents encouraged to tell or write down additional thoughts and examples from their own families; researchers may find this useful to augment the information gathered from the survey with more qualitative information Revision in 2006 added the concept of <i>importance</i> to determine which areas are relevant to QoL for any given family. Also added questions and changed several domains to be more relevant General version also available for families that do not have a member with a disability	9 de • •	omains: Health of the family Financial well-being Family relationships Support from other people Support from disability related services Influence of values Careers and preparing for careers Leisure and recreation Community interaction

Indicator	Reliability	Validity
Beach Centre Family Quality of Life (FQoL)	<ul> <li>All correlations in test-retest reliability in both importance and significance for each of the FQoL subscales were significant at the .01 level or beyond (df from 59 to 63). (Hoffman et al. 2006)</li> <li>Correlations between time points for importance: Family Interaction: .54 Parenting. 66 Emotional Well-Being: .69 Physical/Material Well-being, .41 Disability Related Support: .82</li> <li>Correlations between time points for satisfaction: Family Interaction: .74 Parenting: .70 Emotional Well-Being: .75 Physical/Material Well-being, .77 Disability Related Support: .60</li> </ul>	<ul> <li>Convergent validity measures were significantly correlated with the hypothesized subscales (Summers et al 2005) (n=1197)</li> <li>Family Apgar significantly correlated with the satisfaction mean for the Family Interaction subscales, r(87) = .68, p&lt; .001</li> <li>Family Resource Scale significantly correlated with the mean of the five items on the Physical/Material Well-being subscale, r(58) = .60m p&lt; .001</li> </ul>
International Family Quality of Life Survey (IFQoL)	<ul> <li>Cronbach's alphas ranging from .603 to .922 for all subscales (Isaacs et al. 2007) Health: .92</li> <li>Financial Well-being: .76</li> <li>Family Relationships: .68</li> <li>Support from other people: .77</li> <li>Support from disability related services: .78</li> <li>Spiritual and Cultural Beliefs/Influence of values (2006): .92</li> <li>Careers and preparing for careers: .66</li> <li>Leisure and Enjoyment of Life/Recreation (2006): .79</li> <li>Community and Civic Involvement/Community interaction (2006): .67</li> </ul>	Early examination looks promising but validation is still underway

#### INDICES OF FAMILY QUALITY OF LIFE (Page 3 of 3)

Indicator	Strengths	Criticisms/Future Work
Beach Centre Family Quality of Life (FQoL)	<ul> <li>Spanish version available</li> <li>May be good outcome measure for services and service provision and for statistical comparisons of groups</li> </ul>	Must assess how importance and satisfaction ratings are accounted for
International Family Quality of Life Survey (IFQoL)	<ul> <li>Translated into Chinese, Hebrew, Bosnia; translations underway Sept 2007 for Dutch, French, Japanese, Spanish</li> <li>General version can also be used for control groups in studies for families with a child with disabilities</li> </ul>	<ul> <li>Survey is fairly long, taking about 1.5 -2 hours</li> <li>Not suitable for research that statistically compares groups, or for outcome evaluations</li> <li>Not yet tested for convergent and discriminant validity</li> </ul>

		1		
Indicator	Development & Objectives	Usage	Method & Versions	Subscales/Factors
Family Climate Scales (FCS) Schneewind et al., 1985, revised by Averbeck et al. 1996	Tool for researchers and practitioners to better understand the role of family dynamics in business-owning families Designed primarily for use in context of family business; index of aspects of family culture and process. Based on the hypothesis that poor family functioning and conflict are not only detrimental to family firms but also damage health of individual members.	Research	<ul> <li>Multi-level, self-report</li> <li>Adolescents and adults</li> </ul>	<ul> <li>Open communication</li> <li>Adaptability</li> <li>Intergenerational authority</li> <li>Intergenerational attention to needs</li> <li>Emotional cohesion</li> <li>Cognitive cohesion</li> </ul>
Beavers Model of Family Assessment (Beavers Self- Report Family Inventory SRFI; Beavers Interactional Scales BISS) Beavers and Hampson, 1990	Beavers Model consists of three instruments that assess parenting practices using a combination of self- report (SRFI) and two observational methods: the Beavers Interactional Style Scale (BISS) and the Beavers interactional Competence Scale (BICS) Developed by Beavers and Hampson in 1990 to "help novices in family therapy learn systems thinking and to provide a structure to guide assessment and therapy" (Beavers and Hampson 2000)	<ul> <li>Clinical: assessment, screening, diagnosis, treatment planning, monitoring progress</li> <li>Training</li> <li>Research</li> </ul>	<ul> <li>SRFI is 36- item Likert-type scale that can be completed by family members 11 years +</li> <li>BICS and BISS - trained raters observe 10 minute semi-structure episode of family interaction. Family responds to the question "What would you like to see changed in your family?"</li> </ul>	BICS:Appearance to outsiders• Structure of family• Mythology• Mythology• Professed closeness• Goal-directed negotiations• Managing assertion• Autonomy• Expression of pos/neg feelings• Family affect• Global style• EmpathySRFI:BISS:• Health• Meeting dependency needs• Conflict • Leadership• Use of space• Expressiveness
Circumplex Model, FACES Olson, Russell and Sprenkle, 1979	Series of instruments integrating three dimensions of family functioning (communication, cohesion and flexibility). Most relevant here is the Family Adaptability and Cohesion Scale (FACES)	<ul> <li>Clinical assessment</li> <li>Treatment planning</li> <li>Family intervention</li> <li>Research</li> </ul>	<ul> <li>FACES - self-report questionnaire</li> <li>Circumflex Assessment Package provides 'insider's perspective'</li> <li>Clinical Rating Scale, based on interviews or obs, provides outsider's (eg. therapists') perspective</li> </ul>	<ul> <li>Adaptability and cohesion (FACES)</li> <li>Others as stated</li> <li>Family Communication scale focuses on exchange of information</li> <li>Family satisfaction scale</li> <li>Family strengths scale</li> <li>Family stress</li> </ul>

#### FAMILY INDICES – Other (Page 1 of 3)

Indicator	Reliability	Validity
Family Climate Scales	<ul> <li>Tested on participants (n= 291) from various</li> </ul>	<ul> <li>Correlation analyses of all subscales appropriately indicate a high degree of positive</li> </ul>
(FCS)	<ul> <li>Fosted of participants (n= 251) from various UK institutions of higher education (staff, faculty and students – nonfamily business related sample)</li> <li>High level of internal consistency.</li> <li>Cronbach's alphas (Bjornberg 2007) Open communication: .85 Intergenerational authority: .75 Adaptability: .86 Intergenerational attention to needs: .81 Emotional cohesion: .89 Cognitive cohesion: .86</li> <li>Subscale intercorrelations are high. Subscales reduced in length for internal consistency</li> <li>Low regression weight for one item in the Intergenerational Authority subscale detected</li> </ul>	<ul> <li>Contribution analyses of an subscales appropriately indicate a night degree of positive intercorrelation among dimensions – except for Intergenerational Authority, which was negatively correlated to Adaptability and Open Communication (Bjornberg 2007)</li> <li>Exploratory factor analysis (principal components)</li> </ul>
Beavers Model	BICS (Beavers and Hampson 2000), n=1800 –	BICS (Beavers and Hampson 2000), n=1800
Beavers Model (BICS, BISS, SRFI)	<ul> <li>BICS (Beavers and Hampson 2000), n=1800 – clinical and non-clinical</li> <li>High degree of internal consistency across scales, Cronbach's alpha of .94</li> <li>Kappa coefficients .7688</li> <li>BISS (Beavers and Hampson 2000)</li> <li>Kappa coefficients: .7688</li> <li>Good internal consistency across subscales, Cronbach's alpha of .88</li> <li>SRFI (Beavers and Hampson 2000)</li> <li>High internal consistence, Cronbach's alphas .8493</li> <li>High test-retest reliability, .85 or better</li> </ul>	<ul> <li>BICS (Beavers and Hampson 2000), n=1800</li> <li>Discriminates between clinical and non clinical families</li> <li>Competence scale – high degree of construct validity and correlated with SRFI (r=.62), with the general functioning subscale of FAD (r=.68)</li> <li>BISS: Validation research still underway</li> <li>SRFI (Beavers and Hampson 2000)</li> <li>Good validity, canonical correlations of .62 or better between SRFI and BICS</li> <li>Clinical validity – discriminates groups of psychiatric patients with differing diagnosis</li> <li>Health/Competence subscale correlates with the general functioning subscale of FAD (r=.77). Cohesion subscale correlates with cohesion subscale of FACES III</li> <li>Family competence correlates highly with the Dyadic Adjustment Scale (r=.44), Overall (Beavers and Hampson 2000)</li> <li>Competence dimension of Beavers Model correlates highly between three scales (r=.71)</li> <li>91% correct classification of clinical versus non-clinical cases</li> <li>Various convergent validity with FACES, FAD, MAT, FES</li> </ul>
Circumplex Model, FACES	<ul> <li>High Internal consistency and test-retest reliability (r=.80) (Olson 2000)</li> <li>Cronbach's alphas for FACES IV (Olson et al 2007) Enmeshed: .77 Balanced Cohesion: .89 Disengaged: .87 Chaotic: .86 Balanced Flexibility: .84 Rigid: .82</li> </ul>	<ul> <li>Discriminative validity: Distinguish between problem and non-problem families (Olson 1986)</li> <li>As part of the "Prepare" inventory for engaged couples, FACES predicts future divorce with 80-85% accuracy, and as part of the "Enrich" inventory for married couples, distinguishes happy, non-clinical couples from clinical couples with 90% accuracy (Olson 2007)</li> <li>FACES IV: Predictive accuracy averaged 92% with a range from 84% to 99% (Olson 2007)</li> <li>Validity within and between levels of measurement (individual, dyadic, whole system) have been brought into question (Cook 2006). Cook suggests that the dyadlevel measures of Cohesion and Adaptability are lacking in strong "level validity"</li> </ul>

#### FAMILY INDICES -- Other (Page 2 of 3)

Indicator	Strengths	Criticisms/Future Work
Family Climate Scales (FCS)	<ul> <li>Satisfactory reliability and validity levels make the FCS a potentially useful measure of whole-family functioning in a family business context</li> <li>Strong theoretical underpinnings</li> </ul>	<ul> <li>Self report format may miss subtle complexities and levels of family functioning</li> <li>Only for adolescents and adults</li> <li>Unable to capture "in-event" (real time) family interactions – respondent requested to make summary judgments based on a history of interaction and a life-long acquaintance</li> <li>Longitudinal stability of the scales yet to be demonstrated</li> <li>Further work needed to establish discriminative, concurrent, predictive and criterion-related validity</li> </ul>
Beavers Model (BICS, BISS, SRFI)	<ul> <li>Cross-sectional perspective (Self-report an d observational) results in comprehensive assessment</li> <li>30+ years of research</li> <li>High correlation with other major indicators (FAD, FACES, FES)</li> </ul>	BISS scale not yet validated – one study suggests it has limited descriptive and discriminative power compared to other Beavers measures (Johnson et al. 2006)
Circumplex Model, FACES	<ul> <li>Strong empirical support for the hypothesis (Olson 2000)</li> <li>3D model highly correlated to Self-report Family Inventory and other models (Olson 2000)</li> <li>Incorporates first and second order change in family systems over time (Olson 2000)</li> <li>Correlates with Beavers Model of Family Assessment</li> </ul>	FACES does not adequately measure the unbalanced (extreme high and low) areas of cohesion or flexibility – FACES IV addresses this (Olson et al 2007)

#### FAMILY INDICES – Other (Page 3 of 3)

#### III. Survey Screen-shots



2. Many factors may play a role in the selection of scales, including their reliability and validity as well as operational concerns such as their method of administration. What are the most important considerations in selecting a measure?

-		 	
Ľ			
_			

Prev	Next
------	------



3/8

3. In our literature search, we identified twelve measures of whole family dynamics for detailed study. These scales met the criteria of being found in peer-reviewed articles with different investigators, and having some statistical information indicating good scale reliability and/or validity. For each measure, please indicate your awareness and usage of the scale

Exit this survey

38%

	<u>Aware of it</u>	<u>Used it</u>
Family Assessment Measure (FAM)	0	0
Family Functioning Index (FFI)	0	)
International Family Quality of Life (IFQoL)	0	0
Beach Centre Family Quality of Life Scale (BCFQoL)	0	)
Conflict Behaviour Questionnaire (CBQ)	0	0
McMaster Family Assessment Device (FAD)	0	)
Circumplex Model (FACES)	0	0
Beavers Model of Family Assessment	0	)
Family Climate Scale (FCS)	0	0
North Carolina Family Assessment Scale (NCFAS)	0	)
Home Observation for the Measure of Environment (HOME)	0	0
Family Environment Scale (FES)	0	5

4. Please list any measures of whole family dynamics not on this list that you think we should have included, and whether or not you have used them. In addition, if any of the measures above are *not* the most appropriate for inclusion please specify and explain.



5. Describe your use of family dynamics measures, whether for data collection, clinical use, predicting child outcomes, other research etc. Please include a description of the sample, how and why that measure was selected, and the strengths or shortcomings of the measure.



Prev Next

	<u>Exit this survey</u>
4. Methodology	
4/8	50%
6. The most common methods for collecting data for measures of far interviewer, and observations; less commonly, measures are derived self-reports of actual behaviour (eg. diary of activities or behaviours methods. Do you have any comment about methodology based on yo	mily dynamics are rating scales either self-administered or by an d from qualitative data gathered via semi-structured interviews, and/or of interest). The literature proposes pros and cons of the various our experience?

SRDCC SRSR AND COMPAREMENT COMPAREMENT Social application Assessing the Measures of Family Dynamics: Experts' Survey 5. Longitudinal vs. Snapshot	<u>Exit this survey</u> △
5/8	62%

7. Longitudinal indicators allow for the assessment of family functioning across multiple points in time and cumulate to show overall aspects of family life, whereas snapshot indicators portray experiences of characteristics at a single point in time. Do you have a preference for one over the other?

~

Prev Next

	Exit this survey
Assessing the Measures of Family Dynamics: Experts' Survey	
6 / 8	75%
8. The data collected for family dynamics measures may come from one informant – for example, the person most kn multiple sources, perhaps even all the family members. Do you have a preference for one over the other?	owledgeable – or
Prev Next	
	Evit this survey



Please check whether you strongly agree, agree, disagree or strongly disagree with the following statements, then explain your response.

9. There exists at least one measure of family dynamics that I consider to be broadly applicable for Canadian families regardless of child gender and age, and that provides generally reliable information for my purposes.

- 🌙 Strongly Agree
- J Agree
- 🔵 Disagree
- 🌙 Strongly Disagree

Please Explain:

•	
	~
	~

10. Indicators that were developed over 20 years ago are outdated and must be revised to reflect changes in families (eg. rising numbers of single parent families, blended families and same-sex couples), cultural diversity, and greater knowledge about child developmental disorders and mental health.

🌙 Strongly Agree

- 🌙 Agree
- 🌙 Disagree
- 🌙 Strongly Disagree

Please Explain:



11. In order to achieve standard measures of family dynamics across Canada, it is critical to use scales which are equally effective in both official languages and which have been normed specifically for Québec populations.

- 🌙 Strongly Agree
- 🔵 Agree
- 🌙 Disagree
- 🌙 Strongly Disagree

Please Explain:

	^
	V

12. I see no need to develop new measures of family dynamics at this time.

- 🌙 Strongly Agree
- 🌙 Agree
- 🔵 Disagree
- 🌙 Strongly Disagree

Please Explain:

13. Measures of family dynamics must be firmly grounded in articulated theory in order to be useful.

- 🌙 Strongly Agree
- 🌙 Agree
- 🌙 Disagree
- 🌙 Strongly Disagree



14. Researchers generally agree about which psychometric properties are most important.

- 🌙 Strongly Agree
- 🔵 Agree
- 🌙 Disagree
- 🌙 Strongly Disagree

Please Explain

-		
	A	
	~	

15. There exists adequate information about the psychometric properties of measures of family dynamics.

- J Strongly Agree
- 🌙 Agree
- 🌙 Disagree
- 🌙 Strongly Disagree

#### Please Explair

~
~

Prev Next



Thank you very much for your time and valued advice. During the analysis it is possible we may phone you to ask for clarification of your responses. Of course you can feel free to call us anytime to discuss the project.

Prev Exit