

Family Health Development in Life Course Research: A Scoping Review of Family Functioning Measures

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BACKGROUND AND OBJECTIVES: Our objective is to identify common family functioning measurement tools and assess their compatibility with family-health development and life-course perspectives. abstract

METHODS: Data sources include PubMed, ERIC, CINAHL, Families and Societies Worldwide, PsychInfo, Web of Science, PsychNet, and Health and Psychosocial Instruments. Title and abstract screening and full-text review of articles were conducted by multiple reviewers based on prespecified inclusion criteria. Data extraction focused on features of identified measurements tools, including: (1) name (2) domains of family functioning measured, (3) established psychometric properties, and (4) original context of psychometric evaluation (eg, details about the study sample).

RESULTS: Of the 50 measurement tools identified, 94% measured organizational patterns (eg, flexibility, connectedness, or resources), 46% measured belief systems (eg, making meaning of adversity, or positive outlook), and 54% measured communication processes (eg, open emotional sharing, or collaborative problem-solving).

CONCLUSIONS: Existing measures of family functioning can aid life-course researchers in understanding family processes as contexts for health and well-being. There also remain opportunities to refine or develop measures of family functioning more compatible with a life-course perspective that assess family processes (1) at various life stages; (2) with various backgrounds, identities, structures, and experiences; and (3) embedded in or impacted by various contexts that may facilitate or hinder family functioning.

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The field of Life Course Health Science incorporates the detailed study of factors that impact a person's health over time.¹ The ways in which we think about health and disease have been changed by improved understanding of how ecologically nested webs of risk interact across individual, family, and community levels, and across the lifespan from preconception to old age, to shape a person's well-being.² Rather than viewing health as a static phenomenon by which an individual is evaluated as either "healthy or not," health can be viewed as an emergent set of developmental capacities that change over the lifespan.^{2,3} The LCHD model holds that health development is a complex, nonlinear process that is sensitive to the timing and social structuring of environmental exposures and experiences.⁴ An individual's health development over time can be represented by a health trajectory, which is either moving toward or away from a state of positive health or thriving.⁵

Although there has been considerable focus on individual health development in life-course research, the concept of family health development is relatively less well studied or articulated. The LCHD model regards families as a significant proximal influence on the health of individual family members.^{2,6} The ways in which families can provide a supportive scaffolding for children's healthy development is a vital component of life-course health science, yet one which has not been clearly or systematically conceptualized or operationalized within that field. In addition, families have their own "lifespan" as systems, which can encompass diverse stages, including couple relationship formation and dissolution, becoming parents through birth or adoption, shifts in

employment status and income, caring for aging parents, and experiencing chronic illness or unforeseen tragedies, among others.⁷ Defining "family" is likely not a resolvable challenge, but 1 inclusive definition is "a continuing system of interacting persons bound together by processes of shared roles, rules, and rituals, even more than shared biology."⁸

Family health development can be cast upon an intergenerational backdrop, given that a family's health is linked to the health of individuals' families of origin and dynamics involving extended kin. One plausible explanation for the relatively limited body of life course work related to family health development is the limitations existing measurement tools have in terms of effectively measuring and assessing a family's functioning or health status in a developmentally flexible and comprehensive way.^{9,10} Versatile tools with these characteristics would be useful both for monitoring how family health develops over time and for evaluating the impact of interventions designed to promote family and individual well-being.

Recognition of this opportunity to advance measures related to family health development led the Family Measurement Node, an interdisciplinary group of 12 researchers within the Life Course Intervention Research Network, to consider the development of a "Family Ages and Stages" tool (or suite of tools) that might allow for the monitoring of those characteristics of families that are particularly influential with respect to family and individual well-being over time. As a foundational step toward the development of such a tool, the researchers chose to identify and review existing measurement tools that assess various aspects of family

functioning. This paper describes a scoping review of the literature that aimed to identify measurement tools related to family functioning and assess their compatibility with family-health development and life-course perspectives. Drawing from the Family Resilience Framework, we included in our review an assessment of the particular domains of family functioning captured by existing measurement tools.¹¹ We also examined the extent to which, and under what conditions, identified tools were assessed for validity and reliability in their original psychometrics studies, being mindful about whether low-income families and families with varying racial or ethnic identities (eg, Black, Indigenous, and people of color) were represented.

Consistent with the life-course proposition that health can be viewed as an emergent set of developmental capacities that continue to change over the lifespan, we approached our scoping review with the life-course notion that family health can, generally speaking, reflect a set of developmental capacities that promote the well-being of families and its members over time (although we acknowledge other emergent conceptualizations of family health in other fields^{6,9}). Such capacities can include various domains of family functioning, or the processes by which families, as systems, pursue their goals and functions over time. Thus, whereas family functions can be conceptualized as a family's set of key purposes as a system, family functioning can be conceptualized as the way in which a family fulfills its functions.^{12,13} For the purposes of our scoping review, we prioritize the term family functioning, noting that aspects of family functioning can be expressed or perceived at the level of the family (eg, family

communication), as well as at the level of specific dyads or subsystems within the family (eg, parent-child communication, parent-child connection; indeed, some families consist only of a parent-child dyad).

METHODS

We employed scoping review methodology to assess the extent to which existing family functioning measurement tools in the literature are compatible with family-health development and life-course perspectives. The structure and process of our review was aligned with guidelines as set forth by the Preferred Reporting Items for Systematic Reviews and Meta-analysis¹⁴; however, scoping¹⁴ reviews, although similar to systematic reviews, are particularly optimal for determining “the scope or coverage of a body of literature on a given topic.”¹⁵ Whereas systematic reviews are suitable when addressing a relatively narrow, specific, and focused research question that is often intended to inform practice, scoping reviews aim to more broadly identify, map, report, and discuss the characteristics of studies pertaining to a general area of inquiry.¹⁵ As a result, scoping reviews often do not include formal assessments of research-design quality or bias, registration of a review protocol before the conduct of the review, or a formal synthesis of findings from individual studies and the generation of summary findings.¹⁵ In¹⁵ this study, we were focused on the identified measurement tools, not necessarily the studies in which they were applied; the studies simply were the mechanism by which we were able to identify relevant measurement tools. In addition, our search was not intended to produce a definitively exhaustive yield of measurement tools. Instead, our goal was to retrieve a sufficient

number of measurement tools as to arrive at a compelling level of information saturation with respect to identified measurement tools related to various domains of family functioning.

The search protocol associated with our scoping review was conducted in 2 stages. In the first stage, the research team identified measures of family functioning with which they were already familiar. Second, relevant search terms and Boolean operators were specified and used to conduct searches in the following 8 electronic databases: (1) PubMed, (2) ERIC, (3) CINAHL, (4) Families and Societies Worldwide, (5) PsychInfo, (6) Web of Science, (7) PsychNet, and (8) Health and Psychosocial Instruments. The specific search string implemented was as follows: (Family Function OR Family Functioning OR Child Function OR Child Functioning OR Parent Function OR Parent Functioning) AND (Measure OR Tool OR Assessment OR Scale OR Instrument OR Questionnaire) AND (Valid OR Reliable).

To assess the suitability of including a body of measurement tools focused on parent-child interactions specifically, we conducted a supplemental search for tools matching this particular criterion. Ultimately, we omitted these additional references from our review, given the enormity of this literature and the notable substantive overlap (ie, domains of family functioning) between measures in this literature and those identified in our original search. To limit the number of publications found and to review only publications including promising psychometric measures, the team chose to focus on identifying peer-reviewed journal articles rather than gray literature (eg, theses, dissertations, and book chapters); however, the original source for

some tools identified in this review did include dissertations and books. The search focused on (1) articles published between 1970 and 2021, (2) sources available in English, and (3) studies with human samples with no age restrictions. Two members of the research team performed all database searches and exported citations to Covidence, a web-based literature-search management system, in preparation for title and abstract screening and full-text review.

The same 2 members of the research team also conducted title and abstract screening, full-text reviews, and data extraction. The following inclusion criteria guided each stage of the review process: (1) tools that could be applied in healthy populations, rather than tools applicable only in specific cases where a family member has a chronic health or behavioral condition; (2) studies featuring tools initially identified by the research team; (3) publications including well defined family functioning measurement tools, rather than publications merely describing family functioning concepts, models, or theories; and (4) nonobservational family functioning instruments, such as questionnaires and surveys. In terms of this first criterion, we posited that broader measures of family functioning could likely be applied to very specific family situations, whereas measures of family functioning related to very specific family situations might not apply broadly to other families. If specific tools were identified across multiple studies, only the most recent publication was selected as a reference for the tool (Supplemental Information). Discrepancies in review decisions were discussed among members of the research team until consensus was reached. Because the scoping review was

focused on measurement tools, and not the specific studies from which they were identified, our data extraction efforts focused on features of the measurements tools, including: (1) name of measurement tool, (2) domains of family functioning measured, (3) originally established psychometric properties (eg, types of reliability and validity evidence), and (4) original context of psychometric evaluation (eg, details about the study sample). However, for additional context, we do briefly summarize study information related to the articles in which the measurement tools were identified in our scoping review.

In an effort to parsimoniously extract information about measured domains of family functioning across measurement tools, we considered several frameworks that could aid us in categorizing and organizing extracted information. Applying a framework for the purposes of categorization and organization assisted us in accounting for the fact that measurement tools could vary significantly with respect to (1) the number of domains of family functioning being measured and (2) the terms or descriptions applied to particular domains of family functioning. Of primary consideration were the following 2 frameworks: the McMaster Model of Family Functioning^{1,2} and the Family Resilience Framework (FRF).¹ The McMaster Model articulates 6 core dimensions of family functioning, namely (1) problem-solving, (2) communication, (3) roles, (4) affective responsiveness, (5) affective involvement, and (6) behavior control. Alternatively, the FRF emphasizes 3 core dimensions of family functioning that can facilitate a family's ability to successfully withstand adversity over time, namely (1) belief

systems (ie, making meaning of adversity, positive outlook, transcendence and spirituality), (2) organizational patterns (ie, flexibility, connectedness, and social and economic resources), and (3) communication process (ie, clarity of communication, open emotional sharing, and collaborative problem-solving). Ultimately, the FRF was selected as optimal, given its inclusive applicability to a wide range of family contexts and ability to efficiently categorize the various domains of family functioning observed across the measurement tools we identified. We also favored the FRF over the McMaster Model to guide our data extraction given its relatively stronger compatibility with our focus on family-health development and life-course perspectives.

RESULTS

Search Results

Figure 1 displays information across each stage of the review process. The database search yielded 5872 articles, 4179 of which were flagged as duplicates and removed. The remaining 1693 articles were subjected to title and abstract screening, resulting in 1468 articles being excluded from further review due to their incongruence with inclusion criteria. The remaining 213 articles were subjected to full-text review. Following full-text review, 165 articles were deemed irrelevant and excluded. Common reasons for article exclusion were (1) use of measurement tools that had already been identified, (2) lack of well-defined or validated family functioning measurement tools, and

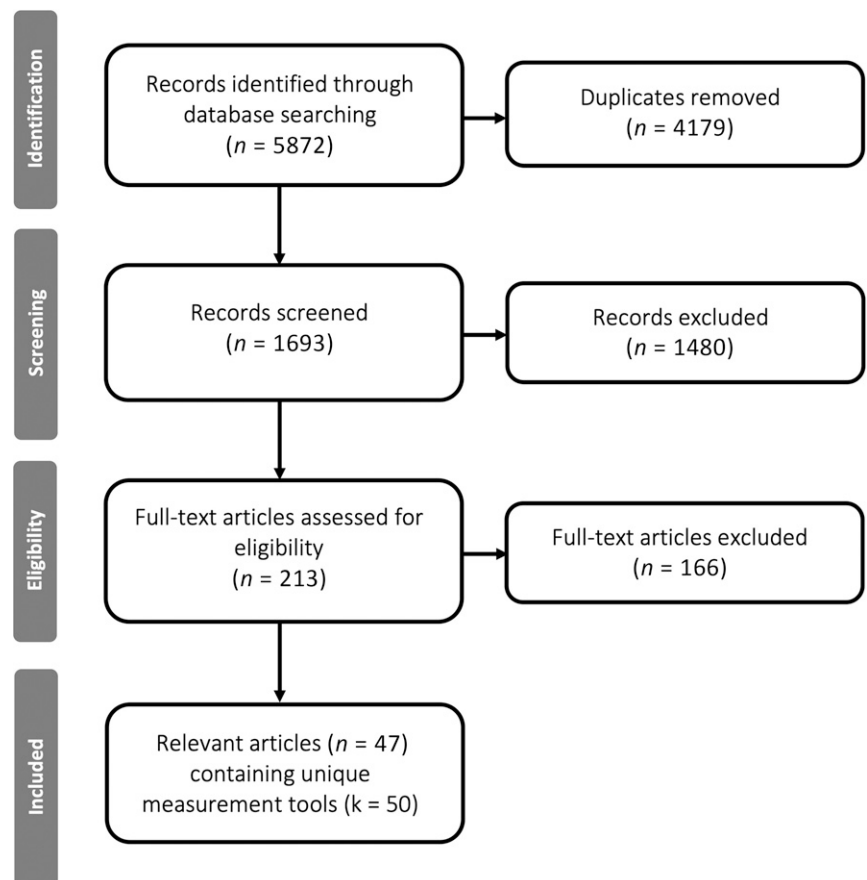


FIGURE 1 Summary of search and review results (PRISMA flowchart).

(3) use of measurement tools designed only for very specific health conditions. The review process resulted in a final pool of 47 articles, from which 50 family functioning measurement tools were identified. Table 1 summarizes information about each identified family functioning measurement tool.

Characteristics of Identified Measurement Tools

As noted earlier, the FRF model¹¹ was used to categorize and organize the various domains of family functioning captured across identified measurement tools. Of the 50 measurement tools identified, 47 (94%) measured organizational patterns (ie, flexibility, connectedness, and social and economic resources), 23 (46%) measured belief systems (ie, making meaning of adversity, positive outlook, transcendence, and spirituality), and 27 (54%) measured communication processes (ie, clarity of communication, open emotional sharing, and collaborative problem-solving). Although 12 measurement tools captured information about all 3 FRF dimensions, relatively more measurement tools captured information about 1 ($n = 15$) or 2 ($n = 23$) FRF dimensions.

Although it was beyond the scope of this review to examine all available studies associated with each identified measurement tool, we do briefly summarize study information related to the articles in which the measurement tools were identified in our scoping review. We also report information from each measurement tool's original psychometric evaluation (Table 1). Turning to information related to the articles in which measurement tools were identified, Table 2 provides summary details with respect to the following sample

characteristics: racial or ethnic identity, education, income, and family structure.

In terms of racial or ethnic identity, the majority of measurement tools (53%) were used in samples in which most of the participants were reported or presumed to be White. This includes studies that did not explicitly report information about racial or ethnic identity, but were conducted in predominantly White populations (eg, Belgium, Finland, Ireland, or the Netherlands). Five measurement tools were used in majority Asian or Middle-Eastern samples (ie, Malaysia, China, and Taiwan, and Turkey, and Iran), 4 in majority Black samples, and 3 with majority Spanish-speaking samples (ie, Spain, Panama, and Argentina). Overall, 24 studies (51%) reported limited or no data on race or ethnicity. Of 25 measurement tools used with United States samples, 5 did not report detailed information on participant race or ethnicity. One US study had a majority Latinx sample, 4 had majority Black samples, and 1 studied Alaska native tribe members.

Most studies lacked detailed information related to respondent education (64%), socioeconomic status (55%), or, surprisingly, family structure (57%). Of the studies that did provide this information, most participants were women with middle to high socioeconomic status who completed high school. Most tools were used in samples comprised of married or partnered respondents; only 4 tools were used among nonpartnered parents (single or divorced). Just 1 of the tools was used in a sample with same-sex couples (see Table 2 for more details).

In terms of originally established psychometric properties, each included a measurement tool had

some form of validity and reliability evidence (eg, construct validity, predictive validity, content validity, internal consistency reliability, test-retest reliability), the details of which are reported in Table 1. There appears to be notable heterogeneity in the samples originally used to establish the psychometric properties of measurement tools, although original studies were not always detailed with respect to key respondent characteristics including racial or ethnic identity, socioeconomic status, and family structure or composition (see Supplemental Information for full references associated with original studies).

DISCUSSION

The purpose of this scoping review was to identify measurement tools related to family functioning and assess the extent to which they would allow scholars, practitioners, and others to apply life-course and family-health development perspectives in their work. As noted earlier, family health, from a life-course perspective, can reflect a set of developmental capacities that promote the well-being of families and its members over time. Such capacities can include various domains of family functioning, or the processes by which families, as systems, pursue their goals and functions over time. Using the FRF as an organizational framework, we found that commonly applied measures of family functioning are, to varying degrees, capable of capturing rich information about families' belief systems, organizational patterns, and communication processes. As a result, life-course researchers could be well positioned to understand important family processes as contexts for health and well-being. However, we also identified important opportunities for future

TABLE 1 Summary of Identified Family Functioning Measurement Tools

Family Functioning Measurement Tool	Domains of Family Functioning			Original Source of Psychometric Evaluation (First Author, Year)	Originally Established Psychometric Properties	Original Context(s) of Psychometric Evaluation
	BS	OP	CP			
Assessment of Strategies in Families-Effectiveness (ASFE)	x	x	—	Friedemann (1991) ²³	Content validity; construct validity; internal consistency reliability; discriminant validity	Community sample of adults and "treatment" populations (eg, substance abuse treatment, domestic violence shelter; 37% Black, 56% White)
Brief Family Relationship Scale	—	x	x	Fok (2014) ²⁴	Construct validity; internal consistency reliability	Predominately Yup'ik Eskimo Alaska Native adolescents from rural, remote communities
Child Health and Family Functioning Questionnaire (CHFFQ)	—	x	—	Thomasgard (1999) ²⁵	Predictive validity	Families with young children recruited from 5 pediatric primary care sites in the greater metropolitan area in Columbus, Ohio
Child-rearing Questionnaire	x	x	x	Gerris (1983) ²⁶	Construct validity	Community sample of Dutch adolescents
Conflict Behavior Questionnaire (CBQ)	—	x	—	Prinz (1979) ²⁷	Known-groups validity; internal consistency reliability	Distressed and nondistressed mother-adolescent dyads (sociodemographic characteristics were not reported in detail)
Dads' Active Disease Support Scale (DADS)	—	x	—	Wysocki (2004) ²⁸	Internal consistency reliability; test-retest reliability; construct validity; convergent validity	Adult heterosexual couples who were the caregivers of a child between the ages of 2 and 18 y diagnosed with one of 6 chronic medical conditions
Dutch Family Problems Questionnaire (DFPQ)	—	x	x	Koot (1997) ²⁹	Original source content not available in English	Original source content not available in English
Dyadic Adjustment Scale (DAS)	x	x	x	Spanier (1976) ³⁰	Content validity; criterion-related validity; construct validity; internal consistency reliability	White married and divorced individuals in Centre County, PA
Evaluation and Nurturing Relationship Issues, Communication, and Happiness (ENRICH)	—	x	x	Fowers (1993) ³¹	Internal consistency reliability; test-retest reliability; concurrent validity; construct validity	Couples seeking marriage counseling from counselors or clergy (majority White and Christian with high school education)
Marital Satisfaction Scale	—	x	x	Fowers (1993) ³¹	Internal consistency reliability; test-retest reliability; concurrent validity; construct validity	Couples seeking marriage counseling from counselors or clergy (majority White and Christian with high school education)
Self-Report Family Inventory (SF)	—	x	—	Beavers (1965) ³²	Construct validity	Nonclinical college population

TABLE 1 Continued

Family Functioning Measurement Tool	Domains of Family Functioning			Original Source of Psychometric Evaluation (First Author, Year)	Originally Established Psychometric Properties	Original Context(s) of Psychometric Evaluation
	BS	OP	CP			
Family Adaptation and Cohesion Scale (FACES) ^a	—	x	—	Alexander (1982) ³³	Internal consistency reliability; construct validity	Clinical and nonclinical families
Family Appgar ^a	—	x	x	Good (1979) ³⁴	Construct validity	Nonclinical families and psychiatric outpatients in Sacramento, California
Family Assessment Device (FAD) ^a	x	x	x	Epstein (1983) ³⁵	Test-retest reliability; concurrent validity; discriminant validity	Employees of a psychiatric hospital without history of psychological disorders and psychiatric patients and their families
Family Assessment Measure (FAM)	—	x	—	Skinner (1983) ³⁶	Internal consistency reliability; construct validity	Heterogeneous sample of families from various health and social service settings in Toronto, Canada
Family Effectiveness Measure (FEM)	x	x	x	McCreary (2004) ³⁷	Construct validity; criterion-related validity; internal consistency reliability	Predominantly African American female offenders newly incarcerated for substance abuse violations in Chicago, Illinois
Family Environment Scale (FES) ^a	x	x	x	Roosa (1990) ³⁸	Construct validity; content validity; predictive validity; internal consistency reliability	Adults in stressed families in the United States.
Family Functioning in Adolescents Questionnaire (FFAQ)	x	x	x	Roelofse (1985) ³⁹	Construct validity; known-groups validity; internal consistency reliability	Adolescents from 3 government schools and 1 private school in Canberra, Australia.
Family Functioning Index (FFI) ^a	x	x	x	Pless (1973) ⁴⁰	Construct validity; known-groups validity	Children with chronic physical illnesses in Monroe County, New York
Family Functioning Questionnaire in Rehabilitation (FFQR)	x	x	x	Abaoglu (2019) ⁴¹	Content validity; construct validity; internal consistency reliability; test-retest reliability	Parents of children in a rehabilitation program in Turkey
Family Inventory of Life Events (FILE)	x	x	x	Patterson (1983) ⁴²	Construct validity	Families who have 1 or more children with cystic fibrosis who received medical care at the Cystic Fibrosis Pediatric Outpatient Clinic at the University of Minnesota Hospital in Minneapolis, Minnesota

TABLE 1 Continued

Family Functioning Measurement Tool	Domains of Family Functioning			Original Source of Psychometric Evaluation (First Author, Year)	Originally Established Psychometric Properties	Original Context(s) of Psychometric Evaluation
	BS	OP	CP			
Family of Origin Scale (FOS)	x	x	—	Hovestadt (1985) ⁴⁵	Construct validity; content validity; test-retest reliability; internal consistency	Undergraduate and graduate students (majority White) at East Texas State University
Family Questionnaire	—	x	x	Wiedermann (2002) ⁴⁴	Internal consistency reliability; test-retest reliability; construct validity; predictive validity	Relatives of inpatients who had been diagnosed with schizophrenia
Family Resilience Assessment Scale	x	x	x	Sixbey (2005) ⁴⁵	Internal consistency reliability; construct validity	Heterogeneous sample (although mostly White) with respect to age, income, education, and recruitment method
Family Star Plus	x	x	—	MackKeith (2014)	Interrater reliability	Local authority family outreach workers or family resource workers and their managers
Family Support Scale ^a	—	x	—	Dunst (1984) ⁴⁷	Internal consistency reliability; test-retest reliability; construct validity	Parents enrolled in Head Start
Feetham Family Functioning Survey (FFFS) ^a	—	x	x	Roberts (1982) ⁴⁸	Construct validity; content validity; concurrent validity; internal consistency reliability; test-retest reliability	Families with healthy infants and families with infants and children born with myelodysplasia (sociodemographic characteristics were not reported in detail)
Impact on Family Scale (IOFS)	—	x	x	Stein (2003)	Internal consistency reliability; construct validity	Heterogeneous sample of patients seen in a university-affiliated municipal hospital in New York City
Intimate Bond Measure	—	x	—	Wilhelm (1988) ⁴⁹	Internal consistency reliability; test-retest reliability; criterion-related validity	Married individuals attending 1 of 11 general practices or 1 optometry service in Sydney, Australia
Inventory of Parent and Peer Attachment (IPPA)	—	x	x	Armsden (1987)	Construct validity; internal consistency reliability	Undergraduate students at the University of Washington (majority White and middle class)

TABLE 1 Continued

Family Functioning Measurement Tool	Domains of Family Functioning				Original Source of Psychometric Evaluation (First Author, Year)	Originally Established Psychometric Properties	Original Context(s) of Psychometric Evaluation
	BS	OP	CP				
Locke Marital Adjustment Questionnaire	—	x	x	x	Kimmel (1974) ⁵⁰	Construct validity; test-retest reliability	Married couples (sociodemographic characteristics were not reported in detail)
Malaysian Family Functioning Scale (MFFS)	x	x	x	x	Sumari (2021) ⁵¹	Internal consistency reliability; construct validity	Heterogeneous sample in Malaysia
Marital Satisfaction Inventory-Revised	—	x	—	—	Snyder (1997) ⁵²	Test-retest reliability; internal consistency reliability; discriminant validity; construct validity	Couples from the general population and couples in therapy
Maternal Antenatal Attachment Scale (MAAS), Maternal Postnatal Attachment Scale (MPAS)	x	x	—	—	Condon (1993) ⁵³	Internal consistency reliability; construct validity	Expectant couples
Parent Problem Checklist (PPC)	x	—	—	x	Dadds (1991) ⁵⁴	Internal consistency reliability; test-retest reliability; criterion-related validity	Married mothers from clinical and nonclinical samples
Parent-Adolescent Communication Inventory	—	—	—	x	Barnes (1985)	Construct validity; internal consistency reliability	Nationwide (United States) sample of mothers, fathers, and adolescents
Parental Bonding Questionnaire (PBI)	—	x	—	—	Parker (1979)	Construct validity; concurrent validity; test-retest reliability; split-half reliability	Medical students, psychiatric nurses, technical college students, and parents of children at a local school
Parental Dimensions Inventory	—	x	x	x	Schaefer (1965) ⁵⁷	Known-groups validity; internal consistency reliability	Seventh-grade children (White) in a suburban parochial school and institutionalized children exhibiting delinquency (White and Black)
Parental Relationship Questionnaire	—	x	—	—	Kenny (1987)	Construct validity; internal consistency reliability	First-year residential college students (primarily White) at the University of Pennsylvania
Parenting Alliance Inventory (PAI)	—	x	x	x	Abidin (1995) ⁵⁸	Construct validity	Parents, teachers, and childcare providers
Parenting and Family Adjustment Scales (PAFAS)	x	x	—	—	Sanders (2010) ⁵⁹	Construct validity; predictive validity	Parents (primarily mothers) recruited from around Australia via schools and

TABLE 1 Continued

Family Functioning Measurement Tool	Domains of Family Functioning			Original Source of Psychometric Evaluation (First Author, Year)	Originally Established Psychometric Properties	Original Context(s) of Psychometric Evaluation
	BS	OP	CP			
Parenting Style Scale	x	x	x	Lamborn (1991) ⁶⁰	internal consistency reliability	day care centers, online forums, and parenting newsletters via forum posts and school newsletters and flyers distributed across childcare centers and school
Prenatal Attachment Inventory	x	x	—	Muller (1993) ⁶¹	Construct validity; internal consistency reliability; concurrent validity; internal consistency reliability	High school students in Wisconsin and California Women with low-risk pregnancies recruited from several prenatal care sites in the San Francisco Bay Area
Protective Factors Survey (PFS)	x	x	—	Counts (2010) ⁶²	Internal consistency reliability; construct validity; criterion-related validity	Individuals receiving services from 11 community-based prevention agencies from across the United States
Quality of Marriage Index	x	x	—	Norton (1983) ⁶³	Construct validity	Couples in 4 US states (sociodemographic characteristics were not reported in detail)
Relational Support Inventory	—	x	—	Scholte (2001) ⁶⁴	Construct validity; internal consistency reliability	Adolescents attending secondary school in the Arnhem-Nijmegen region in The Netherlands
Scale of Racial Socialization for Adolescents (SORS-A)	x	—	—	Stevenson (1994) ⁶⁵	Internal consistency reliability; construct validity	African American, urban adolescents
Security in Family Functioning (SIFS) ^a	—	x	—	Forman (2005)	Test-retest reliability; construct validity; internal consistency	Adolescents and their caregivers from a public school in a middle-class suburb of a US metropolitan area.
Self-Report of Family Functioning (SRFF)	x	x	—	Bloom (1985)	Internal consistency reliability; construct validity	College students and married parents
Sibling Relationship Scale	—	x	x	Buhrmester (1990) ⁶⁸	Internal consistency reliability	Children in third, sixth, ninth, and 12th grade

TABLE 1 Continued

Family Functioning Measurement Tool	Domains of Family Functioning		Original Source of Psychometric Evaluation (First Author, Year)	Originally Established Psychometric Properties	Original Context(s) of Psychometric Evaluation
	BS	OP			
Structural Family Interaction Scale (SIFS)	—	OP	Perosa (1981) ⁸⁸	Construct validity; content validity; internal consistency reliability	Volunteer families from the western New York metropolitan area (majority living in suburbs, White, college educated, "intact"; families with 1 or more children)

Where possible, the citation for each measurement tool reflects the original publication that contains the most detail about the evaluation of its psychometric properties rather than its most recent use. BS, belief systems; CP, communication processes; OP, organizational patterns; —, not applicable. These and additional articles used to identify family functioning measurement tools and those references associated with original psychometric studies can be found in the Supplemental Information.

^a Indicates the measurement tool was identified by the research team before the database-search stage of the scoping review.

measurement development, consistent with the envisioned Family Ages and Stages tool (or suite of tools) as articulated by members of the Family Measurement Node within the Life Course Intervention Research Network.

First, established measures of family functioning tend to have static applications, capturing information about families at a particular point in time. Although informative, it remains unclear whether measures of family functioning are universally applicable across various "ages and stages" of family life. More generally, it remains unclear what specific ages and stages of family life are experienced as salient for families.

Indeed, the lifespan experiences of families as social systems do not often follow a predictable or linear trajectory, which can limit the applicability of some family functioning measurement tools, depending on the particular point-in-time experience of a family (eg, measures that include a focus on relational processes in a couple relationship would not apply to families in which only 1 adult is present). Again, we favor an inclusive definition of families, such that a family can be defined as "a continuing system of interacting persons bound together by processes of shared roles, rules and rituals, even more than shared biology."⁸ Future efforts to develop and refine measures of family

TABLE 2 Sample Characteristics in Articles From Which Family Functioning Measurement Tools Were Identified

Sample Characteristics	Number of Articles (%)
Race or Ethnicity	
Majority White	25 ^a (53)
Majority Black	4 (9)
Majority Latinx	2 (4)
Majority Asian	5 (11)
Majority Native	1 (2)
Majority multiracial or other	0 (0)
Race or ethnicity not reported	10 (20)
Education	
Majority less than high school	2 (4)
Majority high school	6 (13)
Majority greater than high school	9 (19)
Not reported	30 (64)
Income	
Majority high SES	6 (13)
Majority middle SES	8 (17)
Majority low SES	7 (15)
SES not reported	26 (55)
Respondent	
Parent	18 (38)
Adolescent	8 (17)
Multiple family members ^b	17 (36)
Not indicated	4 (9)
Family structure	
Same-sex couple	1 (2)
Divorced or single parent	4 (9)
Married or partnered	15 (32)
Not reported	27 (57)

Fifty percent of study samples were drawn from the United States, with the remaining samples being drawn from Asia (China and Malaysia), Australia, Central America (Panama), Europe (Belgium, Germany, Ireland, Italy, and Spain), Eurasia (Turkey), the Middle East (Iran), Scandinavia (Finland, the Netherlands, and Sweden), and South America (Argentina and Paraguay).

^a Includes samples from majority White countries that did not disaggregate by race or ethnicity.

^b Includes 2-parent dyads, parent-child dyads, and other configurations of family members.

functioning from a life-course perspective should seek to either (1) develop items that could be universally applied across various “ages and stages” of family life; or (2) develop sets of items that pertain to different plausible family ages and stages. Items could measure those aspects of family functioning that are particularly relevant for families at a particular point along their family’s lifespan. Developing optimal items consistent with these ideas will require extensive engagement with and input from families with varying backgrounds, structures or compositions, and experiences, as well as during different stages of family life. This work could also benefit from mixed methods research and insights offered by demographers and ethnographers.

Second, although identified measurement tools have been used and tested in various settings and populations, there remain opportunities to bolster our understanding of family functioning in diverse contexts with respect to racial or ethnic identity, socioeconomic status, and family structure, among other characteristics. Particularly troublesome are studies in which key information about sample characteristics are not reported sufficiently, or at all, when applying family functioning measurement tools to answer important research questions. Failure to account for key family characteristics makes it challenging to discern whether there exist universal patterns of family functioning that transcend the unique characteristics of families. Consequently, future efforts to develop and refine measures of family functioning should attend to the suitability of items with respect to a family’s identities and characteristics. Especially warranted are efforts to center the experiences

of Black, Indigenous, and people of color families and families that are not built on the nuclear-family model, given the relatively greater attention offered to members of the so-called standard North American family (ie, predominately White, married, opposite sex, monogamous couples rearing biological children) in the social, behavioral, psychological, and health sciences.^{16,17} Indeed, various demographic trends in the United States and across the globe have produced a rich diversity of family structures that warrant attention.^{18,19,20} From a psychometric standpoint, such efforts could include tests of measurement invariance that allow data analysts to determine whether (and to what extent) developed measures perform equivalently across different groups.

Third, there are opportunities for future measurement efforts to incorporate information about, or otherwise acknowledge, the larger contexts in which families are situated. From a life course perspective, attending to these contexts is consistent with the principle of historical time and place, which posits that the life course of individuals (and families) is “embedded in and shaped by the historical times and places they experience over their lifetime.”²¹ Such contexts can constrain or facilitate a family’s ability to exercise its agency and optimize the health of family members. The Contextual Model of Family Stress (CMFS) also emphasizes the contexts in which families are situated.⁸ Specifically, the CMFS posits that families are influenced by both external contexts, or contexts over which families have little to no control (eg, economy or history); and internal contexts, or contexts over which families have some control (eg, family values and

beliefs). Attending to features of various contexts can enrich understanding of family health development processes. The Sociocultural Family Stress Model further emphasizes racism, sexism, classism, heterosexism, and colorism as stressful contexts for families, with implications for family health development and functioning.²² Information on these fronts could be a beneficial feature of future measures of family functioning.

Our scoping review had some limitations. Foremost, it is improbable that our search yielded an exhaustive number of family functioning measurement tools. This is due, at least in part, to the parameters we placed on our search protocol, including our search terms and our de-emphasis of observational measures, studies published before 1970, and non-English language studies. As noted earlier, our goal was to identify family functioning measurement tools and assess their compatibility with family-health development and life-course perspectives. Thus, our scoping review serves as a general canvas of commonly applied measurement tools and the specific aspects of family functioning they aim to measure. Additionally, we did not include every developed iteration or revision of the measurement tools or the various psychometric studies that were conducted over time to generate evidence of validity and reliability in varying contexts.

Limitations notwithstanding, findings from our scoping review highlight a variety of family functioning measurement tools by which life course researchers can begin or continue to explore family processes as contexts for health and well-being. Our review also highlights opportunities for life course scholars to expand upon available measurement tools to

better align with our vision of a Family Ages and Stages tool (or suite of tools). Building on the important and valuable work evident in our review of existing family functioning measurement tools, a Family Ages and Stages tool would endeavor to measure relevant aspects of family functioning (that many existing tools do measure well) in a developmentally flexible and inclusive manner, such that important information could be obtained about families (1) at various life stages; (2) with various

backgrounds, identities, structures, and experiences; and (3) embedded in or impacted by various contexts that either facilitate or hinder family functioning. A Family Ages and Stages tool would align with various important perspectives, including life course theory, a family health development perspective, the CMFS, and the Sociocultural Family Stress Model. A Family Ages and Stages tool could also support the efforts of researchers, practitioners, educators, and health administrators who seek to

understand and support families and children across various stages of the life course, which can be diverse, nonlinear, and idiosyncratic.

ABBREVIATIONS

FRF: Family Resilience Framework

CMFS: Contextual Model of Family Stress

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