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Family Life Education: Translational Family Science in Action

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Abstract

Translational family science lies at the intersection of family research and the practice of family life education (FLE). Discussion of the foundational principles of FLE (education, prevention, strengths-based, and research and theory-based) and its key components (culture, context, content, and practice) provide a framework for considering the reciprocal relationship between family science and family life education in the context of translational family science. Further discussion is provided regarding possible barriers to progress and the need to better integrate discovery science and practice science.

Key Words: Family life education, family life education methodology, family well-being, prevention–intervention science, translational family science

Family science is the "scientific study of families and close interpersonal relationships" (National Council on Family Relations [NCFR], n.d.-b). Family life education (FLE) is rooted in research about individuals, families, and their environments; as such, FLE is the *practice* of family science and is therefore inherently *translational*. Because of their location at the nexus of the sciences of practice and discovery, family life educators (FLEs) are often directly involved in converting results from discovery science into real-world initiatives or programs that affect family well-being and benefit communities. Therefore, FLEs occupy a pivotal space for ensuring that the programs and services provided to families are based in solid evidence and in turn that research is informed by practice.

The aim of this article is to demonstrate the integral nature of FLE to translational family science. To achieve this goal, the article begins with a brief overview of FLE, emphasizing its foundational principles (education, prevention, strengths-based, and research and theory–based) with an eye toward how these principles are reflective of translation and the interaction between the sciences of discovery and practice. Key components of FLE (culture, context, content, and practice) provide a basis for discussion of FLE as translational science. The article closes with discussion of possible barriers to progress and a call to action to more fully integrate discovery science and practice science.

Family Life Education—Overview

The purpose and goals of FLE are "to increase knowledge and develop skills so families may build on their strengths to function at their optimal level" (Myers-Walls, Ballard, Darling, & Myers-Bowman, 2011, p. 370). It provides a primarily preventive and educational approach to healthy family functioning within a family systems perspective (NCFR, n.d.-c). When translating family science to practice, FLE professionals consider societal issues such as economics,

education, work–family balance, parenting, sexuality, gender, and more within the context of the family. They believe that problems such as substance abuse, domestic violence, unemployment, debt, and child abuse can be addressed most effectively from a perspective that considers individuals and families within the context of larger systems, and that knowledge about healthy family functioning can be applied to prevent or minimize many problems such as these. FLE provides this information through an educational approach, often in a classroom-type setting or through educational materials (NCFR, n.d.-d).

Foundational Principles and Relevance to Translational Science

Four foundational principles undergird the practice of family life education and set it apart from related professions: education, prevention, a strengths-based approach, and a foundation in research and theory. Each is influenced by the reciprocal relationship between family science and the practice of FLE.

Education

Education is an important underpinning of the practice of FLE. It is based on the premise that individuals can be empowered to function at their optimal level through educational techniques and approaches that teach knowledge and build skills. FLE content is shared in traditional classroom venues but has evolved to include online learning opportunities, use of social media, and increased individual instruction including coaching relationships.

Translational science is essential to facilitate the design and delivery of successful evidence-based FLE programs. In translational family science, research involving the empirical examination of families and their environments informs educators about family systems, dynamics, and strengths, as well as the issues and problems families are facing. Programs can then be designed to address these issues, and program evaluation provides opportunities to

inform research about program and delivery effectiveness in real-world settings; this in turn can identify areas for improvement to increase the likelihood of successful replication. Sustainability provides a foundation for further exploration of successful program implementation and delivery.

Prevention

Prevention is another important foundational principle of FLE. FLE in prevention science focuses on the structural factors (social, economic, and political contexts) and circumstances of daily life, as well as individual risk and protective factors that affect the health and well-being of individuals and families. FLE operates on the premise that many family problems are the result of a lack of knowledge or skills relevant to day-to-day living. Providing education about communication skills, child development, parenting, relationships, and management of resources such as money and time can effectively minimize or avoid problems and enhance family functioning.

The translational science framework embraces *prevention science*—the systematic study of efforts to reduce the incidence of problems by promoting adaptive behaviors, which is at the core of FLE. FLE largely deals with *primary prevention*, which involves protecting people before something happens, and *secondary prevention*, which involves intervening after something has occurred to halt or slow the progress of the problem at its earliest stages. However, it is often appropriate and prudent to implement FLE as *tertiary prevention*, that is, helping people manage complicated, long-term problems to prevent further harm, with the understanding that acquiring new knowledge and skills can reduce the likelihood that similar issues or concerns will occur again in the future (Darling & Cassidy, 2014).

A Strengths-Based Approach

FLEs recognize the inherent knowledge and capability of individuals and value the role they can play in their own learning. This strengths-based prevention and education approach to family issues, while grounding practice in research and theory, differentiates FLE from other approaches to working with and for families. For example, family life educators often emphasize the importance and value of engaging learners in the educational experience rather than approaching the situation as an opportunity to instill knowledge onto students (Freire, 1970). In many situations, participation in FLE results from a *felt* need or desire to learn a particular topic on the part of learners. This motivation to learn may result in a more positive and affirming experience than a situation in which others compel learners (an *ascribed* need) to attend (Myers-Walls et al., 2011).

A Foundation in Research and Theory

The proliferation of advice and information available on the Internet has provided opportunities for most individuals to quickly find answers to questions. Additionally, people who have found success in parenting, relationships, or any other number of personal experiences have multiple opportunities to share their advice through blogs, books, articles, or classes. Although there are certainly situations in which this information can be helpful and effective, the information may be based on subjective experiences, beliefs, perceptions, or traditions rather than empirical evidence and research; one of the foundational principles of FLE is that it is research-based. FLE programs are designed around and supported by research-based information about human development, parenting techniques, relationship skills, and sexuality, as well as the best environment for positive family functioning. Additionally, the approaches and methods used for transmitting information are frequently evaluated in an effort to demonstrate cause, effect, and sustainability. Even if programs are not supported by robust evaluation, they can be influenced

and informed by evidence-based programs and practices (Small, Cooney, & O'Conner, 2009). The intentional nature of FLE also contributes to the integrity of the information provided. Learning opportunities are typically well planned and designed, affording the ability to base curricula on carefully formulated and executed research.

The incorporation of research into the development and implementation of FLE programs and activities includes the infusion of theories relevant to individual and family functioning (e.g., social exchange theory, family systems theory, family ecology, family developmental theory, and family stress theories), as well as theories relevant to topic areas such as sexuality education, parenting education, relationship skills, communication, and human development. Theories relevant to adult learning, program planning, and implementation are also used. Thus, the programming and content of FLE is theory-based research, which contributes to the effectiveness of FLE.

Research and theory as a foundational principle for FLE is also essential to translational family science, which characterizes the process through which research findings are implemented. The bidirectional nature of translational science provides information for the development of practice or intervention, and considerations of practical problems stimulate questions for researchers (Clay, 2011).

Key Components of Family Life Education

There are four key operational components infused within the foundational principles of FLE. These components include *culture* to better recognize the characteristics, needs, issues, and values of learners and teachers involved in FLE; *context* to better understand the environmental conditions; *content* to address the relevant topics in daily family life; and *practice* to incorporate the best possible methodology to facilitate participants' learning experiences. When FLE

functions as translational family science, there is a reciprocal relationship between how research and theory are incorporated into practice and, in turn, how implementation of FLE activities influences subsequent research.

Culture

Culture is an important component of FLE programming and practice. *Culture* is the total way of life of people—the customs, beliefs, values, attitudes, and communication patterns that characterize a group and provide a common sense of identity (Darling & Cassidy, 2014). Understanding the culture of individuals and families is essential for those who study and teach about families because family professionals often need to extend their knowledge and the focus of their programming to families from cultures different from their own. Those with ethnocentric views of culture and families may be prone to judging other cultures by the values and standards of their own culture. Therefore, FLEs and translational scientists need to incorporate an *ethno-relative* approach in which cultural differences are understood relative to one another rather than using a deficit approach (i.e., compared with the dominant culture or subjective ideal). For example, cultural variations in family characteristics need simply to be viewed as differences, not assessed hierarchically as better or worse than the dominant group.

In addition to being nonjudgmental about cultural differences, within FLE it is important to address the needs of the audience, recognizing that the audience can vary by age and developmental stage, socioeconomic status, gender, race or ethnicity, learned social roles, life or family circumstances, or family configuration. Understanding these differences is essential when selecting and presenting content and creating prevention–intervention learning experiences.

FLE plays an important role by moving discovery science forward, bringing to light differences across families, communities, and cultures. Implementation of programming in

multiple settings and with multiple audiences can provide data that lead to a better understanding of what programs and methods work best in actual practice. This translational aspect of FLE is a major strength because it increases the effectiveness of programs. For example, basic research often does not directly address racial minority families due to limitations with regard to funding, access, and researcher interest. Data regarding FLE with diverse groups are needed to understand which programs and methods work best for them, and programs based on culturally relevant basic research may need to be developed, evaluated, and disseminated to ameliorate family concerns in a particular culture. Thus, the translational task of producing culturally relevant material is a key element of FLE.

With increasing international interest in FLE, a recent qualitative study of FLE in 38 countries on six continents indicated that FLE exists to differing degrees in various cultures, and the focus, content, and length of the programs vary considerably (Darling & Cassidy, 2014). Some FLE programs are in the public schools (Taiwan, Japan), others are in the community (Australia, United Kingdom, South Korea, Israel), and still others exist via social media (e.g., text messaging about HIV/AIDS in Nigeria). People in some countries are interested in marriage education; people in other countries attach stigma to attending such courses (e.g., China, Hong Kong, Malaysia, Japan). Other countries and cultures have major health issues that govern their programming efforts, such as people living with HIV/AIDS. In Europe, an evolving family crisis exists with the migration of refugees who require considerable support, and in Syria families face turmoil and conflict from a multiyear war.

Through dissemination research, FLE helps to identify next steps in discovery research focused on understanding how best to provide FLE education or to formulate policy in both the United States and abroad. Evaluating and recording the effectiveness of approaches in different

settings and helping to identify next steps in discovery family science is a key contribution of FLE. For example, some countries have major government involvement, such as laws in Germany regarding the prohibition of violence in parenting or in Taiwan regarding the Family Education Act, which requires all schools to provide FLE content each year (Darling & Cassidy, 2014; Darling & Turkki, 2009). Prevention–intervention and dissemination research are still in their infancy in some countries because the basic family science on which they depend is only beginning to emerge. In the United States, dissemination research must be grounded in pluralistic perspectives of FLE, where "greater cultural awareness and sensitivity will enrich" FLE (Doucet & Hamon, 2007, p. 39). Evaluation research is needed with consideration for cultural characteristics in program content and development to provide the best dissemination possible on family issues within the relevant cultural context. Part of enhancing quality of life and family well-being is to assure that programs match family needs and the culture. This is done in FLE by pairing program evaluation with discovery within specific ecological systems and contexts to address underlying theoretical questions about how a prevention–intervention or educational program may work well in one setting and why it does not work in another setting. Evidence for program effectiveness may be sound in a program's original culture, but the program may not be appropriate for other cultural contexts.

Context

FLE plays a key role in assessing the effectiveness of applied programs by evaluating how context affects programming and policy. Context is an important factor influencing basic family science, prevention–intervention program development, and dissemination of FLE research-based content among educators, policymakers, and the general public (Colditz, 2012). FLE research provides information about the interrelated conditions in which something occurs that

can inform efforts to encourage, intervene, or prevent the same in others. For this reason, FLEs and translational family scientists need to understand characteristics of their audience or the setting, as well as various methods of both education and research that may factor into outcomes.

FLE needs to be translational in a way that effectively supports families from different backgrounds in varied settings. Although theories are helpful for providing context, it is important to incorporate theories that are broad enough to apply to a variety of populations, behaviors, and outcomes and that allow modifications for specific situations and research questions (Lemon et al., 2013). A family ecosystems approach and developmental theory are good examples of broad contextual theories, although there are several other core theories and frameworks frequently used by FLEs. To better understand family functioning and behaviors, theories can be used to guide the research, content, strategies incorporated in FLE programs, program development, and the interpretation of outcomes.

FLE's focus on education, prevention, and intervention across all ages is another mechanism through which FLE bridges discovery and applied practice. Families are multigenerational, so integrating systems and ecosystems paradigms with a multigenerational approach to family developmental theory can be helpful. Understanding the issues children, adolescents, adults, and later adults are facing and the role of their multifaceted environments can provide insight into the content, strategies, and programs that can best serve them. Success is more likely for educational programs developed, presented, or evaluated following careful consideration of how multiple factors might interact to shape audience needs and experiences.

Content

FLE encompasses topics of relevance to daily family life. Specifically, the NCFR has identified 10 FLE content areas, including families and individuals in societal context, internal dynamics of

families, human growth and development across the life span, human sexuality across the life span, interpersonal relationships, family resource management, parenting education and guidance, professional ethics and practice, family law and public policy, and FLE methodology (NCFR, n.d.-a). The NCFR's FLE Framework organizes content relevant to the life stages of childhood, adolescence, adulthood, and later adulthood in each of the 10 content areas (Bredehoft & Walcheski, 2011). FLEs can select the most appropriate organization of concepts and methodologies to meet the needs of their specific audiences. Each content area includes pertinent theories and consideration of how communication, decision-making, and problem-solving relate to the topic area.

FLE's translational nature and the task of connecting basic science to applied practice and then practice to science necessitates a unique and broad preparation. Providing research-based content requires that educators be both informed consumers of research and capable of program development and dissemination. Consistent with a goal to ensure competent FLEs, in 2007 the NCFR launched a national exam for obtaining the Certified Family Life Educator (CFLE). The development of the 2007 exam and the update in 2014 included a practice analysis designed to confirm the expectations for entry-level FLEs with regard to knowledge, skills, and abilities (Darling, Fleming, & Cassidy, 2009; Schroeder Measurement Technologies, 2014). This practice analysis is an example of prevention–intervention research in that it was designed to provide a better understanding of what is needed to be a competent teacher and provider of FLE. The CFLE practice analysis ensured that the exam used to assess candidates reflected the industry-identified knowledge, skills, and abilities for the practice of FLE, reinforcing the translational nature of the practice of FLE.

In this way, areas of need can be identified as a means to ensure that training provides the

content necessary to be an effective and well-rounded educator (Table 1). The NCFR practice analysis identified the two content areas with the lowest mean scores of importance as *human sexuality across the life span* and *family law and public policy*, and opinions on the importance of competencies for these two areas were widely disbursed as well. This is likely reflective of divergent cultural values concerning sexuality, as well as a relatively low regard for law and policy, which may be due to several reasons: Some FLEs may lack full understanding of the policy-making process, do not see the relevance of law and policy to their practice, feel frustration due to ongoing changes and complexities in laws and policies, are employed in settings with restrictions on political involvement, or have insufficient time and resources to address policy-related issues (Darling et al., 2009).

Although progress is being made in prevention–intervention research concerning the qualities of competent teachers, including both necessary knowledge and skills, additional research is needed to determine whether competent teachers actually provide better programs as well as what types of approaches and programs work best with different audiences and in different settings (Ballard & Taylor, 2012; Darling & Cassidy, 2014). Some evidence-based programs are noted in the literature, but their overall success regarding replication has not been sufficiently documented to expand dissemination. Continued study of best practices will enhance the effectiveness of FLE.

Practice

FLE is more effective when professional practice carefully considers and incorporates culture, context, and content. Three of the 10 FLE content areas reflect the practice of FLE rather than content: *professional ethics and practice*, *FLE methodology*, and *family law and public policy*. Prevention–intervention science provides empirical information about appropriate ethical

interactions, relevant and effective curricula, and proven teaching methodologies. FLEs frequently work within settings affected by policy and therefore have the ability to make unique contributions to policy decisions based on daily practice.

Professional ethics and practice. In 2009, with a goal of promoting guidelines for professional decision-making and assurance of professional standards to the public, NCFR introduced a code of ethics based on ethical guidelines developed by the Minnesota Council on Family Relations (MCFR, 2009). These guidelines resulted from a series of workshops and focus groups with family professionals conducted by the Ethics Committee of MCFR and reflect the application of research to practice.

A critical process when dealing with a potential ethical situation involves consideration of a series of questions including the following: Is sufficient and credible information available? What are alternative courses of action, and which alternative will provide the most benefit in the present situation? Perhaps because ethics often involve both inner reflection and dynamic interactions throughout a complicated and often ambiguous process, it might appear that definitive success cannot be measured and there is no guarantee of successful solutions to ethical dilemmas.

Fortunately, prevention–intervention research reminds us of the importance of the "translation, transformation, and exchange of the cognitive (information) and affective (motivation) elements of meaning systems" (Palinkas & Soydan, 2012, p. 89). Prevention–intervention research findings have shown that education improves ethical reasoning processes within the context of FLE (Cummings, Maddux, Cladianos, & Richmond, 2010; Klugman & Stump, 2006). On the basis of various ethical approaches, programs and courses focused on ethics have been created to provide knowledge about related principles, to nurture development

of critical thinking processes, and to engage in co-learning within the context of meaningful human relationships. Discovery research has helped to inform this aspect of FLE, but there is a need for more prevention–intervention research to answer questions such as the following: What causes values to change or remain stable? What role do values play in solving ethical dilemmas and to what extent? Is there a pattern of how critical thinking skills emerge and in what order? How are perceptions affected by cultural expectations?

Because of its translational nature, FLEs are not only able to address the tensions in application between personal morals and the socially constructed nature of ethics in the application of programs, but they are also able to translate needed areas of consideration for further study. For example, important questions exist, such as do ethical knowledge and skilled critical thinking learned in one setting transfer to other settings, and especially to professional practice? Are the ethical meaning systems—that is, shared understandings of what is appropriate behavior—similar to or compatible between research and practice? The social exchange of knowledge, attitudes, and practices enables practitioners and their stakeholders to develop synergy, trust, and ability to honor differences—all supported by a professional ethical foundation. As Schillinger (2010) noted, effectiveness is an essential criterion so discoveries (universal or particular) are not only applied in individual practice but also will attract funding sources, support of family-related organizations, and become widely used to benefit those we serve.

Family life education methodology. The aforementioned aspects of FLE are translated into application through construction of a mindful design—the purposeful process of arranging many essential components into a coherent big picture. A typical model of educational design is to integrate learning objectives, use teaching and learning strategies that will meet those

objectives, and assess student success or level of achievement (Fink, 2005). This and similar conceptual frameworks have been disseminated to most educators and broadly implemented, illustrating how "universal" interventions can be efficient, effective, and widely replicated in educational design (Spoth, 2008).

The dissemination and application of discovery science to inform applied practice is evident in FLE. Situational and structural factors—such as the program type (formal or nonformal), format (traditional, online, or hybrid), setting (county extension office, prison, online), social expectations, learner characteristics (culture, age, gender), instructor characteristics (experience, knowledge, personality), class size, and so on—need to be considered when designing FLE for specific situations. FLE within a program to teach life skills to incarcerated adults will differ dramatically from a government program to assist military families deal with stress and anxiety. Spoth (2008) suggested that educators "identify which intervention components are those that most contribute to positive outcomes" (p. 418). For example, learner characteristics are important to consider as a component of design (Sternberg 1997), and these have been studied quite extensively. Gardner (1999) discovered that students have different "intelligences" and thus learn through varying modes. Whereas a person with a linguistic preference will learn best through reading, writing, and discussion, a person with a visual preference will learn better with video media, charts, graphs, drawing, and art. Despite improved focus on translating and adapting prevention–intervention models and research evidence into the diverse settings of FLE practice, more research is needed to answer design questions such as: What will have the biggest impact on families in general, as well as families with unique needs? What outcomes should be tracked to know if well-being is enhanced? How

long will it take to show progress and how will it be observed? How can this information be integrated into the next steps of discovery science (Colditz, 2012)?

Within the translational framework, it is important to determine how effective particular educational designs and methods have been; therefore, FLEs need to assess how well learners have met objectives (Fink, 2005; Spoth, 2008). Research experiments, scores on tests and other measures, student reports of their experiences, and observations of actions or products typically provide one-time evidence that teaching methods and learner activities improved learning. However, prevention–intervention science and FLE are practiced in postmodern society where objectives may be hard to identify, complexity seems constant, and multiple viewpoints often conflict. What objectives are most important to document learning within a pluralistic and continually changing environment? Even a basic research question such as "What should be done about my child's negative behavior?" is challenging because learners will have various understandings and situations relative to family needs, understanding of child development, family culture, religious considerations, and multiple other relevant aspects of the situation.

FLEs cannot always provide the "right" answers, given the multifaceted nature of family issues, which poses challenges in working with diverse families and dynamic contexts. Simultaneously, the challenge of examining the application outcomes scientifically and having these inform next questions in discovery is a strength that FLE provides to family education, programming, and policy. Given the diversity of learners, FLEs must help them identify their own needs, set their own objectives and goals, analyze and critique their situations, obtain individually necessary needed skills and resources, communicate with others for common decisions, consider alternatives and their consequences, and take actions in a way that is meaningful. Helping learners set their own objectives via critical science allows adaptation and

flexibility to meet the needs of diverse learners (Allison & Rehm, 2011). Although it may not be as efficient in providing specific feedback and assessment that can be generalized to wide audiences, this approach may be effective by translating specific information and approaches to meet unique needs (Spoth, 2008).

Building on information from evaluations of applied practice, discovery science helps FLEs construct and examine new formats and methods that are available through technologies. FLE can be taught fully or partially online, Twitter and Instagram can provide modern ways to communicate, and family problems or tasks can be simulated in virtual environments such as Second Life. FLE practitioners need to understand which methods of using technology work best and how best to implement those technologies in learning contexts (Rehm, Allison, Bencomo, & Godfrey, 2013). The effectiveness and integration of this information within family systems is one way that evaluation informs discovery.

Further translation of how to best use these tools to serve and support families is a challenge, and FLE provides the foundation to answer these questions and create effective interventions. Research often starts with giving a pretest, then a variable such as a teaching method is introduced, and a posttest is conducted after the intervention is completed. Changes in performance indicated through the posttest are generally attributed to the intervention, but with due caution based on threats to the validity that cannot be ruled out based on the pre–post research design implemented. Internal validity can be assessed regarding the extent to which changes in the level of some dependent variable, such as improving family communication or nutrition status, is the result of a program or intervention (Dearing, n.d.). Prevention–intervention research can be used to assess how well internally valid interventions fare when tested under real-world field conditions. FLEs recognize that successful interventions are context-dependent

and that situational factors may or may not transfer to other people or contexts. Translational research gains external validity when FLE programs achieve positive effects across different sites. In sum, data collected throughout formative and summative evaluations of interventions can be used to identify and confirm effective educational approaches and content.

Family law and public policy. Although FLEs generally focus on the development and implementation of their curricula, some may have opportunities to educate politicians or legislators about a specific issue that families are facing, to promote certain evidence-based programs, or to describe public support around requiring credentials for practitioners. For example, CFLEs are recognized in Texas as qualified to provide court-mandated parenting education (Darling & Cassidy, 2014). Policymakers generally want empirical data so that their decisions can be translated into effective results. Engaging in prevention–intervention and translational science strengthens the skill and knowledge base of FLEs and positions them to make unique contributions as "approved providers" of family-related education at the federal, state, and local levels. For example, FLEs can provide evidence of broadly valued implementation outcomes such as efficacy, safety, effectiveness, equity, client- or learner-centeredness, and timeliness.

Translational science and prevention–intervention science play critical roles in communicating programmatic efforts to establish policies capable of enhancing the well-being of families. Data can be used to draw conclusions as well as to gain feedback from those served (Grimshaw, Eccles, Lavis, Hill, & Squires, 2012) and then disseminated through networks that are visible to politicians, policymakers, and other community leaders. Translational family research can be used to improve the way policy is carried out in practice. For example, the Adverse Childhood Experiences Study has identified the long-term and negative impact that

experiencing sexual and physical abuse, neglect, parental divorce, or poverty in childhood can have on the health and well-being in adulthood (Felitti et al., 1998). These findings hint at numerous policy initiatives focused on preventive efforts to reduce the incidence or impact of adverse experiences for children that FLEs could pursue.

Outcome: Family Well-being

Outcomes are the end results of prevention–intervention programs designed for individuals or families and ideally include results people and communities desire, such as health, family functioning, quality of life, satisfaction, or family well-being (Schillinger, 2010). Various health-related preventions and interventions can be readily evaluated and disseminated. The development of outcome measures for prevention–intervention and dissemination methods within FLE, however, often focus on the success of the program at enhancing participant psychosocial well-being (Schillinger, 2010). That said, compared with most health-related outcomes, the measurement of well-being and related constructs, such as feelings of happiness or satisfaction with life, is more subjective because they cannot be directly measured with self-reports or observation (Centers for Disease Control and Prevention [CDC], 2013). Thus, replicated, longitudinal, or triangulated findings are likely to be most credible and influential for informing the decision-making of public policymakers. Measurement challenges aside, well-being is associated with numerous health, work, and family benefits, including decreased risk of disease, illness, and injury; better immune functioning; increased work productivity; and longevity (CDC, 2013).

Conclusion

Translational science is still a relatively new field. Although FLE has incorporated applied research and evidenced-based practice for some time, the term *translational research* was first

noted in the Medline database in 1993, and in those early years, there were few references to translational science outside of cancer research (Rubio et al., 2010). Currently, various models for translational science exist, with some being source-based through the lens of the researchers and their context, community-centered focused on practice settings, or systems-oriented to conceptualize the overall paradigm of implementation and dissemination (Colditz, 2012). Although the goals of translational science are still evolving in multiple fields, as that process unfolds in family science, we believe that translational family science will emerge as an integrated social science that incorporates FLE methodology and practice because translational family science is FLE in action and FLEs are the quintessential disseminators of research-based knowledge about and for families.

Just as translational science is evolving, so too is the profession of FLE and the intersection of these two paradigms. Nonetheless, FLE has a longer history than translational science, and although both fields involve colleagues from multiple disciplines, FLE is relatively advantaged by being associated with a national organization that brings family educators and scholars together in one professional environment via conferences, journals, and ongoing communication. Further, NCFR has a certification credential (CFLE) to promote competence of FLE providers and an online resource bank to assist FLEs with program preparation. Conversely, although various resources can be found online, there is no unifying professional organization for translational science to coordinate and facilitate implementation and dissemination.

Regardless of paradigm, translating research into practice is essential but not without challenges (Evans, 2012). Many programs or approaches may be effective but lack funding and staffing, which makes it difficult to afford and implement an extensive and well-designed evaluation. Another issue is the dearth of funding available for large-scale implementation

research. For these reasons, translational science is far more advanced in the medical field than in the social sciences. Although 2015 expenditures for U.S. medical and health-related research and development were $158.7 billion (Research America, 2016), funding of health services prevention–intervention research, models of care, and service innovations tend to represent less than 5% of research funding (Dorsey et al., 2010; Woolf, 2008). This exemplifies the low priority of research designed to develop and expand scientifically validated approaches to care. There is also an apparent 17-year gap between the funding of research and putting it into practice (Balas & Boren, 2000). These numbers suggest that it may be fruitful to assess the economic benefits of family preventative interventions, both with cost-effectiveness and benefit–cost analyses. Some programs have been evaluated along these lines, and positive outcomes have been found (e.g., Rose & McCullough, 2017; Waldrop, 2014), but most preventative interventions have not been evaluated for their economic benefits (Spoth, 2008). That said, research indicates that every dollar spent for preventive interventions returns $2 to $42 in future costs, summing to a savings of as much as $31,000 per participant (Catalano et al., 2012).

Given that funding for implementation and dissemination research is low, it follows that publications on implementation and dissemination research are scarce (Colditz, 2012), and that the number of journals focused on translational research is also small. Consequently, those articles that do exist based on translational science tend to be published in a variety of journals related to specific areas of content and practice. To enhance the funding and publication prospects of translational research, elements that might limit or enhance translation need to be examined. For example, using small and unrepresentative samples of participants and settings precludes generalization of the results (Schillinger, 2010), and research is needed that can inform decisions concerning what and how to implement or disseminate programming (Colditz, 2012).

Indeed, although FLE has resulted in many evidence-based programs, emphasis must also go beyond individual program evaluation to include translation, implementation, and dissemination of evidence-based best practices and programs. All said, even as science and practice and the relationship between them continues to evolve, we can be sure that translating and communicating successful practices, programs, and policies must take a more prominent role in the future development, effectiveness, and promotion of FLE programs.

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Table 1

FLE Content Areas Ranked by Mean Order of Importance With Top Two Competencies per Area

Ranked FLE Content Areas and Top 2 Competencies/Area	*M*	*SD*
Professional Ethics and Practice (*n* = 7 competencies)	4.36	0.78
1. Demonstrate respect for diverse values		
2. Demonstrate professional attitudes, values, behaviors, and responsibilities to clients, colleagues, and the broader community that are reflective of ethical standards and practice: Establish and maintain appropriate personal and professional boundaries		
Family Life Education Methodology (*n* = 15 competencies)	4.33	0.90
1. Create learning environments that are respectful of individual, vulnerabilities, needs, and learning styles		
2. Demonstrate sensitivity to diversity and community needs, concerns, and interests		
Parenting Education and Guidance (*n* = 12 competencies)	4.27	0.83
1. Promote healthy parenting from a child's and parent's developmental perspective		
2. Apply strategies based on the child's age/stage of development to promote effective developmental outcomes		
Internal Dynamics of Families (*n* = 8 competencies)	4.24	0.81
1. Develop, recognize, and reinforce strategies that help families function effectively		
2. Facilitate and strengthen communication processes, conflict-management, and problem-solving skills		
Human Growth & Development Across the Life Span (*n* = 6 competencies)	4.11	0.84
1. Recognize the impact of individual health and wellness on families		
2. Assist individuals and families in effective developmental transactions		
Interpersonal Relationships (*n* = 7 competencies)	4.09	0.88
1. Develop and implement effective communication, problem-solving, and anger/conflict management strategies		
2. Recognize the impact of personality and communication styles		
Family Resource Management (*n* = 15 competencies)	4.07	0.87

1. Apply and facilitate effective decision-making processes: assessment of individual and family needs		
2. Apply and facilitate effective decision-making processes: identification and evaluation of options and resources		
Families and Individuals in Societal Contexts (*n* = 6 competencies)	4.05	0.85
1. Identify factors that influence the relationship between work, personal, and family life		
2. Recognize the reciprocal interaction between individuals, families, and various social systems (e.g., workplace, health, legal, educational, religious/spiritual)		
Human Sexuality Across the Life Span (*n* = 9 competencies)	3.70	1.05
1. Recognize the psychosocial aspects of human sexuality: risk factors (e.g., substance abuse, social pressures, media)		
2. Recognize the psychosocial aspects of human sexuality: characteristics of healthy and unhealthy sexual relationships		
Family Law and Public Policy (*n* = 8 competencies)	3.53	1.00
1. Identify current laws, public policies, and initiatives that affect families		
2. Identify current laws, public policies, and initiatives that regulate and influence professional conduct and services		

Note. Range: 1 (*of no importance*) to 5 (*extremely important*). FLE = family life education.