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Translational family science and forgiveness: A healthy symbiotic relationship?

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Translational Family Science and Forgiveness: A Healthy Symbiotic Relationship?

Frank D. Fincham *Florida State University*

Department of Child & Family Sciences, Sandels Building 225, Florida State University,

Tallahassee, Florida 32306-1491 (ffincham@fsu.edu).

Abstract

This article explores how translational family science might be instantiated by considering research on forgiveness in close relationships. Relevant historical context is provided to traverse ground in multiple disciplines in an attempt to avoid repetition of past errors. The translational science continuum (T1 to T4) is considered and specific examples of each type of translation are outlined. A set of explicitly stated implications are offered in the course of the analysis. These implications speak to lessons that can be learned for translational family science from the examination of forgiveness in a relationship context as well as mandates for forgiveness research that become apparent when research on this construct is viewed through the lens of translational family science. The potential for a healthy symbiotic relationship between translational family science and research on forgiveness in relationships is explored.

Key Words: Forgiveness, marriage, translational science.

Some historical context clarifies why attention to translational family science is propitious, especially given its central focus on family well-being (Grzywacz & Allen, this issue). At the turn of the 20th century, concern among social reformers about the increasing number of families experiencing deleterious social and economic conditions gave rise to the scientific study of families (Christensen, 1964). The American Sociological Society focused its 1908 conference on

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“problems of interpersonal relations in the family” (Burr, Hill, Nye, & Reiss, 1979, p. 40), and by the time a multidisciplinary professional association of researchers and practitioners was established in 1938 (National Council on Family Relations [NCFR]), some 800 articles on the family had been published in scientific journals (Aldous & Hill, 1967). Several major intellectual traditions helped shape the scientific study of families, including symbolic interactionism, family sociology, psychiatry, family therapy, developmental psychology, learning theory, and clinical psychology (Gottman, 1979; Jacob, 1987). A historical account from the perspective of family science per se makes clear the pivotal role played by practitioners in developing the interdisciplinary study of families (see Hamon & Smith, this issue; Hamon & Smith, 2014; Hollinger, 2002; NCFR Task Force, 1988). Since its inception, then, the scientific study of families has reflected concern about the well-being of families and this ongoing interest is shown by the contribution of disciplines such as psychiatry, family therapy, and clinical psychology to understanding families.

Given these circumstances, it is common for those who study families to consider what models of translational science taking root in other disciplines seeking to improve human well-being can offer to the family field. Therefore, in the present article, I explore how a translational science perspective might be applied to an emerging area of research: forgiveness in close relationships. In doing so, implications for the realization of a translational family science are highlighted, as are the ways in which this exercise might advance understanding of forgiveness. It is hoped that the dialectical relationship that emerges, in which forgiveness scholarship informs and is informed by translational family science, will itself instantiate what it means to engage in translational family science.

PROLEGOMENA: PERTINENT HISTORICAL CONTEXT

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As noted by Grzywacz and Allen (this issue), there has been pervasive adoption of *translational science* models since the emergence of the term. Although new terminology has arisen, the motivation behind it is somewhat older as reflected in such ideals as the scientist-practitioner model in clinical psychology. Formally adopted at the Boulder Conference in 1949, the scientist-practitioner or Boulder model was designed to integrate science and practice by training psychologists in both endeavors. Concerns about the failure to effectively bridge science and practice soon emerged (see Frank, 1984), and it behooves family scientists to learn from such efforts as we examine what translational science has to offer.

Implication 1. *Constructing an effective translational family science requires avoiding the pitfalls previously encountered at the interface of science and practice and building on training and execution models that have emerged in other areas of translational science* (e.g., Ameredes et al., 2015; Gonzales, Handley, Ackerman, & O’Sullivan, 2012; Rubio et al., 2010).

The present exploration of translational family science also takes place in the context of a long-standing and ongoing examination of the field of family science. Despite the early organizational success and accumulated literature noted earlier, in the 1980s, the status of the field as a discipline was questioned when it was argued that the study of families “depends for explanatory power on other disciplines” (Davis, 1984, p. 1; but see Burr, 1985, for a response). Prompted by circumstances that “created an ‘identity problem’ in the family field,” Burr and Leigh (1983, p. 467) defended the disciplinary status of the field and labeled the discipline *famology* (Bailey & Gentry, 2013, provided a contemporary analysis of how the family field meets Burr and Leigh’s criteria for a discipline). A newsletter subsequently announced the establishment of a task force for the development of a family discipline (Burr, 1984), and within

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a few years family science was defined as “the field where the primary goals are the discovery, verification and application of knowledge about the family” (NCFR Task Force, 1988, p. 98). The training of family scientists was also later addressed (Ganong, Coleman, & Demo, 1995), but concerns about the multiplicity of discipline and department names has persisted (Hans, 2014). This has led to the recent warning that “Without a clear and shared identity and nomenclature, the field seems likely to fade” (Gavazzi, Wilson, Ganong, & Zvonkovic, 2014, p. 335) and an NCFR Task Force on the Future of Family Science, formed in 2014, is mandated to consider “questions about the name of the field . . . and expanding the reach and impact of the field to strengthen families” (NCFR The Future of Family Science Task Force, 2014, p. 1). My examination of forgiveness and translational science has an important implication for this context, and hence I turn directly to it.

FORGIVENESS

In this article the field of forgiveness research is used as a model to instantiate translational family science. This field provides a good exemplar because forgiveness is an inherently interpersonal construct central to family functioning that, like the field of family science, seeks to integrate the sciences of discovery and practice. As I turn the focus of this paper to forgiveness, I begin by clarifying the nature of this complex construct.

Although forgiveness is a “goal commonly advocated by all of the world’s long-standing religions” (Thoresen, Luskin, & Harris, 1998, p. 164), scientific research on forgiveness largely began to emerge in the 21st century. Only five studies on forgiveness were published before 1985 (Worthington, 1998), and an annotated bibliography on forgiveness in 1998 contained 46 studies (McCullough, Exline, & Baumeister, 1998). However, the exponential growth of the field since then continues unabated, and today hundreds of empirical studies exist on forgiveness.

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Because it is a complex construct, considerable effort was expended initially on defining forgiveness, and disagreements permeated the field for several years. By 2005, however, definitional controversy abated (Worthington, Van Oyen Witvliet, Pietrini, & Miller, 2007) with acceptance of the idea that forgiveness entails a freely chosen motivational change in which the desire to seek revenge or to avoid contact with the transgressor is overcome. This reduction in negativity (involving resentment-based motivation, cognition, and emotion) toward the transgressor has been accepted as the operational definition of forgiveness in the research literature. Researchers also agree that forgiveness is distinct from related constructs such as pardoning (granted only by a representative of society such as a judge), the spontaneous dissipation of resentment and ill will over time (to forgive is more than the passive removal of the offence from consciousness), forgetting (to forgive is more than not thinking about the offence), and condoning (no longer viewing the act as a wrong and removing the need for forgiveness). Finally, reconciliation (a dyadic process) should not be confused with forgiveness (an intrapersonal process), although forgiveness can, but need not necessarily, facilitate reconciliation (it is not contradictory to both forgive and end the relationship).

Implication 2. *As illustrated, a multiplicity of perspectives is likely inevitable in a new scholarly endeavor. Views of translational family science different from what is captured in this special issue are to be expected. This will be healthy and will help avert premature closure, provided the field soon coalesces around a broadly accepted definition. Moving beyond the ongoing identity issue in family science will be helpful in realizing this outcome.*

Where is the relationship in all this? Forgiveness is inherently interpersonal in that it is “outward-looking and other-directed” (North, 1998) even though it occurs intrapersonally

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(“Forgiving happens . . . inside our minds and hearts”; Smedes, 1996, p. 25). Yet research specifically on forgiveness in relationships emerged only after a considerable amount was learned about how factors such as demographics (e.g., sex, age), individual differences (e.g., personality dimensions), social-cognition (e.g., perceived intentionality), characteristics of the offence (e.g., degree of hurt), situational factors (e.g., extenuating circumstances), post transgression offender behavior (e.g., apology), and broader cultural factors (e.g., social norms) influenced forgiveness (for reviews, see Fehr, Gelfand, & Nag, 2010; Miller, Worthington, & McDaniel, 2008; Riek & Mania, 2011).

As attention turned to forgiveness in ongoing relationships the question arose as to whether overcoming unforgiveness or the desire to seek revenge or to withdraw was sufficient. Reduced unforgiveness removes negativity but does not provide the approach motivation that might facilitate reconciliation. Noting that forgiveness entails “an attitude of real goodwill towards the offender as a person” (Holmgren, 1993, p. 342), it was proposed that this benevolence dimension is especially relevant to ongoing relationships because it provides a motivational foundation for relationship repair following a transgression (Fincham, 2000; Worthington, 2005). Indeed, there is some evidence that positive (benevolence) and negative (unforgiveness) dimensions of forgiveness have different correlates in close relationships (e.g., Carmody & Gordon, 2011; Fincham, Beach, & Davila, 2007); there are also data to show that some peripheral and central nervous system changes are unique to benevolence and do not simply reflect changes in unforgiveness (Worthington et al., 2007). Although the benevolence dimension of forgiveness is not entirely absent from general research on forgiveness (e.g., McCullough, Root, & Cohen, 2006), concerns about measuring forgiveness adequately in close

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relationships led to the development of relationship specific measures (e.g., the Marital Offense Forgiveness Scale; Paleari, Regalia, & Fincham, 2009).

Implication 3. *The first level of translation in translational family science can involve moving from individually based, basic research to research on the construct in relationships or families. This is analogous to moving from in vitro to in vivo research in medicine and is sometimes described as T0 (the preclinical phase in translational medicine). As already illustrated, this level of translation may require fundamental changes to constructs when used in family research.*

FORGIVENESS IN RELATIONSHIPS (T1 TRANSLATION)

In contrast to T0, T1 can be conceptualized as forgiveness research in continuing or ongoing relationships. What determines forgiveness in such relationships and moderates its operation; most importantly, how does it relate to individual and relational well-being? Research addressing these issues has primarily taken place in the context of a recently emerged field focused on the study on close relationships. Although a clear definition and operationalization of close relationships was offered (see Berscheid, Snyder, & Omoto, 1989), a pragmatic approach became dominant in which legal (e.g., marriage), biological (e.g., family relationship), subjective (e.g., “close friend”), or temporal (e.g., dating for at least 3 months) definitions of close relationships were used. The field grew rapidly, spawning its own professional organizations and journals. By the turn of the 21st century, it had come of age, at which time Berscheid (1999, p. 260) celebrated what she called the “greening of relationship science.”

Unfortunately, the fields of “relationship science” and “family science” exhibit limited interplay. The upshot is that forgiveness in emerging adult and adult romantic relationships (e.g.,

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marriage) has received the lion's share of attention with limited attention being given to family relationships.

Implication 4. *Translational family science should address the existence of relevant isolated, parallel literatures and be attractive to researchers in related disciplines who do not identify with family science. This would realize more fully true interdisciplinary and multidisciplinary collaborations that have the potential to ultimately give rise to a transdisciplinary field. Transdisciplinary research often emerges from interdisciplinary work and occurs "when discipline-transcending concepts, terminology, and methods evolve to create a higher level framework and a fundamental epistemological shift occurs" (Austin, Park, & Goble, 2008, p. 557).*

The de facto operationalization of close relationships in relationship science has gone relatively unchallenged and generalizations about forgiveness in this field rarely test explicitly potential differences that might exist across varying forms of close relationships. Yet it is self-evident that family relationships differ from other close relationships in that they are nonvoluntary and are usually accompanied by a perceived obligation to continue the relationship. Moreover, there is some evidence that hurtful statements in such relationships are substantially more painful than those made in other types of relationships independent of relationship closeness and relationship satisfaction (Vangelisti & Crumley, 1998). Taken together, these considerations may result in a forgiveness process in family relationships that has unique elements (see Carr & Wang, 2012).

Implication 5. *Translational family science may need to consider the possibility that relationship phenomena uncovered in relationship science may operate differently in families. The absence of such differences should be explicitly examined rather than*

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assumed. This observation reinforces the importance of integrating efforts across relationship science and family science (Implication 4).

In turning to address the case for translating what is known about forgiveness to improve relationship well-being, translational family scientists will note that families are not limited to adult romantic relationships. What do we know, for example, about forgiveness in parent–child relationships? A handful of studies provide data relevant to this topic, but only a few involve children or adolescents (i.e., Hoyt, Fincham, McCullough, Maio, & Davila, 2005; Maio, Thomas, Fincham, & Carnelley, 2008; May, Kamble, & Fincham, 2015). This circumstance likely reflects the virtual absence of developmental research on forgiveness (see Fincham & Greer, in press, for a brief synopsis of forgiveness over the life course). This is somewhat surprising given rich conceptual analyses on the development of forgiveness (e.g., Enright, Gassin, & Wu, 1992) and the inclusion of chapters devoted to the topic in landmark texts on forgiveness (Denham, Neal, Wilson, Pickering, & Boyatzis, 2005; Mullet & Girard, 2000). Forgiveness in childhood is beginning to appear as a topic of research in the large literature on peer relationships (e.g., Flanagan, Van den Hoek, Ranter, & Reich, 2012; Van der Wal, Karremans, & Cillessen, 2016), which could stimulate study of child–parent forgiveness and forgiveness in other family relationships (e.g., sibling relationships). The need for research informed by developmental theory is apparent and will do much to further understanding of forgiveness in the parent–child relationship given its organismic nature.

Implication 6. *A translational family science perspective makes evident glaring omissions in forgiveness research. Given only a few studies, there is little to “translate” in regard to the parent–child family relationship and nothing with regard to other family*

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relationships (e.g., sibling relationships). Translational family science has the potential to stimulate remediation of this lacuna.

In turning back to forgiveness in adult romantic relationships, a preliminary concern for translational family science is whether forgiveness is even associated with relationship well-being. This can be addressed at both conceptual and empirical levels. A strong conceptual case can be made that the main function of forgiveness is to help “individuals preserve their valuable relationships” (McCullough, 2008, p. 116), and compelling arguments have been marshalled to support the view that “forgiveness systems evolved in response to selection pressures for restoring relationships that, on average, boosted lifetime reproductive fitness” (McCullough, Kurzban, & Tabak, 2011, p. 231). The philosopher Boleyn-Fitzgerald (2002) observed that forgiveness is “arguably the most important virtue for controlling anger” (p. 483), and the adverse effects of acute, and especially chronic, anger on individual and relationship well-being are well known. Such viewpoints are consistent with the value placed on forgiving in both secular and religious contexts. To many, the importance of forgiveness for relationship and individual well-being is self-evident.

In light of the foregoing, it is perhaps no surprise that a consistent, robust relationship has been documented between both forgiveness and unforgiveness and reported marital quality (see Fincham, 2010), with some indication of a more robust relationship for unforgiveness (Gordon, Hughes, Tomcik, Dixon, & Litzinger, 2009; Paleari et al., 2009). Longitudinal evidence suggests that marital quality predicts later forgiveness and that forgiveness also predicts later marital quality (Fincham & Beach, 2007; Paleari, Regalia, & Fincham, 2005). Such findings suggest that that there may be a bidirectional causal relationship between forgiveness and relationship satisfaction.

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It has been suggested that forgiveness in relationships is driven by the intent to persist in a relationship or commitment (Finkel, Rusbult, Kumashiro, & Hannon, 2002), and, as might be expected, there is evidence to support this view. Two studies, however, offer longitudinal evidence to suggest that forgiveness also promotes increases in commitment (Tsang, McCullough, & Fincham, 2006; Ysseldyk & Wohl, 2012). Braithwaite, Selby, and Fincham (2011) specifically investigated commitment and satisfaction together when examining the mechanism(s) linking forgiveness and relationship satisfaction both concurrently and longitudinally. Independent of commitment, they found two nonredundant mechanisms (conflict tactics and self-regulation) linking forgiveness to relationship satisfaction that parallel the positive and negative dimensions of motivational change posited to underlie forgiveness in relationships.

Forgiveness has been similarly linked to other important relationship features such as closeness (Karremans et al., 2011), trust (Weiselquist, 2009), and couple identity (more use of plural person pronouns in relationship discourse; Karremans & Van Lange, 2008), leaving little doubt that forgiveness likely influences relationship well-being and vice versa. Furthermore, family well-being likely benefits positively from forgiveness among family members given that forgiveness is also related to indices of mental health. For example, Riek and Mania (2011) found that in 22 studies involving 4,510 participants, a statistically significant inverse relationship emerged between forgiveness and depressive symptoms ($r = -.26$), anxiety ($r = -.18$), perceived stress ($r = -.23$), and negative affect ($r = -.47$). Higher levels of forgiveness were also related to greater life satisfaction ($r = .25$, 11 studies, 2,984 participants) and reported positive affect ($r = .32$, 9 studies, 1,502 participants).

FORGIVENESS INTERVENTIONS: EFFICACY (T2 TRANSLATION)

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T1 research on forgiveness provides a strong mandate for translation into intervention programs, and there is a substantial literature on attempts to increase forgiveness. It would be disingenuous to imply that a linear translation took place, however. The intervention literature had a life of its own, spawning numerous models of forgiving (e.g., Enright, 2001; Luskin, 2007; Worthington, 2003) that were not empirically evaluated before they were used to guide intervention outcome research. This led to the attempt to induce forgiveness without knowing how it operates in everyday life. It is not inaccurate to conclude that the presumed benefits of forgiveness for well-being drove both basic research and intervention research and that work on intervention proceeded without waiting for relevant basic research to come to fruition. It is also the case that insights from intervention informed basic research on forgiveness. Indeed, from the perspective of a positivistic philosophy of science, it can be argued that understanding a phenomenon is facilitated by causing change in it, as occurred in intervention research.

Notwithstanding the preceding circumstances, we now know a considerable amount about how to increase forgiveness, and empirically supported interventions exist, as will soon become apparent. The fact that intervention research on forgiving did not unfold in the most logical, efficient, and parsimonious manner yet still resulted in strong evidence-based interventions suggests the following implication.

Implication 7. *Translational family science may not always exactly follow the “bench to bedside” metaphor in translational medicine. In some instances, such as that outlined for forgiveness, a most compelling conceptual case can be made for T2 research even in the absence of complete T1 data (or even its existence). Translational family science should be open to this possibility.*

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9 Since Close (1970) first published a case study on forgiveness in counseling, a substantial
10 literature on facilitating forgiveness has emerged. This work can be examined to determine proof
11 of concept (whether it yields a sufficient basis to continue intervention efforts). An initial meta-
12 analysis of this literature (Worthington, Sandage, & Berry, 2000) showed that across 14 studies
13 (delivered to 393 participants), there was a linear dose–effect relationship for the effect sizes;
14 clinically relevant interventions (defined as those of 6 or more hours in duration) produced a
15 change in forgiveness that was reliably different from zero, with nonclinically relevant
16 interventions (defined as 1 or 2 hours in duration) yielding a small but measurable change in
17 forgiveness. A later meta-analysis of 27 studies delivering group interventions (Wade,
18 Worthington, & Meyer, 2005) showed that although amount of time spent in the intervention
19 predicted efficacy, intervention status (full vs. partial vs. no intervention) predicted outcome
20 over and beyond intervention duration. A more recent meta-analysis of 21 group interventions
21 (Rainey, Readdick, & Thyer, 2012) delivered to 1,060 participants again emphasized dosage as
22 interventions lasting 6 or more hours were efficacious (Hedges’s $g = 0.62$), with shorter
23 interventions being less so. Interestingly, using a person’s faith to facilitate forgiveness was
24 helpful (three studies, Hedges’s $g = 0.79$), whereas encouraging conciliatory behavior with the
25 transgressor was not.

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41 A limitation of these meta-analyses is that the outcome investigated comprised
42 forgiveness only (making it analogous to a manipulation check). Continued use of forgiveness
43 interventions requires attention to whether increased forgiveness affects other important
44 outcomes or end points. A meta-analysis of 16 studies (Lundhal, Taylor, Stevenson, & Roberts,
45 2008) using “process” models of forgiveness (forgiveness requires going through several
46 different steps or phases) showed large effect sizes not only for increasing forgiveness (Hedges’s
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$g = 0.82$) but also positive affect (Hedges's $g = 0.81$) as well as a moderately sized decrease in negative affect (Hedges's $g = 0.54$). Participants with elevated levels of distress benefitted more than those with lower distress levels and participants who received the intervention individually showed greater improvement than those who experienced group interventions.

The most recent meta-analysis (Wade, Hoyt, Kidwell, & Worthington, 2014), using 53 posttreatment effect sizes (for interventions from 1 to 57 hours) involving 2,323 participants who had received a forgiveness intervention for a specific hurt, showed not only that participants displayed greater forgiveness than nonparticipants (Becker's $\Delta = 0.56$) or those who received an alternative intervention (Becker's $\Delta = 0.45$) but that they also displayed fewer depressive (Becker's $\Delta = 0.34$, 10 studies) and anxiety symptoms (Becker's $\Delta = 0.63$, seven studies) as well as greater hope (Becker's $\Delta = 1.00$, six studies). Although the effect sizes did not statistically differ from those obtained for forgiveness, the effects of the intervention for reducing reported depressive and anxiety symptoms were 40% to 50% lower than for forgiveness. Overall, greater change in forgiveness was achieved in individual compared with group interventions and in interventions of longer duration (compared with no intervention but not alternative interventions), but the small number of studies involved did not allow testing of moderators for mental health indices.

The five meta-analyses mentioned are instructive, and Recine (2015) abstracted useful lessons offered by them for those interested in programs to facilitate forgiveness. The second edition of a text on forgiveness therapy also has been published 15 years after it first appeared (Enright & Fitzgibbons, 2015), as have guidelines for what clinicians need to know to help clients forgive (Aalgaard, Bolen, & Nugent, 2016; Freedman & Zarifkar, 2016; for cautionary notes, see Wade, Johnson, & Meyer, 2008). The latter is important given Wade, Bailey, and

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Schaffer's (2005) observation that 75% of persons presenting at counseling centers who had experienced an interpersonal transgression wished to forgive the transgressor. In the present context, the following implication arises:

Implication 8. *A translational science perspective makes clear the need to identify meaningful end points for forgiveness interventions. With proof of concept now well established, it is time to demonstrate why forgiveness intervention research is important for society and deserves public funding. Demonstrating self-reported increases in forgiveness and decreases in some self-reported psychological symptoms (e.g., anxiety) will not suffice to be taken seriously for public funding.*

One option for addressing the end point issue is to show how forgiveness interventions improve family functioning and associated end points (e.g., marital stability, better health). However, noting that participants in forgiveness interventions showed no improvement in their relationship with the perpetrator of the transgression, Lundhal et al. (2008) suggested that forgiveness interventions may “not be consistently better than no treatment in improving relationships” (p. 474). Besides confusing forgiveness with reconciliation, this conclusion counters clinical observations in which forgiveness emerges as critical for reconciliation after major relationship transgressions such as infidelity (see Baucom, Snyder, & Gordon, 2009), a viewpoint supported by survey data (Heintzelman, Murdock, Krycak, & Seay, 2014).

But do forgiveness interventions improve family relationships? Worthington, Jennings, and DiBlasio (2010) reviewed couple intervention studies ($n = 11$) and in several found improved relationship (e.g., intimacy, satisfaction, communication) and individual mental health outcomes (e.g., anger, anxiety, depression, and global symptoms). Although they drew the conclusion that “interventions to help couples have been found to be consistently effective” (p.

242), the literature reviewed was quite weak. For example, four of the 11 studies used samples of 10 or fewer couples and overall the studies were underpowered. This might account for findings such as (a) improved couple communication after a forgiveness intervention without changes in forgiveness and (b) changes in forgiveness without changes in relationship outcomes (see Worthington et al., 2010). In light of these concerns, the adequately powered couple interventions included in Wade et al.'s (2014) meta-analysis assume particular importance. For example, Baskin et al. (2011) found that their intervention improved forgiveness ($d = 0.51$) and marital satisfaction ($d = 0.45$) and decreased depressive symptoms ($d = 0.34$), improvements that were maintained at 3.5-month follow-up. In a similar vein, Greenberg, Warwar, and Malcolm, (2010) showed that changes in forgiveness were statistically correlated with improved marital satisfaction and trust in their study.

Again, however, the issue of end points that would command attention in the public arena remains and may reflect the relative lack of T1 research on forgiveness and health outcomes in family relationships. Although there is a robust inverse relationship between depressive symptoms and forgiveness in marriage (e.g., Kachadourian, Fincham, & Davila, 2005; Paleari et al., 2009, showed that it holds for both unforgiveness and forgiveness), and a similar link has been documented for 12- to 16-year-old children's forgiveness of a parent (Maio et al., 2008), the study of community samples using self-report measures continues to be problematic, especially in the absence of linking them to directly measurable end points such as work absenteeism or medical costs. Regarding physical health, only four studies have related forgiveness in relationships to health-relevant outcomes: namely, cortisol reactivity to imagined conflict discussions (Berry & Worthington, 2001), blood pressure 40 minutes after conflict (Hannon, Finkel, Kumashiro, & Rusbult, 2012), cardiovascular functioning (Fincham, May, &

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Sanchez-Gonzalez, 2015), and self-reported health (Lawler-Row, Hyatt-Edwards, Wuench, & Karremans, 2011). Problems with these studies and their scattered nature has led to the recommendation that “the first order of business for future research is to explicitly set out to investigate health outcomes of forgiveness in family relationships” (Fincham, 2015, p. 264).

Implication 9. *Far greater sophistication is needed to establish T2 forgiveness research in translational family science. In particular, expertise from family scholars is needed (e.g., in deriving appropriate targets for intervention in different family relationships and identifying associated end points) and from experts in physical health (e.g., to ensure selection and competent assessment of meaningful biomarkers, health behaviors, and so on). The recent emergence of attention to health outcomes in the broader forgiveness literature may prove helpful here (see Touissaint, Worthington, & Williams, 2015) and needs to be accompanied by a similar focus on family outcomes (e.g., marital stability, father involvement in children’s lives) facilitated by forgiveness.*

FORGIVENESS INTERVENTIONS: EFFECTIVENESS (T3 TRANSLATION)

As might be apparent from the preceding review, the nature of interventions used in efficacy trials varies widely. Given widespread misconceptions about what it means to forgive (e.g., to forgive requires one to condone the offence, is a sign of weakness, and so on) some intervention efforts have comprised brief, psychoeducation interventions (usually in groups). At the other end of the spectrum is the delivery of forgiveness interventions as intensive, longer term psychotherapy. Dosage clearly is related to intervention efficacy (0.1 *SD* increase in forgiveness for each hour of intervention; Wade et al., 2014) but tends to be confounded by offence severity as more severe offences tend to give rise to longer interventions. Such observations, along with lack of knowledge about the optimal time to intervene after an offence occurs and a host of other

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issues, appear to have mitigated against the next step in translational science, effectiveness or T3 research—that is, pragmatic trials that document what happens when interventions are implemented in real-world settings.

This circumstance is particularly notable given that the two forgiveness intervention programs with the most empirical support are available to the public as self-help materials. Specifically, Enright’s 20-step process-model-based intervention has been available since 2001 (Enright, 2001), and Worthington’s REACH Program has been available since 2003 (Worthington, 2003), long before their efficacy had been firmly established. In any event, the following implication arises:

Implication 10. *Translational science once again highlights a major gap in research on forgiveness and points to the need to evaluate the effectiveness of efficacious forgiveness interventions. Moreover, the translation of forgiveness interventions specifically for use by members of the general public points to an obvious question: Do these interventions improve well-being? Continued failure to address this question raises an ethical question.*

It appears that Worthington is turning to address the preceding question. In making a do-it-yourself workbook based on the REACH Program available for free on his website (as well as DVDs on how to run groups) and inviting researchers to conduct evaluation studies on the materials, it likely will not be long before some form of effectiveness data are available. Interestingly, Enright makes commercially available family guides to forgiveness education and forgiveness implementation in the home, but there is no indication of an interest in evaluating such manuals on his website.

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It can be argued that the situation described here is at best analogous to making a drug available over the counter immediately after showing that it works in a clinical trial. Should it not first be made available only under medical supervision? This is a legitimate question when one recalls Bergin's (1963) observation that anything with the potential to help also has the potential to harm. We also know that insufficient dosage of a forgiveness intervention is ineffective and potentially iatrogenic (Wade, Worthington, & Meyer, 2005). Thus, if some people give up because of the pain involved in recalling the hurt, it is important to know this and identify personal characteristics that might predict it happening. This would facilitate accurate warning labels that clearly specify the boundary conditions of what is offered. Finally, if the self-help efforts are inert, this is also important to know so that peoples' resources are not wasted and can be channeled more appropriately. All these considerations suggest an ethical imperative to investigate these self-help formats of forgiveness interventions.

Before leaving consideration of real-world implementation, recall that (a) forgiveness interventions can be primarily psychoeducational, thereby highlighting their potential use in prevention and (b) practitioners in family science include family life educators who are well positioned to provide such psychoeducation. In contrast to many practitioners who wait for clients to present at the office for treatment, family life educators often work with those who are not explicitly seeking help by reaching out to the community. This is a valuable service because persons who might benefit from forgiving may not seek help due to limited financial resources or geographic distance from mental health care providers. This leads to an important implication:

Implication 11. *In drawing on models in translational medicine, translational family science must avoid bias toward remediation over prevention. Similarly, this bias in the forgiveness intervention literature reviewed needs to be addressed.*

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In turning to prevention, it is useful to distinguish among universal prevention, delivered to everyone in the population; selective prevention, delivered to subgroups of the population at somewhat elevated risk; and indicated preventive measures, delivered to persons known to be at high risk (Mrazek & Haggerty, 1994). Fincham (2015) built on such distinctions to provide a comprehensive framework for facilitating forgiveness that encompasses individual-, group-, and community-level preventive interventions. It is only at the indicated level where response to a specific transgression in the recipient's life is addressed. Universal prevention, realized through forgiveness information campaigns, and selective prevention, in the form of psychoeducation, are designed to create conditions propitious to consideration of forgiveness as a possible response when a transgression is experienced.

The only large-scale attempt to evaluate a community-based forgiveness campaign was recently conducted in a college setting over a 2-week period (Griffin et al., 2016). Assessments completed 2 weeks before the campaign and 2 weeks after its implementation showed not only increased forgiveness but also improved self-reported quality of relationships with roommates, peers, and teachers but not romantic partners or parents. This finding emphasizes the caution offered earlier about generalizing findings across relationships and the potentially unique nature of forgiveness in family relationships.

However, community-level interventions cannot be evaluated adequately by only assessing outcome for individuals. Because the community is the unit of intervention, changes at the community level also need to be addressed; comprehensive evaluation entails examination of collectives and not only individuals. Yet how do we assess the community or organization? This is not the context in which to address such questions; it must suffice to refer readers to Fehr and

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Gelfand's (2012) analysis of a forgiving organization and what can be done to facilitate a "forgiveness climate" in the workplace. These considerations highlight a further implication:

Implication 12. *Viewing forgiveness research in close relationships through the lens of translational family science highlights yet another important omission—namely, the failure to examine forgiveness in relation to the emergent properties of systems. As forgiveness in families takes its place in translational family science it will be important to move beyond the study of dyadic family relationships to consider properties of the family (e.g., family climate) that transcend those of dyadic family relationships and of individual family members.*

INCORPORATING EMPIRICAL EVIDENCE ON FORGIVENESS INTO PRACTICE (T4 TRANSLATION)

Grzywacz and Allen (this issue) remind us of the many ways to use empirical evidence to influence practice, including mandates (e.g., directed policies and associated sanctions), professional guidelines, or position statements). The specific skills required to do so are less familiar to those who ply their trade in the T1 through T3 arenas, which may contribute to "why most clinical research is not useful" (Ioannidis, 2016, p. 1). Many researchers tend not to consider features that make research useful in the public domain (e.g., value for money) and recent concerns about transparency (trust), stimulated by public discussions about the replicability of research results including drug trials (e.g., "Trouble at the Lab," 2013; see Cicerone, 2015), exacerbate the task of ensuring legislation, policy, and so on are informed by empirical evidence.

Nonetheless, informing practice with empirical evidence on forgiveness is within the grasp of translational family science. The existence of a professional organization that oversees professional practice credentials (Certified Family Life Educator) makes it possible to

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9 immediately consider potential professional guidelines regarding forgiveness intervention that
10 are informed by data. However, we should not lose sight of efforts to inform public policy and
11 institutions, especially in view of a conceptual analysis of how forgiveness can promote
12 resilience in the context of human-caused and natural disasters and crises (Worthington et al.,
13 2016). This analysis is informed by attempts to use forgiveness interventions in the wake of
14 tragedies such as the Sierra Leone civil war (Toussaint, Peddle, Cheadle, Sellu, & Luskin, 2010)
15 and the Rwandan genocide (Staub, Pearlman, Gubin, & Hagengimana, 2005). In light of such
16 analyses, it is easy to imagine how a forgiveness component could be built into societal
17 responses to disasters.
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26 What about building empirically based practice regarding forgiveness into the
27 functioning of social institutions that affect families? Given the strong link between forgiveness
28 and religious traditions and the fact that more than three quarters of the world population profess
29 a religious faith (Fincham & Beach, 2013), it is natural to turn to religious institutions.
30 Magnuson and Enright (2008) outlined how the Church can function as a forgiving community.
31 Consistent with the vision of forgiving communities offered, Enright and his colleagues have
32 also introduced psychoeducational forgiveness interventions into elementary schools (e.g.,
33 Holter, Magnuson, Knutson, Knutson-Enright, & Enright, 2008). Although curricula for pre-
34 kindergarten through 12th grade are available, their widespread adoption is not apparent.
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43 The legal system might also be targeted given interest in forgiveness in both criminal
44 (e.g., Nygaard, 1997) and civil contexts (e.g., Feigenson, 2000). Here it is worth noting the rise
45 of problem-solving courts, especially community courts, that use judicial authority to solve legal
46 and nonlegal problems and consider outcomes that go beyond mere application of the law.
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50 Denckla (2000) described the role and impact of forgiveness in problem-solving courts, and
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Fincham (2015) noted that it would be helpful to index the degree to which forgiveness operates in particular courts and relate this to relevant outcomes (e.g., recidivism), and compare jurisdictions in which such courts do and do not operate.

An even more amenable target may be restorative justice programs, especially those that include as a component victim–offender mediation (VOM). Emerging in Canada in the 1970s, there are now hundreds of VOM programs throughout the world (focused largely on juvenile offenders and therefore particularly relevant to families), evaluation of which yields salutary findings, including participant satisfaction, perceived fairness of restitution agreements, restitution completion, and recidivism (Umbreit, Coates, & Vos, 2004). Forgiveness is not an explicit goal of such programs, but they allow for it to occur. By allowing for forgiveness, such programs empower the victim and allow the perpetrator to be affirmed both by the victim and the community as a person of worth and to regain—or for many, gain for the first time—their respect and be reintegrated, or integrated, into society.

Although forgiveness in VOM is tricky because its explicit mention may “pressure and prescribe behavior for victims” (Umbreit, 2001, p. 25), there is no reason why empirical data on the conditions that facilitate forgiveness could not be built into VOM and restorative justice programs more generally. Some might counter that forgiving subverts the course of justice and that when forgiveness occurs justice is not served. Certainly attention to forgiveness in legal contexts is not without danger. However, a detailed analysis of the justice–forgiveness relationship adduces both logic and data to show that justice and forgiveness are positively related and that each might facilitate the other (Fincham, 2009).

CAUTIONARY NOTES

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Before concluding how translational family science and forgiveness might enrich each other, two important assumptions need to be made explicit and carefully examined. First, research on forgiveness tends to assume that forgiveness is salutary, but there is also a potentially dark side to it. Recalling that forgiveness is a motivated behavior reminds us that, like all motivated behavior, it can arise from good and bad motives. Thus, communicated forgiveness can be used strategically to manipulate other family members, to convey contempt, engage in one-upmanship, and the like. In a similar vein, verbal statements of forgiveness may not reflect true feelings. Stated forgiveness without accompanying internal changes has been labeled *hollow forgiveness* (Baumeister, Exline, & Sommer, 1998); it should not be confused with genuine forgiveness and may result in different outcomes.

It is also the case that forgiveness can be poorly executed. For example, forgiveness may be communicated in a manner that puts down the offending partner or explicitly elevates the forgiver as morally superior to the partner. Likewise, if there is disagreement about whether a transgression has occurred, statements of forgiveness may be seen as accusatory. Finally, genuinely motivated statements of forgiveness can also be problematic because forgiveness is not instantaneous but occurs over time, a circumstance that can lead to problems when the offending family member takes another family member's statement of forgiveness literally rather than as a promissory note ("I am trying to forgive you"). When hurt feelings regarding the transgression arise subsequently, the offending family member may experience confusion or anger if he or she believed that the matter had been previously resolved, and conflict may ensue.

A family member might also forgive a relationship hurt without verbally communicating such forgiveness or even saying anything about the hurt to the other person. In such cases, it is quite possible that the partner infers that his or her hurtful behavior is acceptable. McNulty

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(2008) suggested that by removing aversive stimuli experienced by the transgressor (e.g., feelings of guilt or remorse), forgiveness may sometimes increase the likelihood of future hurtful behavior. Consistent with this viewpoint, he demonstrated that less forgiving spouses experienced declines in partner psychological and physical aggression over the first 4 years of marriage, whereas more forgiving spouses actually experienced stable or growing levels of psychological and physical aggression (McNulty, 2010). McNulty (2008) may have been correct in viewing the withholding of forgiveness as a means of regulating partner behavior, but it is also possible to regulate partner behavior by accompanying forgiveness with a clear and unequivocal statement from the victim that the hurtful behavior is unacceptable and will not be tolerated in the future. It thus remains unclear whether McNulty's (2008, 2010) findings reflect forgiveness per se, its execution, or even a flawed understanding of forgiveness (condoning the offence). The last possibility may account for the troubling finding that victims of domestic violence in shelters who forgive the offending partner reported being more likely to return to them (Gordon, Burton, & Porter, 2004). Some relationships are simply not healthy and should be terminated, and there is no contradiction in simultaneously ending such relationships and engaging in forgiveness. This leads to a penultimate implication:

Implication 13. *Both potential harm and potential benefit need to be considered in translational family science on forgiveness. Given such considerations, it can only be safely assumed that "forgiveness plays an important salutary role in amicable family relationships" (Fincham, 2015, p. 266; emphasis added).*

The second assumption that needs to be addressed concerns the ultimate goal of a translational family science. As Grzywacz and Allen (this issue) note, "the central focus of translational family science is family well-being" (p. x). Laudable as it is, it is hard to imagine

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any disagreement with this goal. However, social science research has tended to focus on the negative (in reaction to which a new field of positive psychology has recently emerged). In research on families, DeFrain and Asay (2007) captured this state of affairs in their observation that “most of the research in the 20th Century in America focused on why families fail” (p. 302). Research in the broader field of close relationships has offered little to counterbalance this focus because little attention has focused on identifying optimal or flourishing intimate relationships or the conditions that lead to them. Fincham and Beach (2010) addressed this issue by offering a model of relationship flourishing, and the first volume specifically focused on optimal relationships was recently published in the field of relationship science (Knee & Reis, 2016).

Why does this matter? It matters because well-being or health is not the absence of ill-being or illness. There is no doubt that translational family science would make valuable contributions simply by following the well-worn path of viewing family well-being as the absence of dysfunction. However, there is an opportunity to do more than this, leading to my last implication:

Implication 14. *A newly established translational family science will develop simultaneously with a new focus on optimal relationships in relationship science. It should be informed by and inform this new area of study. Given that attention has been drawn to the issue of flourishing relationships in family science (Fincham & Beach, 2010), it also has the potential to lead to advances in family science.*

CONCLUSION

A great deal of ground has been traversed in exploring translational family science and forgiveness in relation to each other. What has emerged is at best a promissory note, but one that has great potential not only for enriching translational family science but also forgiveness

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research. Where appropriate, lessons that can be learned from the examination of forgiveness in a relationship context were highlighted for translational family science, and an analogy with T0 translation in translational medicine was identified. Conversely, the lens of translational family science was instrumental in identifying much-needed work on forgiveness. It is hoped that the present analysis will lead to a healthy symbiotic relationship between translational family science and research on forgiveness in relationships. In any event, there appears to be a brave new world ripe for exploration (for a contrasting perspective, see Hamon & Smith, this issue) and whether the incomplete map offered in this article leads to its exploration remains to be seen.

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