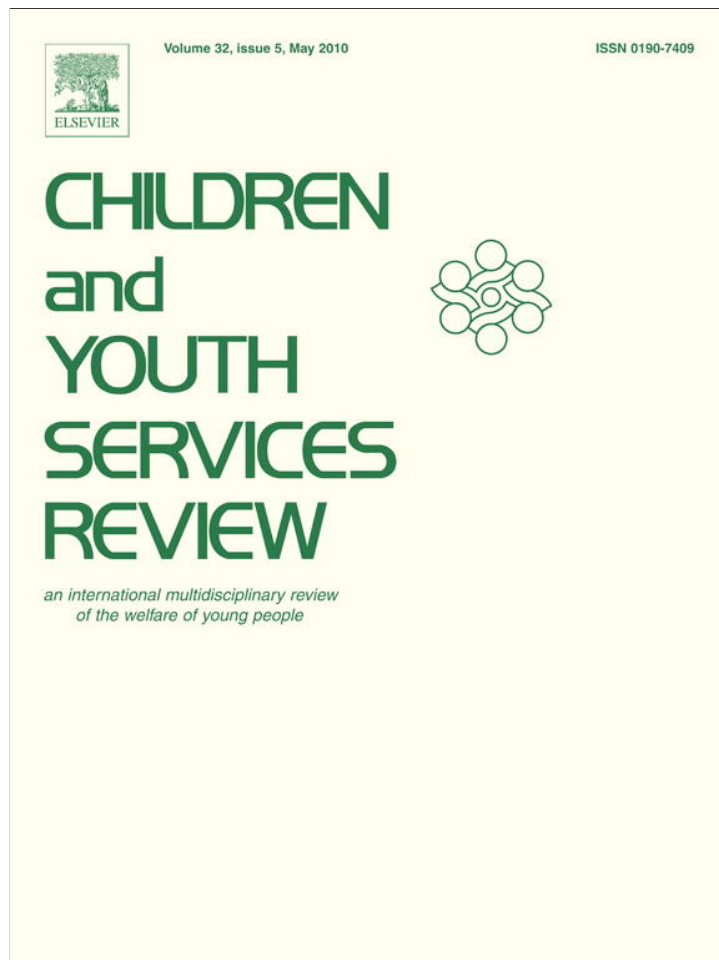


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Innovation in child welfare: The adoption and implementation of Family Group Decision Making in Pennsylvania

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ABSTRACT

This paper explores what system factors influenced the adoption of Family Group Decision Making (FGDM) in Pennsylvania and what the perceived barriers and facilitators of adoption and sustainability are according to the individuals involved in FGDM. A mixed methods design is employed, using geographic autocorrelation modeling and analysis of qualitative data about barriers and facilitators. The findings reveal that maltreatment and poverty rates and the size of the population of children are non-significant predictors of a county using FGDM, but having a FGDM pilot grant is a significant predictor, along with having had a system of care initiative. Population density and number of caseworkers also are significant, if weaker, predictors; population density became insignificant once the two largest counties, Philadelphia and Allegheny were removed from the model. Having a neighboring county that practices FGDM e.g. the neighborhood effect is the most powerful predictor ($z = 8.98, p < 0.000001$) and contributes a sizeable effect. The individuals working in counties new to FGDM perceive that adoption required additional resources such as more staff, money and training. The survey results from counties that recently adopted FGDM compared to counties that have more experience with FGDM suggest that leadership becomes even more important in maintaining progress in FGDM implementation compared with leadership needed to begin FGDM. The findings suggest that to facilitate the adoption of FGDM, funders should look to strategically place new programs close to established programs, provide start-up funding and utilize networks established through system collaboration activities. Continued research in the nature of innovation in child welfare practice using theories and analyses more commonly associated with sociology and economics may better inform the child welfare systems change efforts.

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1. Introduction

Adopting and sustaining new interventions in Child Welfare Practices can be a challenging process. One promising child welfare intervention is Family Group Decision Making (FGDM) a practice in which families actively participate in the decisions about the outcomes for their own family. The process is organized around a core set of principles but is individualized and non-manualized in its approach. Despite evidence that it increases family participation in planning (Pennell, 2006) and reduces child protective services events (Crampton & Jackson, 2007; Pennell & Burford, 2000), FGDM has been described as a marginalized practice in Child Welfare Services (CWS) (Brown, 2003; Merkel-Holguin, Nixon, & Burford, 2003).

Systematic implementation practices are essential to any attempt to use the products of science (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). However, studying implementation requires the use of a multi-

level research approach taking into account individuals, systems, organizations and contextual and cultural aspects (Greenhalgh, Robert, Mcfarlane, Bate, & Kyriakidou, 2004). Most studies of implementation examine only one aspect or fail to acknowledge the relationships between the innovation, the individuals and the context in which they are trying to implement the new practice. This paper examines the adoption of FGDM in Pennsylvania looking at the macro or system level of need, characteristics of the child welfare agencies and the neighborhood factors. A mixed methods design is employed in order to study these inter-relationships, using geographic autocorrelation modeling and an analysis of qualitative information about adoption and implementation of FGDM. Taken together, this approach enables us to have a more complete understanding of what factors may be at play when child welfare agencies adopt new practices.

2. Literature review

Family Group Decision Making was first legislated and embedded within legislation in New Zealand in 1989 after protests by indigenous people against the European-based child welfare system (Hudson,

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Morris, Maxwell, & Galaway, 1996). Since this time, Family Group Decision Making (FGDM) has spread to other parts of the world and child welfare systems in Europe, Australia, Canada and the United States are increasingly including FGDM in their child protection practices. The appeal of the model lies in the underlying values that children do better when they are connected to their families, and that families can be empowered to work in partnership with child welfare agencies (Brown, 2003; Merkel-Holguin, 2001). However, in the United States, FGDM has not achieved the level of use in practice that might be expected given its correspondence with social work values and the attraction of working with families in a strengths-based manner. A racial comparison using data from the National Study of Child and Adolescent Well-Being (NSCAW) found that 10% of the African-American and 9% of the White children who were investigated received FGDM (McCrae & Fusco, 2010). Similarly, Weigensberg, Barth, and Guo (2009), also using data from NSCAW report a weighted percent of 9.09% of children receiving FGDM. In a study of the statewide adoption of FGDM in Hawaii, FGDM was found to be inconsistently implemented and referrals to family group were not a uniform part of an established practice (Adams & Chandler, p. 113, 2004).

FGDM is deceiving in its simplicity. What appears to be a common sense approach to working with troubled families actually requires a tremendous paradigm shift. It alters the power differential: families, not professionals, describe their needs, and families design and implement the solutions. It is a move away from child saving, the historical role of child welfare, to partnering with and empowering families. At the same time, the primary and ultimate CWS goal is the protection of children from harm (Barth, 1999, p. 250). The current climate of child welfare is one in which the autonomy and creativity of workers have been reduced due to media scrutiny, litigation, class action and consent decrees (Lupton & Nixon, 1999). Brown (in press) observes that innovative practices like FGDM may not be in the self-interest of the professionals because it shifts the balance of power and changes the client-worker relationship in ways that can be difficult for the child welfare workers. They may perceive FGDM to be a high risk intervention because they maintain the responsibility for outcomes but share the control of the interventions: the higher the perceived risk, the higher the resistance to any innovation (Rogers, 1995; Salveron, Arne, & Scott, 2006). McBeath, Briggs and Aisenberg (2009) also mention the importance of risk avoidance for child welfare managers, noting that the adverse media attention often given to child welfare agencies has led to a “risk-adverse political environment,” (p. 117) pushing agencies to be publically accountable and reducing their ability to innovate or experiment with new ideas.

Given the professional imperative to protect children, risk-averse organizational climates and the necessary shift in power structure, it is hardly surprising when workers don't adopt FGDM as a practice. Although the Fostering Connections to Success and Increasing Adoptions Act (HR 6893) encourages the use of Family Group Decision Making as a way of re-connecting families, it supports the practice through funding state, local or tribal child welfare agencies rather than by legislation. There has been discussion in the international Family Group literature about the need for legislation (Doolan, 2002; Nixon, Burford, & Quinn, 2005) but absent federal legislation mandating the practice, states and localities will continue to make the decision to adopt the practice. In order to take full advantage of new funding opportunities the field needs to better understand what organizational factors and conditions lead to adoption of the practice of FGDM.

Research in the dissemination and diffusion of service innovations provides important insights into the adoption of FGDM. In a comprehensive review of innovations in service industries, Greenhalgh, Robert, Mcfarlane, Bate, and Kyriakidou (2004) determined several important research threads that need to be explored in order to better understand how innovation works in service industries. Although research specific

to the health care industry was examined, the parallels with CWS and FGDM in particular are compelling. Greenhalgh et al. point out that while much research has been done on the diffusion of innovation, the majority of it follows a model set forth by Rogers (1983, 1995, 2003). His groundbreaking research on diffusion of innovation described diffusion as primarily a communication process (Rogers, 1995 p. 5), and identified both the qualities of the innovation, and the qualities of those individuals who can adopt or reject the innovation. However, as Greenhalgh notes: “Most of the research on the diffusion of innovations focused on simple, product-based innovations, for which the unit of adoption is the individual, and diffusion occurs by means of simple imitation (Rogers, 1995). It is important not to use this literature to over generalize the complex, process-based innovation in service organizations, for which the unit of adoption (more often called assimilation) is the team, department or organization....” (Greenhalgh et al. 2004, p. 600). She stresses that the “assimilation” of new innovations is most often “organic and rather messy,” (p. 601) involving the organization shifting back and forth through stages of imitation, implementation, setbacks, and surprises.

Dopson, FitzGerald, Ferlie, Gabbay, and Locock (2002) further this discussion with an aggregate analysis of seven studies done in the UK showing the importance of context for innovation, a factor seldom explicitly addressed. They note “The influence of context can be conceptualized as a layered set of influences, which commence at the outer layer with influences from government health policy and move inward to regional/local influences, and finally to influences that are specific to a single organization and individual practitioner” (p. 43). Because of the obvious complexity of “context”, research often focuses on a more micro level on individual adopters or single organization adoption. Frambach and Schillewaert (2002) also adopt a “multi-level” framework in looking at organizational decisions to adopt innovations, stressing that while the qualities of the innovation are important, they must be set in an organizational context. Denis, Herbert, Langley, Lozeau, and Trottier (2002) emphasize that the adoption of innovations is only indirectly related to evidence, saying “the diffusion and adoption of innovations is a social and political process” and noting that any model that assumes “a unified calculation based on the pattern of evidence is unlikely to fully explain diffusion patterns” (p. 71).

In a response to better understanding the “research to practice gap” (Ringeisen, Henderson & Hoagwood, 2003) seen in the evidence based practice implementation, Fixsen et al. (2005) comprehensively synthesized the literature on implementation, focusing on the implementation variables. They concur that “scant attention has been given to evaluation of clear and effective methods to move science to service (p. 69)” and suggest the development of more and better tools for evaluating implementation processes and outcomes, emphasizing that “a full range of quantitative and qualitative research methods will need to be employed (p. 75)”. They also emphasize the need for organized efforts to determine what creates “hospitable practices and environments in which the probability of successful implementation and sustainability is increased (p. 7)”. This is echoed by Dopson et al. (2002) when they write the challenge of creating “a receptive context for change” which includes: a good history of relationships between professional groups, sustained managerial support, clear goals and infrastructure for change, good relationships between local groups, and access to information sharing in the local context. They also stress the role of professional training and development in creating groups to facilitate learning. Information sharing between professionals in the same region seems to have been an important factor in Mandiberg's (2000) study of the Clubhouse model. He found a regional effect in that people from areas with clubhouses serving adults with serious mental illness had a better knowledge of the model than people from areas with no or few clubhouses. Whether this was due to physical proximity or social space, e.g. knowing people who work in clubhouses, was not clear

from this study. The local interaction literature also suggests both that the size of the groups within the neighborhood is influential, and that it is easier to coordinate beneficial outcomes within small interacting groups than with large groups (Dietz, 2002).

All of the research on implementation is relatively abstract in relation to CWS, which has its own unique culture, professional perspectives and goals. Implementation Research in FGDM has been studied in the United Kingdom (Brown, 2003, 2005, 2007, *in press*; Lupton & Nixon, 1999) and in the United States (Adams and Chandler, 2004; Crampton, Crea, Abramson-Madden & Usher, 2008; Crea, Crampton, Abramson-Madden & Usher, 2008). In the United States, Adams and Chandler (2004) identify sources of resistance to the conferences, such as the legal environment for CW workers, which often gives them little flexibility or creativity in completing their jobs. Crea, Crampton, Abramson-Madden, & Usher (2008) report on the implementation of Team Decisionmaking (TDM), another family meeting model used in child welfare. They found public child welfare agencies face common barriers to implementation, including a lack of resources, and a need for more time to complete TDM. They identified three key facilitators for implementing TDM: a strong vision and training from administration; “firewalls” to prevent decisions from going forward without team support; and incentives for workers within the agencies, so that consistent use of TDM is rewarded. They also report that caseworkers tend to be selective in their practice based on perception of resources and priorities; in the early stages of implementation, caseworkers may not view TDM as one of their core activities (Crampton et al., 2008, p. 519). They recommend changing ongoing practice through effective use of communications and resources, and consistent, passionate leadership. Foster and Stiffman (2009) report research about the professional culture of caseworkers, and their perceptions of innovation. Although the study concerns the decision to adopt decision support technology, the authors explored what facilitators and barriers existed for adoption of the technology. Workers in this study reported a preference for relying on their own experience or consulting with other workers when their own experience is not sufficient. Workers were reluctant to rely on technology to provide suggestions unless both these methods failed.

In summary, research suggests that a practice may not be adopted, or may be adopted and then marginally used because of challenges in the organization such as culture and administrative practices, and personal factors such as caseworker thresholds for risk and past experiences over new practices. The adoption of FGDM in Pennsylvania began in 2002. All 67 counties were invited to apply to the Office of Children Youth and Families in order obtain pilot grants of \$25,000 from the Annie E. Casey Foundation for the adoption and implementation of FGDM. Most counties making an application received the funds, although some counties who applied did not because their application was not consistent with the principles of FGDM. A few counties who were thought to be important because of location, leadership or connections to other counties were also approached and encouraged to apply. Therefore, the process was both strategic and competitive (K. Jenkins, personal communication, January 11, 2010). Most of the counties who received the grants used them for training and to support start-up costs. Additional funds needed to be secured from other sources in order to continue implementation (P. Vriens, personal communication, January 8, 2010). While the practice has spread to other counties, it is not mandated by the state Office of Children Youth and Families. In Pennsylvania, public child welfare agencies are county administered with state oversight and this combination of informal adoption and local control provides an ideal setting to explore contextual factors that support or challenge adopting and sustaining FGDM. This paper explores the adoption of FGDM focusing on two questions: (1) What county and agency factors influence the adoption of FGDM; (2) What do the individuals using FGDM feel are the factors that create barriers or help to facilitate adopting, implementing and sustaining the practice?

3. Methods

3.1. Field data procedures

The University of Pittsburgh monitors the implementation status of county adoption of FGDM. Adoption level, the dependent variable, was operationalized as: 0 – no interest and no adoption activities; 1 – some level of interest and preliminary adoption activities (e.g. attending a family group and attending an introductory training); 2 – implementation activities but no groups (e.g. forming inter-system teams, training team members; contracting with a provider to coordinate or facilitate groups); 3 – FGDM has been implemented, but fewer than 20 family groups have been conducted; and 4 – FGDM is implemented and more than 20 family groups have been held.

We collected field data for the years 2008–2009 on (1) FGDM grant status (if they had received grant funds to begin FGDM); (2) System of care status (if they had ever been a county that had a system of care project); (3) population density per 1000 citizens; (4) the number of caseworkers in the child welfare agency; (5) total reports of maltreatment per 1000 citizens; (6) number of children under 18 in the county; (7) county poverty level and (8) a “neighborhood effect” variable described in more detail below. These variables are all measured at the county level and were hypothesized to explain levels of FGDM adoption (Table 1).

Conceptually, they can be grouped into characteristics of the need within the county for welfare services (population density, poverty, number of children under 18, and maltreatment reports), and characteristics of the child welfare agency (pilot status, system of care, and number of caseworkers). The neighborhood effect variable measures the adoption level of the neighboring counties, and describes what the counties next to you are doing. The rationale for including a “neighborhood effect” as an independent variable was based on social of social influence (Leenders, 2002) as well as research that found models comparisons to influence behavior (Babcock, Wang, & Loewenstein, 1996). Agency resources and maltreatment rates were considered important as workers have reported that FGDM was difficult to implement in Pennsylvania because of insufficient staff resources and the volume of families referred for reasons of maltreatment (Rauktis, 2008). Finally, resources through a grant, and system networking through a systems of care grant were also thought to be conceptually important factors based on the findings of previous studies of family group (Brown, 2003; Crea et al., 2008). In the next section, autocorrelation modeling, an approach used to measure adoption at the macro level (Valente, 2005), will be used to examine the influence of these variables on adoption of FGDM.

3.2. Survey procedures

A self-administered, web-enabled survey containing open and closed items was developed. The survey included three open-ended questions concerning adoption and sustainability of FGDM: (1) What have been the greatest helpers/facilitators of implementing FGDM? (2) What have been the greatest barriers to successfully implementing

Table 1
Descriptive statistics: county and child welfare agency characteristics.

Variables	Mean	SD	Min	Max
Family group adoption level	2.343	1.309	0.00	4.00
Population density per square mile per 1000	0.453	1.415	0.012	11.234
County poverty	11.941	3.504	5.2000	23.50
Children under age 18 in county	21.370	1.958	15.000	25.20
Maltreatment report per 1000	10.456	4.375	3.400	28.70
Recipient of a pilot FGDM grant	0.184	0.391	0.00	1.00
Recipient of a system of care grant	0.323	0.471	0.00	1.00
Number of caseworkers	32.692	31.139	2.00	120.00

FGDM? (3) What do you believe is necessary in order to sustain and expand the FGDM process in your county?

Because there is no list of individuals involved in FGDM in Pennsylvania, emails were initially sent to the Children and Youth Administrators of every county in Pennsylvania asking them to provide the email addresses of at least ten individuals in their county who are involved in the practice of FGDM in some way, e.g. through referral, implementation of the group, providing services, or participating as members of teams. Thirty-nine of the sixty-seven counties (58%) responded with email addresses identifying 314 individuals who were then sent an email with a link to the website where the survey was located. By April 2008, 215 surveys were submitted (68% response rate). Duplicate surveys and those with 75% or greater missing responses were omitted resulting in a final sample size of 180. The number of completed surveys ranged from one to nine per county.

Immersion in the data through repeated readings and rereading of the three open-ended questions resulted in a list of themes which were given descriptive codes. This inductive approach was done without the use of an initial list of codes (Miles & Huberman, 1994). These codes were further developed using a constant comparative process in which the codes were examined for meaning, identity and similarity or dissimilarity with other codes. The first and second authors then independently read and coded the responses to the open-ended questions using the Coding Analysis Toolkit (CAT), an open source qualitative analysis application for the organization and analysis of qualitative data (<http://cat.ucsur.pitt.edu/default.aspx>). Concurrence was determined using CAT and then agreement was reached when the two raters did not agree on the coding of an answer.

3.2.1. Description of the survey sample

Over one-half (61%) of the respondents worked for a public child welfare agency, 21% were employed at a private provider and 6% worked in juvenile probation. A variety of positions are represented in this study: 27% were child welfare supervisors; 16% were child welfare caseworkers; 15% were FGDM managers; 10% were county administrators; 7% probation officers; 7% mental health professionals; 6% advocates and 12% other (teachers, judges, foster parents, and private provider caseworkers). In terms of their role in FGDM, 29% reported participating as part of the county implementation team, 28% were individuals who referred families to FGDM, 20% were in liaisons to child welfare agencies, and 13% were FGDM coordinators, facilitators (7%) or co-facilitators (4%).

4. Findings

4.1. Autocorrelation modeling

It is reasonable to presume that implementation of the FGDM model would be related to the needs of the county. Thus our first model (Table 2 Model 1) included the four need variables: poverty level, population density per square mile, children under 18, and reported maltreatment per 1000 citizens. The dependent variable, the extent of adoption and implementation of FGDM, was regressed on these four independent need variables. None of these variables significantly predicted implementing FGDM across Pennsylvania. Indeed, the model as a whole explained remarkably little variance in the use of FGDM ($R^2 = 0.03$), and the model was not statistically significant ($F = 0.50, p = 0.74$).

The second model included the characteristics of the child welfare agency: whether they had received a start-up grant for FGDM, whether they participated in a System of Care initiative, the population density of the county, and the number of caseworkers in the agency. As seen in Table 2 (Model 2) all of these variables were significant predictors. Of these four, by far the strongest predictor was whether the county had received a pilot grant to begin FGDM. In fact, receiving such a grant

Table 2

Models 1 to 3: need, agency and neighbor effects and adoption of FGDM ($n = 67$).

Independent variables	Model 1		Model 2		Model 3	
	B (SEβ)	t-value	B (SEβ)	t-value	B (SEβ)	z-value
County poverty	−0.006 (0.067)	−0.095				
Children under age 18	−0.076 (0.107)	−0.704				
Maltreatment report per 1000	−0.047 (0.043)	−1.090				
Population density per SQ mile per 1000	0.062 (0.142)	0.439	0.670 (0.318)	−2.104*	−0.819 (0.317)	−2.582**
FGDM pilot grant			1.300 (0.351)	9.506***	1.406 (0.351)	4.00***
System of care grant			0.776 (0.291)	2.667***	1.055 (0.284)	3.711***
Number of caseworkers			0.010 (0.004)	2.306*	0.012 (0.004)	2.864**
Neighbor effect					0.585 (0.065)	8.978***

* $p \leq 0.05$.
 ** $p \leq 0.01$.
 *** $p \leq 0.001$.

increased the level of implementation on average by 1.3 points on the 5 point scale ($p < 0.0005$). Second in strength was the system of care variable; the presence of a system of care initiative increased the implementation variable by over three quarters of a point on the 5 point scale ($p < 0.01$). The two remaining variables, population density and number of caseworkers, were significant predictors but contributed relatively little to the model, with a modest significance level.

In addition to the attributes of the county itself, we anticipate that there may have been social comparison factors in the implementation of FGDM. As counties look at the use of FGDM in neighboring counties, they are influenced in their own decisions about using FGDM. It is easy to create a variable that measures the average usage level of the county's neighbors; however it would be inappropriate to include such a variable in a standard regression model, as used in the previous analysis. This is because such a variable necessarily includes information from the dependent variable on both sides of the regression equation, leading to biased and inconsistent coefficient estimators. To solve this problem, we employed a network autocorrelation model which provides an unbiased maximum likelihood estimate (MLE) for the coefficient (Doreian, 1982; Leenders, 2002). This model has been shown to provide unbiased and consistent estimators for geographic problems such as we consider in this study (Anselin, 1982 1988, 2003). To measure the "neighborhood effect", a 67×67 matrix variable (\mathbf{M}) was created that captures the adjacency of the counties: $\mathbf{M}_{ij} = 1$ if and only if county i shares a border with county j ; otherwise, $\mathbf{M}_{ij} = 0$. A transformed, weighted matrix \mathbf{W} was created by dividing the cell values in \mathbf{M} by the row totals in \mathbf{M} :

$$\mathbf{W}_{ij} = \frac{\mathbf{M}_{ij}}{\sum_i \mathbf{M}_{ij}}$$

By multiplying this \mathbf{W} by the vector of dependent values ($\mathbf{y} =$ "Extent of FGDM Usage in County"), we derive a term $\mathbf{W}\mathbf{y}$, which records for each county the average of the extent of usage by all the county's neighbors. This composite variable, $\mathbf{W}\mathbf{y}$, is added to the regression equation as a separate term. The traditional way to represent this new equation is:

$$\mathbf{y} = \mathbf{X}\beta + \rho\mathbf{W}\mathbf{y} + \epsilon,$$

where $\mathbf{X}\beta$ contains the set of standard regression variables (such as those in Table 2 above) and ϵ is the vector of traditional residuals in

the model. The regression coefficient, ρ , assigned to the social comparison term is interpreted just like a β coefficient in a standard regression. That is, if the ρ is statistically significant, we conclude that the social comparison effect captured in **Wy** has a significant impact on the counties' own involvement in FGDM. Because this model requires a GLM solution to ensure that the β and ρ coefficients are estimated and tested properly (Doreian, 1981), we employed the "network autocorrelation" procedure in the *sna* package in R (Butts, 2008, 2009) in this analysis.

The results for this analysis are provided in Table 2 (Model 3). Again, being funded to implement a pilot program is still a strong and significant predictor, as is SOC. Population density and number of caseworkers also are significant, if weaker, predictors. The social influence variable, however, is also very significant ($z=8.98$, $p<0.000001$) and contributes a sizeable effect: For every point increase in the average of the county's neighbors experience rating, the county itself increases its usage by an average of 0.59 on the 5-point scale. The adjusted R^2 for this model jumped to 0.41, a substantial increase over the model in Table 2 (adjusted $R^2=0.34$). Clearly, the social comparison variable has a strong effect on the extent to which counties implement a FGDM process, independent of the effect of the other strong predictors.

It should be noted, however, that on several of these key variables, two of the counties, Philadelphia and Allegheny, are outliers. These two counties represent large metropolitan areas with characteristics that make them unique. For example, Philadelphia itself has over 6 times the population density of the densest county outside of Allegheny. It is possible that these two "outlier" counties could be driving some of the results and to check for this possibility, we replicated the procedures excluding Philadelphia and Allegheny counties. These results, in Table 3 (Models 4, 5 and 6) replicate closely those found before, with one exception: Population density is no longer significant.

4.2. Survey findings

Responses to the three open-ended questions were divided into two groups: responses from individuals who were associated with "established adopter counties", or counties who had done more than 20 family groups (47.2% of the survey respondents) and responses from those in "new adopter counties" (52.9% of survey respondents). Table 4 displays the responses to the open-ended question "What have been the greatest helpers/facilitators of implementing FGDM?"

Individuals from the established adopter counties and the new adoption counties showed some similarities in what they believed

Table 3
Models 4 to 6: need, agency and neighbor effects and adoption of FGDM ($n=65$).

Independent variables	Model 4		Model 5		Model 6	
	B (SE β)	t-value	B (SE β)	t-value	B (SE β)	z-value
County poverty	0.029 (0.073)	0.400				
Children under age 18	-0.062 (0.107)	-0.578				
Maltreatment report per 1000	-0.047 (0.043)	-1.082				
Population density per SQ mile per 1000	0.469 (0.424)	1.106	-0.579 (0.438)	-1.324	-0.622 (0.443)	-1.404
FGDM pilot grant			1.289 (0.359)	3.588***	1.373 (0.362)	3.785***
System of care grant			0.655 (0.323)	2.026*	0.789 (0.325)	2.424*
Number of caseworkers			0.013 (0.006)	2.201*	0.020 (0.006)	3.320***
Neighbor effect					0.523 (0.073)	7.112***

* $p \leq 0.05$. *** $p \leq 0.001$.

Table 4
Percentage of comments about the facilitating factors of Family Group Decision Making by county adoption status.

Category of comment	Established adopter counties	New adopter counties
Cross systems nature of practice	6.8%	9.27%
Specific agencies	9.1%	9.27%
Training and education	17.04%	23.7%
Families	5.7%	7.21%
Specific individuals	15.9%	10.3%
The process of FGDM	11.36%	9.27%
Leadership	21.5%	15.46%
Attitudes of case workers	9.1%	4.12%
Comment N	88	87

facilitated the growth of FGDM. Both felt that FGDM could be facilitated by the help of specific agencies, such as child welfare, private providers, and juvenile justice and that features of FGDM (e.g. strengths-based approach) itself helped to facilitate its implementation. The greatest areas of difference are seen in the role of leadership, training and education, and attitudes of caseworkers. The established adopter group was more likely to mention the importance of leadership for implementing FGDM. This was the most common type of comment (21.5%) made by established adopters. Example comments from this group were: "administrative buy-in", "acceptance of the practice by leadership" and "agency support and encouragement." Established adopters were also more likely to mention the importance of case worker attitudes (9.1% vs 4.1% for new adopters). For example, comments like "co workers believing that FGDM will work," and "openness to trying new ideas" were made by this group.

Newer adopters of the practice also stressed leadership needs – almost 16% of the comments from the new adoption counties were about how leadership facilitates the growth of FGDM. However, the most common comments (23.7%) described education and training as key factors. For example, comments from this group included: "I attended a family/community session where judges were available to discuss how FGDM could work. The dialogue and examples that families gave were very helpful", and "Trainings and statewide implementation team gives hope and a wealth of information." Thus, while there was overlap between the two groups, the individuals associated with the counties who were considering adopting or had just started doing family group found training and education along with leadership to be critical to their implementation process. Those from the counties with more established practices tended to identify caseworker attitudes and leadership as necessary to their continued implementation.

There was greater differentiation in the responses to the question "What have been the greatest barriers to successfully implementing FGDM?"

Case worker attitude was strongly identified as a barrier by the experienced adopting counties. Approximately 44% of the comments by this group were about how worker attitudes were a barrier compared to approximately 18% of the responses from individuals in the new adoption counties. This was the most common response category for established adopters. Examples from this group of comments included: "Caseworkers not believing in the process", "Resistance from coworkers to use the program," and "Workers attitudes towards giving the family some decision making power." The most common responses from new adopters were about resources: the lack of time, money and staff – this seems to be a greater barrier for the new adopters (29% of comments) compared to approximately 19% of the comments from the established counties. New adopter respondents mentioned "Resources", and "Time, being able to fit meetings into an already hectic schedule," and "Funding to get it off the ground," as barriers to implementing FGDM. Aspects of the model of FGDM itself were identified more frequently as a barrier

for the newly adopting counties (11.53% compared to 4.3% for established adopters). It may be that as people gain experience with FGDM the process becomes less of a barrier (Table 5).

The three most common kinds of comments for established adopters were: 1) caseworkers attitudes, 2) lack of resources and 3) family issues. For new adopters, the three are: 1) lack of resources, 2) family issues, and 3) caseworker attitudes. Clearly different barriers are important at different points in the adoption process.

Table 6 displays the responses to the question “What do you believe is necessary in order to sustain and expand the FGDM process in your county?”

For the newly adopting counties, comments made with the most frequently were additional comments about resources (25.64% of the responses). Comments included “additional funding for staff dedicated to FGDM,” and “state dollars so that the initiative doesn’t fall short in county budgets,” and “having a sustainable funding source.” Newer adopters also saw a need for additional training and education (16.2%). Comments on training included “have workers travel to counties where the process is up and running and observe,” and “constant exposure, through trainings...”. Newer adopters also saw a need for “more buy-in” (10.2%) and for more time to pass, to allow exposure and experience with the practice (11.11%).

In the more experienced counties, respondents felt that fine-tuning or improving the practice of FGDM was the most critical to sustainability, and the largest number of comments fell in this category (22.68%). These comments included “continued evaluation by our agency and IT to determine what issues we face and how we need to resolve them;” or “better communication between CYS and the contracted service provider;” or “an in-house FGDM team.”

The second most common type of comments from experienced counties involved increasing “buy-in” to FGDM, including buy-in from all the agencies involved with FGDM (17.52% of comments). These comments included “Buy-in from all agencies,” and “I believe that the judges need to be on board before the practice will become accepted.” Another commented: “getting more buy-in from the schools and certain CYS caseworkers.”

Experienced counties also saw a need for more and stable resources (12.37%) and for more time to pass to allow exposure to the practice (12.37%).

These results suggest that diffusion strategies may differ from sustainability strategies and this make sense in light of what Mandiberg (2000) describes as a typology of adopters. According to Mandiberg in his study of the diffusion of the clubhouse model, the belief-based adopters, called “converted” and “convinced” adopt quickly while the “normative” adopters are waiting for institutional recognition and leadership, and the “assigned” are waiting to be ordered to adopt the practice. In the experienced counties who were trying to sustain the practice, these normative and assigned adopters were evident and viewed as the challenge to sustaining the practice. The respondents felt that leadership was critical at this point, perhaps to either give institutional approval or order the adoption of FGDM as

Table 5
Percentage of comments about the barriers to Family Group Decision Making by county adoption status.

Category of comment	Established adopter counties	New adopter counties
Case worker attitudes	43.95%	18.26%
Lack of resources (time, money)	18.6%	28.84%
The process of FGDM	4.3%	11.53%
Community	2.19%	5.76%
Outcomes (lack of)	1%	2.88%
Referrals (lack of)	4.3%	7.69%
Family problems (domestic violence)	16.48%	19.2%
Administrative attitudes	8.7%	5.7%
Comment N	91	104

Table 6
Percentage of comments about sustaining and expanding Family Group Decision Making by county adoption status.

Category of comment	Established adopter counties	New adopter counties
More resources (financial)	12.37%	25.64%
Fine tune the process	22.68%	9.4%
Outcomes (lack of)	6.1%	5.98%
Additional training and education	7.2%	16.2%
Outreach to the community	7.2%	1.7%
More “buy-in”	17.52%	10.2%
Addressing family problems	4.1%	6.8%
Needs more time	12.37%	11.11%
No code fits	1.03%	6.8%
Comment N	97	117

the accepted practice model. Leadership, training, resources and convincing the caseworkers were important strategies for both the established and newly adopting counties, but the emphasis seemed to change depending on where they were in the adoption process.

5. Discussion

Some clear findings emerge from these data. Location is important to adoption of FGDM, and counties that are located near another county that is using the practice are statistically more likely to move towards adoption. This finding has strong implications for strategies that encourage adoption, and will be further discussed in the recommendations. Questions about why location is so important are less easily answered, although a pattern of adoption and regional clustering has been observed in studies in the UK (Brown, 2007; Walker, Jeanes, & Rowlands, 2002). The qualitative data does offer a few clues. The process of adopting FGDM involves considerable training and support. Several respondents described the value of visiting, observing and talking with other counties as they started FGDM. One such response says “on site visits to (another county) were the most helpful piece of this implementation process”. Given the tight budgets and time constraints of most child welfare agencies, nearby counties afford a greater possibility for visits, meetings and support. Since family group requires a practice shift, having another agency geographically close and doing similar practice may help to create a sense of community or togetherness in the practice. There is also considerable evidence that individuals look around in their environment for “social comparison” on many issues (Babcock et al., 1996; Leenders, 2002), and it seems possible that workers are monitoring their local environment to keep their practices as current and updated as their neighbors.

Other factors seem to influence whether FGDM is adopted: obtaining a grant for implementation of FGDM, the number of caseworkers and whether the county practices a Systems of Care approach. A grant provides the initial resources and training to begin the process of adopting FGDM (e.g. hiring new staff or a consultant, time for training, and money for materials), and it is expected that these counties show higher levels of using the FGDM process. The number of caseworkers is similarly a resource issue: a larger number of caseworkers can allow for coverage during training and to cover for other workers when they are coordinating or facilitating family group meetings. The system of care variable is less obvious, but indicates that counties with an interest in coordinating the care they provide are also more likely to adopt and sustain FGDM. All of these factors offer ideas, but unfortunately the nature of the research does not allow us to make causal inferences based on these findings. We don't really know whether counties that already have an “innovative context” are more likely to ask for a grant, or adopt a System of Care approach or whether these helped to create such an environment. This is compounded by the fact that start-up grants were given to counties that expressed interest by submitting an application.

The autocorrelation data support the finding that no measure of need that we were able to evaluate is strongly related to the use of FGDM. Neither the volume of children under 18, nor the number of reported maltreatment cases are related to FGDM use, either before or after factoring in the effects of location. This seemingly surprising finding is supported by other research, which shows that the decision to innovate does not seem to be strongly related to client need factors (Dopson et al., 2002; Mandiberg, 2000). It is also supported by research that argues that innovation decisions are not as rational and predictable as might be expected (Mandiberg, 2000) and that organizational and political factors may influence the process more than client need (Denis et al., 2002).

The qualitative and quantitative findings support each other in several important respects. Qualitative comments from the new adopters describe a need for additional resources (time, money and staff) as the most common barrier to initial adoption of FGDM. The significance of the grants in predicting how active a county is with FGDM relates directly to this need for additional money for the resources necessary to get FGDM started.

The qualitative findings also support that a systems of care approach is philosophically comparable with FGDM (Burchard & Burchard, 2000). Both new and more experienced adopters of FGDM felt that the process was facilitated by specific agencies within the county being “on board” with FGDM. For example, one experienced respondent says “the fact that the community partners, commissioners and judges support the effort countywide” was a great facilitator. A Systems of Care approach enhances this possibility, by establishing connections and a process for systems to come together to work. When the county already has a system of care approach, this should work synergistically with the use of FGDM. Moreover, System of Care philosophies support a strengths-based approach to care (Burchard & Burchard, 2000), something strongly promoted by the FGDM model. This provides further support that the two practices are complementary, and that a county using a system of care approach might provide a more supportive context for FGDM, as our county-wide data suggest.

6. Recommendations

If a goal is to encourage adoption of FGDM, then additional resources in the form of training and funding are helpful at the start of the process. The clear link between a grant and eventual use of FGDM is strong evidence for initial financial supports. The geographic autocorrelation data also suggest a more subtle approach to encouraging FGDM, and that involves targeting certain counties that may be “ripe” for adoption due to their locations. This targeted approach, which would involve providing resources to counties more strategically, would take into account the status of nearby counties, and attempt to benefit from both nearby “helpers” as well as the social comparison and communication factors that may influence the county to move towards change. This approach differs significantly from a “seed” approach of putting resources into dry spots where little FGDM exists. Rather, these findings suggest that adoption of FGDM and continued development of the practice may be amplified by strategically “spreading” the resources. It is also a different approach from the current practice in Pennsylvania, which is to provide start-up funds when a county asks for them. Instead, funders may look at investing resources into areas where a system of care approach is operating and that may also be in close proximity to another county or district that has an established FGDM practice in place.

Finally, consistent with findings of other studies (Crampton et al., 2008) the qualitative findings suggest the need for consistent leadership throughout the adoption and implementation process, and the need for the type of leadership to change over time. At the start of the adoption process, leaders need to collaborate with neighboring counties and other systems and support the change in

practice by finding practical resources. In her study of adoption of innovative practices in child welfare, Brown (in press) wrote that “Professional resistance was a strong and powerful barrier” to innovative practices, necessitating strong leadership. We too found that professional resistance is a barrier to growing and sustaining the practice. Therefore adopting and sustaining the practice seems to require that leaders directly address the problem of those who are reluctant and openly resistant. At the same time, they must also find ways of fine-tuning the practice to fit the local context while maintaining fidelity to the principles of Family Group Decision Making.

6.1. Limitations

The greatest limitation of this study is that causality cannot be determined. It is not clear, for example, if getting a grant resulted in more innovation, or if the more innovative counties applied for a grant. In addition, the nature of the social influence process cannot be determined. Did adoption occur because individuals in neighboring areas are more likely to communicate directly with each other or through shared contacts and this influenced beliefs and behaviors? Is the process the result of one county comparing their practices to a neighboring county and concluding that if the practice is “correct” for a neighbor, then would be “correct” for them (Leenders, 2002)? Some counties “share” FGDM coordinators and facilitators – could this influence adoption behaviors? It is important to note that this study did not look at adoption of family group at the individual caseworker level. It is possible for a county to have many conferences, yet the referrals could be made by a small fraction of the total caseworkers and supervisors in the agency. We did not analyze the data by county adoption level by caseworker role by agency. This is a fruitful area for additional research, perhaps using qualitative software that permits this level of model building analysis.

A final limitation is that the qualitative data are from a self-selected group. Although over half of the 67 counties responded with names of individuals to contact for the survey that included the qualitative responses, it is possible that some counties excluded themselves for reasons that may be important. In addition, although the survey was web-administered and anonymous, respondents may be influenced by concerns that the family group trainers from the University of Pittsburgh Child Welfare Education and Research Program (CWERP) might have access to their responses.

We believe that this study offers an alternate way of looking at how FGDM is adopted and supports the use of strategies that may not be typical of child welfare system change efforts. Continued research in the nature of innovation in child welfare practice using theories and analyses more commonly associated with sociology and economics may better inform the child welfare systems change efforts.

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