Parent, Child, and Adoption Characteristics Associated with Post-Adoption Support Needs

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The purpose of this study is to (a) identify whether there are meaningful subgroups of families with distinct post-adoption needs and (b) determine which parent, youth, and adoption characteristics are associated with these collections of needs. Using data from the Modern Adoptive Families study, authors conducted a three-step latent class analysis with a sample of 1,414 families who rated the importance of 16 areas of parent education and support, based on their current level of need. A five-class solution best fit the data. Descriptively, the classes reflect families with low needs, families with needs related to adoption adjustment, families with adoption-specific needs, families wanting support specific to their youths' special needs, and families with needs that are both adoption-specific and related to youth special needs. Results from the multinomial logistic regression model found class membership differences based on parent, youth, and adoption characteristics. These classes may help adoption professionals to recognize the types of post-adoption services different families may need and to develop targeted interventions for specific types of families.

KEY WORDS: *adjustment; adoption; adoptive families; latent class analysis; special needs*

Adoption is increasingly being understood as a lifelong process. Despite common perceptions that the initial adoption period will be the only time of major adjustment, research suggests that the need for post-adoption services increases over time (Wind, Brooks, & Barth, 2007). Because adoptive parents' ability to access and use effective support services is associated with adoption permanency, understanding the postplacement needs of adoptive families is essential to maintaining permanency efforts—yet this topic remains understudied (Rolock, 2015).

The landscape of adoption in the United States is changing as intercountry adoption becomes much less common (Budiman & Lopez, 2018). Increasing numbers of adoptions in the United States take place through the child welfare system, in which over 117,000 children are currently waiting to be adopted (U.S. Department of Health and Human Services, 2017). Most families are adopting through the child welfare system, and these children have commonly been exposed to preplacement adversity, such as trauma, prenatal substance exposure, or multiple foster placements (B. R. Lee, Kobulsky, Brodzinsky, & Barth, 2018). Adoptive families thus often need services that can meet complex needs, extending beyond the initial placement period or completion of legal adoption proceedings (Fraser et al., 2014; Rolock, Pérez, White, & Fong, 2018).

Parent, youth, and adoption characteristics contribute to family functioning and adjustment. Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1988) has been applied to family dynamics in adoption (Brodzinsky, 2005; Schweiger & O'Brien, 2005). The adopted child enters the family microsystem, and the characteristics of the parents and child influence each other and the family system. Beyond the family system, other systems are significant in shaping the child and family. For example, the chronosystem encompasses the changes that occur over time during a child's life. The exosystem encompasses the other people and places that have a significant impact on children through their parents, even if the children do not directly interact with them; these can include post-adoption services or other influences on the family's adjustment and functioning. This ecological framework is helpful in thinking about factors that may be associated with a family's needs post-adoption.

The characteristics of the adoptive parent and child, and the adoption itself, create a distinctive ecosystem that is associated with a family's needs and likelihood of seeking services. Post-adoption care may include a range of offerings, such as sup-

port groups and training, psychoeducation, and mental health services. Post-adoption services can promote healthy dynamics within the family and ultimately support the family's ability to sustain permanency (Hartinger-Saunders, Trouteaud, & Matos Johnson, 2015). Social workers and adoption specialists should thus ensure that families are being offered the support they need. This support should be tailored to the family's particular needs. Dhami, Mandel, and Sothmann (2007) surveyed 43 Canadian adoptive families about their needs and use of available supports post-adoption. Parents emphasized a need for post-adoption support at specific times, such as following a stressful or traumatic event, during school enrollment, and upon the child entering adolescence (Dhami et al., 2007). Similarly, a more recent study found evidence that customized supports promote permanency and help parents to effectively parent their children (Merritt & Festinger, 2013). Identification of subgroups of adoptive parents who have distinct constellations of needs could increase the identification and delivery of essential post-adoption services.

PARENT CHARACTERISTICS

Parent characteristics can help inform post-adoption needs but are often overlooked compared with child characteristics (Palacios, Rolock, Selwyn, & Barbosa-Ducharne, 2019). Parent demographics have been associated with post-adoption needs, help-seeking, and permanency outcomes. On average, adoptive parents are older than biological parents (Hamilton, Cheng, & Powell, 2007), but advanced age may not always be a benefit. Orsi (2015) found higher rates of child welfare reinvolvement for older parents who adopted preschool- or elementary-age children but, interestingly, no increased risk for reinvolvement among older parents who adopted older youths. Education level may also be a protective factor for family stability: Adoptive parents have higher mean education levels than do parents in other family structures (Hamilton et al., 2007). Among foster parents, higher levels of education have been associated with increased help-seeking (Zima, Bussing, Yang, & Belin, 2000); a similar relationship may exist for adoptive parents. Lower levels of parent education have been linked to unmet service needs (Zwaanswijk, Verhaak, van der Ende, Bensing, & Verhulst, 2006). Household income may also be associated with access to resources or supports; however, the relationship between income and adoption stability lacks recent empirical evidence. Reviews of studies from the 1980s have challenged the idea that low income is a risk factor for adoption disruption (Rosenthal, Schmidt, & Conner, 1988) and have suggested that higher-income households may be at increased risk of adoption disruption (Coakley & Berrick, 2008).

Research has examined how adoptive parents' sexual orientation affects the adoption experience for both the adoptive parents and the adopted child. Findings suggest that lesbian and gay adoptive parents report unique challenges during the adoption process (for example, related to discrimination) (Goldberg, Downing, & Sauck, 2008), are more likely to adopt children of color (Goldberg & Smith, 2009), and are more likely to choose adoption as a first choice (Goldberg & Smith, 2008). Even when experiencing unmet expectations, parents in same-sex relationships emphasized feeling grateful to have an adoptive child (Moyer & Goldberg, 2017). A study comparing adoptive parents in same-sex relationships with adoptive parents in heterosexual relationships found no differences in openness or overall contact with birth families (Farr & Goldberg, 2015), whereas other research has suggested higher levels of contact and more positive relationships among same-sex adoptive families and birth families—specifically among those families adopting through child welfare (Brodzinsky & Goldberg, 2016). Research that examined the experiences of youths adopted by lesbian or gay parents suggests that these youths may experience a unique intersection of stigmas related to their parents' sexual orientation, their adoptive status, and, sometimes, the multiracial nature of their families (Gianino, Goldberg, & Lewis, 2009). A qualitative study of youths adopted into gay and lesbian families identified unique challenges related to whether to disclose the family structure and fears of bullying, but this study also perceived strengths related to increased acceptance and empathy toward others (Cody, Farr, McRoy, Ayers-Lopez, & Ledesma, 2017).

CHILD CHARACTERISTICS

Child and youth characteristics may contribute to how the child adjusts into the adoptive family (Goldman & Ryan, 2011) and the need for services postplacement. Because needs can emerge

with specific developmental tasks, child age can be a factor. A study examining adoptive caregivers' initiation of support-seeking found the average age of the child at the time of help-seeking to be 12, suggesting that the transition to adolescence can be a period of elevated difficulty within the family (Waid & Alewine, 2018). Indeed, the most common age for foster care reentry following adoption is adolescence (Smith, Magruder, Sciamanna, Howard, & Needell, 2014), as the parent–child relationship may be tenuous and trauma and loss issues may reappear (Brodzinsky & Smith, 2019).

Having a child with special needs has been shown to contribute to higher post-adoption service use (Wind et al., 2007). These services can include educational supports (Hartinger-Saunders et al., 2015) or mental health supports (Smith et al., 2014; Tan & Marn, 2013). About one-half of all children adopted from child welfare experience ongoing emotional or behavioral problems (Smith et al., 2014), which may place the family at higher risk for adoption disruption (Dhami et al., 2007). Families in which children display externalizing behaviors are more likely to seek services, and acting-out behaviors are often considered a red flag for placement disruption (Orsi, 2015). Failure to treat a child's mental health symptoms and related behavior challenges can overwhelm parents' coping skills and place the family's stability at risk (Hartinger-Saunders et al., 2015; Smith, Howard, Garnier, & Ryan, 2006); the existence of this dynamic underscores the importance of post-adoption services.

ADOPTION CHARACTERISTICS
Various aspects of the adoption experience have been shown to be associated with post-adoption needs. Whether a child is adopted privately, internationally, or through foster care matters (Merritt & Festinger, 2013), as adoption pathway may influence a child's adjustment into an adoptive family (Waid & Alewine, 2018). Adoption type (for example, international, kinship, or non-kinship) has also been associated with whether and what type of post-adoption services are needed (Merritt & Festinger, 2013). The prevalence of social, emotional, and developmental special needs is much higher among child welfare–involved youths than among their counterparts (Pecora, Jensen, Romanelli, Jackson, & Ortiz, 2009), suggesting that parents

who adopt from the foster care system may need additional preparation and support.

Parents who adopt transracially may have unique challenges, as the adopted youths are likely visibly different from their parents. In addition to these phenotypical differences, adoptive parents are often ill-prepared to engage in racial socialization practices, which support children of color in managing racial discrimination and instilling a positive racial identity (R. M. Lee, 2003). Some research suggests that transracial adoption placements may be more likely to experience disruption than adoptions within the same race, especially for African American children (McRoy & Grape, 1999; Palacios et al., 2019). Although parental age and education level are unrelated to having a transracial placement, transracial adoption may be more common among same-sex couples (Farr & Patterson, 2009; Goldberg & Smith, 2009). One study of adoptive families found that more than one-half of same-sex couples adopted a child of a different race, compared with only 30% of different-sex couples (Farr & Patterson, 2009). It is unclear whether transracial placements result in increased post-adoption needs (for example, racial socialization or identity development supports).

Time since the adoptive placement may also affect service needs. The initial transition period in the first few years following adoption may be especially challenging for parents (McKay, Ross, & Goldberg, 2010) because they may be adjusting to a reality that is different from what they expected (Moyer & Goldberg, 2017). In contrast, a longitudinal study that followed adoptive families for eight years found that use of both general and clinical services increased over time (Wind et al., 2007). More research is needed to understand how post-adoption service needs may vary over time.

POST-ADOPTION SERVICE ENVIRONMENT
Despite the prevalence of risk factors that heighten the need for post-adoption services, about one-fourth of U.S. states do not provide post-adoption services, and almost 40% of states have very limited supports (Smith, 2014). In a study using data from the National Adoptive Families Survey, the most commonly endorsed post-adoption service was a parent support group (37%), with 28% of parents having accessed one (Hartinger-Saunders et al., 2015). Participation in a parent support group has been found to significantly reduce the likeli-

hood of adoption dissolution (Hartinger-Saunders et al., 2015). In turn, connecting adoptive families with services to meet their needs may help to promote placement stability and overall well-being.

CURRENT STUDY

With growing numbers of adoptions being formed through the child welfare system, families require postplacement supports specific to their needs, which may often include parenting education and support related to raising a child with preplacement adversity (B. R. Lee et al., 2018). Yet little is understood about what service needs may surface, when, and for whom. To reduce this gap in knowledge, the current study seeks to identify, through latent class analysis (LCA), subgroups of adoptive parents who have distinct constellations of needs. Understanding which needs to anticipate for what kinds of adoptive families can help both practitioners and policymakers support families after adoption.

METHOD
Procedure

Data were drawn from the Modern Adoptive Families (MAF) project, a nationwide, nonrandom, cross-sectional survey of adoptive parents' beliefs and experiences that was conducted from 2012 to 2013 (Brodzinsky, 2015). The project was designed to compare family characteristics and adjustment outcomes for different types of adoptive families. Participants were recruited through adoption agencies, adoption attorneys, and other adoption researchers across the country who agreed to send letters to previous clients or research participants. Because one of the goals of the project was to examine similarities and differences between adoptive families headed by sexual minority parents and those headed by heterosexual parents, efforts were made to oversample from sources known to work with sexual minority parents. Over 95% of respondents filled out the survey online through SurveyMonkey. The rest returned surveys by e-mail or postal mail. A total of 1,616 individuals completed the survey. Only one parent per family filled out the survey; stepparent adoptions and second-parent adoptions of a partner's biological child were excluded from the sample. Study procedures were reviewed and approved by the Institutional Review Board of Illinois State University. Brodzinsky (2015) provided additional details about partic-

ipant recruitment and demographic characteristics for the full sample.

Measurement

The entire MAF survey consisted of 203 questions covering a wide range of topics related to the adoption process, family demographics, parenting beliefs and experiences, and adjustment outcomes; see Brodzinsky (2015) for a complete description of the survey questions. Questions were developed to reflect current issues being addressed with this population in adoption research, social casework, and clinical practice. For the purposes of the current study we focused on the following survey items.

Post-Adoption Need Areas. Participants were asked to rate the level of importance to their current needs (from 1 = not important to 5 = extremely important) for 16 areas of adoptive parent education and support (listed in Table 3). These items were developed from a review of the literature regarding common post-adoption needs described by adoptive parents, as well as the types of services often provided by adoption agencies. These items were used to create the latent classes.

Adoptive Parent Characteristics. Parents were asked to report their age in years, education level, and sexual orientation. Education level was collected using six categories ranging from high school diploma or GED to PhD, MD, or other professional degree. When the analysis was conducted, this information was recoded to reflect whether a parent had at least a college education or less than a college education. Parents reported their estimated annual household income using six categories in increments of $50,000 (ranging from under $50,000 to over $250,000). The item "I am a sexual minority (LGBT [lesbian, gay, bisexual, or transgender]) adoptive parent" (y/n) was used to classify sexual orientation.

Child Characteristics. Parents also reported on their adopted child's current age in years and whether the child had one or more special needs at adoptive placement. These special needs included medical problems, emotional problems, learning problems, behavioral problems, and developmental delays. Parents were also asked if their adopted child had ever received any of the following diagnoses: attention-deficit/hyperactivity disorder, depression, anxiety, oppositional defiant disorder, conduct disorder, fetal alcohol spectrum disorder, mental retardation, sensory processing dis-

order, autistic spectrum disorder, adjustment disorder, substance abuse, or attachment disorder. This variable was dichotomized to reflect whether the child had at least one of these diagnoses or no diagnoses.

Adoption Characteristics. Parents reported the number of years since the adoption had occurred and the type of adoption (foster care, private domestic, or international). Adoption from foster care served as the reference category. Parents were also asked to report whether the adopted child was a different race from themselves or their partners; in this study, *transracial placement* was defined as an adopted child being of a different race than both of the adoptive parents (or of the solo parent for single-parent adoption).

Post–Adoption Services. Parents were asked about the frequency with which they used various post-adoption services. However, because of significant rates of nonresponse to this item, an item asking adoptive parents whether they were currently participating in an adoption support group was substituted as a proxy for service use. As described in the literature review, empirical support exists for the importance of support-group participation and the opportunity it provides for networking with other adoptive parents.

Sample Description

For this analysis, participation was limited to respondents whose oldest adopted child was under 18 years of age ($N = 1,450$). Descriptive information about the sample is provided in Table 1. In this sample, the average age of parent respondents was 44 years, and more than 80% had at least a college education. About 18% of respondents identified as a sexual minority. Parents who had more than one adopted child reported on the characteristics of their oldest adopted child. On average, these children were about eight years old at the time of the survey, and 43% were reported to have a significant developmental or mental health diagnosis identified by a mental health provider. More than one-half of parent respondents reported that at the time of placement, their adopted child had at least one special need. Adoption type was fairly evenly split among foster care (31%), international adoption (37%), and private domestic adoption (32%). Over one-half of the adoptive children were of a different race than their adoptive parents. Levels of help-seeking among this sample were relatively high.

Table 1: Sample Description ($N = 1,450$)		
Variable	**n (%)**	**M (SD)**
Parent age (in years)		44.0 (7.5)
Parent has at least a college degree	1,153 (82)	
At least one parent identifies as nonheterosexual	254 (18)	
Youth age (in years)		8.2 (4.6)
Youth special needs	797 (55)	
Youth has a developmental/mental health diagnosis	627 (43)	
Years since adoptive placement		6.5 (4.2)
Adoption type		
Foster care	448 (31)	
International	535 (37)	
Private domestic	467 (32)	
Transracial adoptive placement	828 (57)	
Use of post-adoption services and supports ($n = 1,005$)	603 (60)	
Current participation in adoption support group	629 (45)	

More than one-half of respondents reported having used post-adoption supports, and 45% reported currently participating in a support group.

Analytic Plan

Using the 16 variables of adoptive parent need areas as indicators, the researchers conducted LCA to identify distinct profiles of adoptive parent needs. LCA is an optimal strategy for finding meaningful subgroups within a diverse sample (Nylund, Bellmore, Nishina, & Graham, 2007). Mplus Version 8.1 (Muthén & Muthén, 1998–2018) was selected to conduct the analyses because of its capacity to model the relationship between auxiliary predictors on latent class membership (Asparouhov & Muthén, 2014). This three-step approach (1) estimates the latent class model, (2) calculates the latent class membership probabilities for each respondent for each class, and (3) considers the uncertainty of class membership in estimating the relationship between predictor variables and membership in each latent class.

Selection of the best-fitting model was based on statistical criteria and interpretability. The model-fit measures of the log-likelihood, Akaike information criterion, and Bayesian information criterion decrease as the number of classes increases, suggesting better model fit. The Vuong–Lo–Mendell–Rubin likelihood ratio test considers whether the

Table 2: Model Selection					
Model	Log-Likelihood	AIC	BIC	VLMR (*p*)	Entropy (%)
2-class	−37,040.2	74,178.4	74,435.9	−40,521.3 (.000)	93
3-class	−36,027.9	72,187.7	72,534.5	−37,040.2 (.000)	90
4-class	−35,487.6	71,141.3	71,577.4	−36,027.9 (.000)	91
5-class	−35,066.7	70,333.3	70,858.7	−35,487.6 (.000)	91
6-class	−34,829.9	69,893.7	70,508.5	−35,066.7 (.030)	90

Notes: AIC = Akaike information criterion; BIC = Bayesian information criterion; VLMR = Vuong–Lo–Mendell–Rubin.

fit improvement is statistically significant compared with a model with one fewer class. Finally, entropy theoretically ranges from 0 to 1 and measures the quality of distinct classification; lower entropy suggests that the classes are poorly differentiated. In addition to these model-fit measures, practical considerations such as adequate sample size within each class and interpretability of each class as meaningfully distinct were considered.

Within the three-step method, Mplus also conducted a multinomial logistic regression that estimated the relationship among key parent, child, and adoption characteristics as well as post-adoption support group participation with latent class membership, accounting for uncertainty in membership using the posterior probabilities. Statistically significant differences in these predictors by class provide additional descriptions of class membership.

RESULTS

LCA identified a five-class model of post-adoption needs as the best-fitting model. Although the model-fit measures continued to improve as the number of classes increased, the six-class model was no longer statistically significant at the .01 level compared with the more parsimonious five-class model. Furthermore, the five-class model had a clearer interpretation. Table 2 shows the model-fit statistics for the models considered.

The mean scores for each item by class are presented in Table 3. The five classes reflect different levels and types of needs. Class 1 (*n* = 446; 31%) was labeled "both adoption and special-need concerns," as this class had the highest ratings on both adoption-specific and general needs related to the child's trauma or behavior. Class 2 (*n* = 186; 13%) was labeled "youth special needs," as this class had high ratings on need for behavioral and emotional supports (for example, "strengthening behavior management strategies," "understanding impact of trauma on child"). A distinct

classification for special-needs adoptions is consistent with Schweiger and O'Brien's (2005) ecological framework. Class 3 (*n* = 419; 30%) was labeled "adoption-specific concerns," as this class featured high ratings on several challenges that can stem from the adoption experience (for example, "helping my child cope with adoption loss," "fostering positive self-esteem and identity development," "parent–child communication strategies"). Class 4 (*n* = 196; 14%) was labeled "adoption adjustment support," as the members had elevated ratings on a few adoption topics (for example, "talking with children about adoption," "supporting child's curiosity about their origins") that seem to be associated with specific developmental and adjustment milestones within the adoption experience. Class 5 (*n* = 167; 12%) presented with low levels of need across all the education and support domains and was thus labeled "low need."

Results from the multinomial logistic regression identified some significant differences between classes on different parent, child, and adoption characteristics (Table 4). Characteristics of each class are described subsequently relative to the other classes. Adoptive parent age did not differ significantly between any of the classes.

Both Adoption and Special-Needs Concerns (Class 1)

As indicated by its name, class 1 membership was associated with more challenges than were the other classes. Specifically, class 1 members were about 20% less likely to have a high household income than either class 4 (odds ratio [*OR*] = 0.82) or class 5 (*OR* = 0.81). These adoptive parents were about one-half as likely to complete college as those in class 3 (*OR* = 0.49) or class 4 (*OR* = 0.51). They were also less likely to be LGBT parents compared with any other class. The adopted youths in class 1 were older than those in class 3, 4, or 5. They were more than 1.5 times more likely to have a special need than those in class 3 (*OR* =

	Class 1: Both Adoption and Special Need Concerns (*n* = 446)	Class 2: Youth Special Needs (*n* = 186)	Class 3: Adoption-Specific Concerns (*n* = 419)	Class 4: Adoption Adjustment Support (*n* = 196)	Class 5: Low Need (*n* = 167)
Characteristic					
Fostering parent–child attachment	3.8	2.7	2.5	1.6	1.4
Talking with children about adoption	4.4	2.2	4.0	3.4	1.8
Discussing difficult background information with child	4.3	2.3	3.7	3.0	1.5
Supporting children's curiosity about their origins	4.6	2.1	4.3	3.8	1.5
Helping children cope with adoption loss	4.7	2.6	3.9	3.0	1.4
Managing relationships with birth family	3.4	2.0	2.8	2.1	1.8
Racial/cultural socialization strategies	3.7	2.2	3.2	2.4	1.7
Strengthening behavior management strategies	4.5	4.1	3.1	1.4	1.5
Understanding child's development and adjustment problems	4.6	3.8	3.3	1.6	1.5
Understanding impact of trauma on child	4.6	3.4	2.9	1.5	1.3
Parent–child communication strategies	4.7	4.0	3.8	2.1	1.7
Fostering positive self-esteem and identity development	4.8	4.1	4.3	2.8	1.7
Discussing sexual orientation issues with child	3.1	1.6	2.3	1.5	1.2
Developing effective educational advocacy strategies for child	4.4	3.4	3.2	1.8	1.6
Finding an adoption-competent pediatrician	3.2	1.9	2.0	1.3	1.3
Finding an adoption-competent therapist	3.8	3.0	2.0	1.3	1.3

Table 3: Mean Scores of Importance Rating by Class

Note: The scale ranged from 1 = not important to 5 = extremely important.

1.56) and 11% more likely than those in class 2 (1.11). Similarly, rates of mental health or developmental diagnoses for this group were more than twice as high as for class 3 (OR = 2.27), more than seven times higher than for class 4 (OR = 7.64), and almost four times higher than for class 5 (OR = 3.82); however, they were 29% less likely to have a diagnosis than youths in class 2 (OR = .71). Class 1 had completed their adoptions more recently than class 3, 4, or 5, but less recently than class 2 (OR = 1.05). Class 1 families were almost twice as likely to have a transracial placement as class 4 (OR = 1.90) or class 5 (OR = 1.97). Families in class 1 were more than twice as likely to participate in a support group as those in class 4 (OR = 2.22) or class 5 (OR = 2.42).

Youth Special Needs (Class 2)

Class 2 youths were significantly older than those in any other class, and their adoptive placements were also more recent on average than those of any other class. They were most likely to have a mental health or developmental diagnosis: more than three times the likelihood of class 3 (OR = 3.19), 10 times the likelihood of class 4 (OR = 10.77), and five times the likelihood of class 5 (OR = 5.39). Their adoptive placements were also more recent on average than those of any other class. Mem-

Table 4: Odds Ratios for Predictors on Latent Class Membership ($n = 1,341$)					
Characteristic	Class 1: Both	Class 2: Special Needs	Class 3: Adoption Specific	Class 4: Adoption Adjustment	Class 5: Low Need
Household income	0.81*	0.77*	0.88	0.99	(1.0)
Parent age (in years)	1.00	0.98	0.99	0.99	(1.0)
Parent completed college	0.56^	0.89	1.16	1.13	(1.0)
LGBT parent	0.55*	0.68	0.89	1.08	(1.0)
Youth current age (in years)	1.16*	1.30**	0.99	0.78*	(1.0)
Youth special need at adoption	1.50	1.35	0.96	1.24	(1.0)
Youth has dev/MH diagnosis	3.82***	5.39***	1.68*	0.50^	(1.0)
Years since adoption	0.86*	0.82*	0.99	1.24^	(1.0)
International (ref: foster care)	0.81	1.64	0.77	1.70	(1.0)
Private domestic (ref: foster care)	0.86	1.49	0.68	0.84	(1.0)
Transracial adoptive placement	1.97**	1.61^	1.76*	1.04	(1.0)
Current support group participation	2.42***	1.17	1.99**	1.09	(1.0)
Household income	0.82*	0.78*	0.90	(1.0)	
Parent age in years	1.01	0.99	1.01	(1.0)	
Parent completed college	0.51*	0.79	1.03	(1.0)	
LGBT parent	0.51*	0.63	0.83	(1.0)	
Youth current age (in years)	1.47***	1.66***	1.27*	(1.0)	
Youth special need at adoption	1.21	1.09	0.78	(1.0)	
Youth has dev/MH diagnosis	7.64***	10.77***	3.37***	(1.0)	
Years since adoption	0.69***	0.66***	0.80*	(1.0)	
International (ref: foster care)	0.48*	0.97	0.46*	(1.0)	
Private domestic (ref: foster care)	1.03	1.78	0.82	(1.0)	
Transracial adoptive placement	1.90**	1.55	1.70*	(1.0)	
Current support group participation	2.22***	1.07	1.83**	(1.0)	
Household income	0.91	0.87	(1.0)		
Parent age (in years)	1.00	0.98	(1.0)		
Parent completed college	0.49**	0.77	(1.0)		
LGBT parent	0.62*	0.76	(1.0)		
Youth current age (in years)	1.16**	1.30***	(1.0)		
Youth special need at adoption	1.56*	1.40	(1.0)		
Youth has dev/MH diagnosis	2.27***	3.19***	(1.0)		
Years since adoption	0.87**	0.83***	(1.0)		
International (ref: foster care)	1.05	2.12*	(1.0)		
Private domestic (ref: foster care)	1.26	2.18^	(1.0)		
Transracial adoptive placement	1.12	0.91	(1.0)		
Current support group participation	1.22	0.59*	(1.0)		
Household income	1.06	(1.0)			
Parent age (in years)	1.02	(1.0)			
Parent completed college	0.64**	(1.0)			
LGBT parent	0.81*	(1.0)			
Youth current age (in years)	0.89**	(1.0)			
Youth special need at adoption	1.11*	(1.0)			
Youth has dev/MH diagnosis	0.71***	(1.0)			
Years since adoption	1.05**	(1.0)			
International (ref: foster care)	0.50	(1.0)			
Private domestic (ref: foster care)	0.58	(1.0)			
Transracial adoptive placement	1.23	(1.0)			
Current support group participation	2.08	(1.0)			

Notes: Dev/MH = developmental or mental health; LGBT = lesbian, gay, bisexual, transgender. Values in bold font are significant at $p < .05$ or greater.
^$p < .1$. *$p < .05$. **$p < .01$. ***$p < .001$.

bership in class 2 was associated with reporting a lower income category than membership in class 4 or 5. Compared with class 3, class 2 members were twice as likely to have an international adoption as opposed to adoption from foster care ($OR = 2.12$) but were 40% less likely to participate in a support group ($OR = .59$).

Adoption-Specific Concerns (Class 3)

Class 3 youths had adoption-specific challenges; as the middle group, they had more risk factors than class 4 or 5 but were less challenged than class 1 or 2. They were more than three times more likely to have a mental health or developmental diagnosis than those in class 4 and 1.68 times more likely than those in class 5. Class 3 members were also more likely to be in a transracial placement than class 4 ($OR = 1.70$) or class 5 ($OR = 1.76$). Perhaps relatedly, class 3 had almost twice the likelihood of participating in a support group compared with class 4 ($OR = 1.83$) or class 5 ($OR = 1.99$). Compared with classes 1 and 2, class 3 youths are younger, are less likely to have a mental health diagnosis, and have had more time pass since their adoptions were completed.

Adoption Adjustment Support (Class 4)

Families in class 4 showed heightened adoption adjustment concerns and included youths who were younger than those of any other class, but more time had passed since their adoption compared with any other class. These youths were least likely to have a mental health or developmental diagnosis, less likely to have a transracial placement than class 1 or class 3, and less likely than those two classes to participate in a support group.

Low Need (Class 5)

As the low-need class, class 5 reflects many assets and few challenges. Members of this group had significantly higher income than those of class 1 and class 2 and were more likely to include an LGBT parent than class 1. Youths in class 5 were younger than those in class 1 or 2 but older than those in class 4. These youths were less likely to have a mental health or developmental diagnosis than those in classes 1, 2, or 3. They had a lower likelihood of currently participating in a support group than any other group.

DISCUSSION

This study identified distinct profiles of post-adoption support needs for families. It is notable that only a small number of families (12%) was considered low-need. Almost one in six families expressed a need to know more about issues relevant to adoption adjustment, and a similar proportion had needs related to their adopted child's special needs. Of notable concern is that the largest classes were families with high rates of adoption-specific concerns (30%) and families who faced both special needs for their child and concerns related to the adoption experience. These two largest groups are characterized by key vulnerabilities that may render them at greater risk for adoption disruption.

Consistent with the ecological theory, characteristics of the adoption microsystem (especially parent and youth factors) were associated with post-adoption-need class membership. Although adoptive parents are generally understood to be well educated (Hamilton et al., 2007), the highest proportion of parents without a college education was found in the greatest need class: families with both adoption-specific and special needs. This finding may suggest that less-educated parents are more willing to adopt youths who are experiencing more challenges. It is not surprising that these families with the lowest education levels also had lower incomes. Families in class 4 and 5 had higher education and income, which may have provided them with access to more material assets that moderated their need for post-adoption supports. Sexual minority parents were least represented in the highest need class, a finding that similarly raises the question of whether these families have additional supports, such as LGBT-specific supports, that buffer their needs. Indeed, sexual minority parents may be especially attuned to gaps and insensitivities in traditional services, which may render them particularly adept at seeking out support (Kinkler & Goldberg, 2011). More research is needed to understand how a family's resources may play a role in adoption decision making, post-adoption help-seeking, and placement stability.

As found in previous literature, youth special needs and developmental or mental health diagnoses were significant factors in predicting post-adoption needs. Parenting a child with special challenges requires additional supports, and adoptive parents have varying levels of preparation for what they face. The literature has shown that parents often have incomplete information about the child before adoption and may have had expectations

that are not consistent with the reality they face (B. R. Lee et al., 2018; Moyer & Goldberg, 2017). Regardless of the reasons, findings from this analysis suggest that parenting a child with a diagnosed condition or special need is associated with membership in the highest post–adoption service need classes.

Current youth age and time since adoption were also associated with need profiles. Youths in the lowest three need classes (class 3, 4, and 5) were on average about seven years old and had been adopted at under two years old. In comparison, youths in the special-needs class were about 10 years old and had been adopted at about age three; youths in the adoption-specific and special-needs class were about nine years old and were adopted at just over two years old. Data on youth age and time since adoption together suggest that later age at adoption, in addition to older current age, may create additional post-adoption needs for parents (Smith et al., 2014; Waid & Alewine, 2018).

Adoption characteristics were less strongly associated with need class than expected. Although prior literature shows heightened risks for youths adopted from foster care, this finding was less pronounced in the present sample, perhaps because special need and diagnosis are included in the model. Transracial placements were almost twice as likely to be found in the adoption-specific need classes compared with low need and adoption adjustment, suggesting that these visible differences may be associated with increased post-adoption needs, especially related to racial and cultural socialization (Pinderhughes & Brodzinsky, 2019).

Perhaps not surprising, families in the highest need classes also had the highest rates of participation in adoption support groups for parents. This finding is both encouraging and concerning. It suggests that these families recognize their needs and are actively engaged in help-seeking. However, their post-adoption needs may exceed the supports provided by a parent group. Further research on the relationship between participation in services and unmet post-adoption needs is warranted. Also important is deeper investigation into parents' perceptions of what is needed but absent in the types of post-adoption supports they are able to access.

Limitations

This study has several limitations that should be considered in interpreting the findings. First, the survey relied on self-reports from adoptive parents, which may not be a reliable measure of need. The need items also were not psychometrically tested or validated and may not comprehensively reflect all the needs adoptive families may experience. Second, although the MAF data set comprises one of the largest and most current samples of adoptive families, it may not be representative of all adoptive families. The survey intentionally oversampled LGBT families and relied on agency cooperation to solicit participation from adoptive families they have served, a procedure that may have created unidentifiable clusters of networked families who may have similar needs or characteristics. Third, although we recognize that current service use and help-seeking is an important consideration of family need, measurement issues limited our ability to fully consider how needs and services may interact. Furthermore, we did not consider the duration, intensity, quality, or effectiveness of services the parents were currently or had previously been receiving. Additional study on service use and quality is needed.

CONCLUSION

Identifying subgroups of adoptive families with distinct needs has clear implications for post-adoption social work practice. The preponderance of families with high rates of post-adoption service needs also makes the case for an adoption-competent workforce. Social workers need to be knowledgeable about the needs of families post-adoption and how to connect families with needed services. The National Adoption Competency Mental Health Training Initiative is one effort to promote high-quality practice with families who have experienced guardianship or adoption (Wilson, Riley, & Lee, 2018). This online training is available nationally for child welfare and mental health professionals through the Children's Bureau training Web site. Evaluation results from the pilot study suggest improvements in both perceived and actual adoption competencies (Smith Goering, Wilson, Lee, & Bright, 2018).

However, preparation of the workforce to serve post-adoption families must extend beyond just social workers engaged in the public child welfare system. This study found that adoption type (foster care versus international versus domestic) was not a strong predictor of need class. This being the case, assessing and treating post-adoptive needs is more

than a child welfare system opportunity. Social workers in schools, behavioral health programs, and other youth settings may encounter adoptive families ([Brodzinsky, Santa, & Smith, 2016](#)) and need to be prepared to treat them. Even in this sample of parents who completed their adoption on average over five years ago, parents still have current needs related to adoption. The post-adoption need profiles identified in this study offer insight into how the field can better anticipate and address challenges faced by adoptive families. **SWR**

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