



Disruptions in foster care: A review and meta-analysis

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Abstract

This review examined risk and protective factors associated with placement breakdown across $k=26$ studies of 20,650 children in foster families. A series of meta-analyses were performed to assess the average effect sizes across multiple studies on the same factors. Older age at placement ($k=15$), behavior problems ($k=13$), a history of residential care ($k=7$) and previous placements ($k=6$) showed significant small to moderate associations with placement breakdown. A large combined effect size was found for behavior problems when analyzed in multivariate models. Unexpectedly, kinship care ($k=6$) did not show a significant association with placement breakdown. Other potential protective factors of placement breakdown referred to the quality of foster caregiving and other foster care related aspects, which showed small to large effect sizes. However, findings were contradictory when univariate and multivariate results were compared. Results of multivariate studies suggested mediating and moderating effects of variables related to the children's background. This might suggest that more insight in the processes leading up to placement breakdown may be derived from causal models.

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1. Introduction

Foster care has proved to be preferable above institutional care when children's safety and well-being cannot be safeguarded in their own homes (Roy, Rutter, & Pickles, 2000). Nevertheless, children placed in foster care are separated from their primary caregivers, which may

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result in short- and long-term affective and behavioral reactions (e.g., [Stovall & Dozier, 2000](#)). [Bowlby](#) reasoned on the basis of his attachment theory (1969/1997, 1973/1998, 1980/1998) that grief, anger, and distress as the result of temporary or permanent loss of access to existing attachment figures can only be resolved by children, if they are able to develop attachment relationships with their alternative caregivers. The need for affectionate and stable care is also recognized in the ‘Declaration on Social and Legal Principles relating to the Protection and Welfare of Children, with special reference to Foster Placement and Adoption Nationally and Internationally’ of the United Nations, which states: “In all matters relating to the placement of a child outside the care of the child’s own parents, the best interests of the child, particularly his or her need for affection and right to security and continuing care, should be the paramount consideration” (Declaration Adopted by General Assembly resolution 41/85 of 3 December 1986). Nevertheless, between 20% and 50% of children in long term foster care experience that their planned stay in their foster family ends prematurely ([Minty, 1999](#)). Because foster children are already at increased risk for behavioral problems (e.g., [Lawrence, Carlson & Egeland, 2006](#)), health problems (e.g., [Takayama, Wolfe & Coulter, 1998](#)) and academic skill delay (e.g., [Zima, Bussing, Freeman, Yang, Belin & Forness, 2000](#)), any additional risk, such as yet another separation and upheaval in the child’s life because of placement breakdown, should be avoided ([Minty, 1999](#)).

The purpose of this review of research on placement disruptions in family foster care is to provide a summary of factors associated with placement outcome in the form of placement breakdown, in order to identify risk and protective factors. Because the attention of theorists in the field is increasingly on risk and protective mechanisms above the assessment of the relative importance of several separate risk factors ([Rutter, 2000a](#)), the types of risk and protective factors must be taken into account. Theories of risk and protective mechanisms can be built if distal and proximal factors are distinguished. Proximal risk processes are directly involved in the mediation of the risk for placement breakdown whereas distal risk factors are catalytic and only indirectly involved through its association with another risk factor ([Rutter, 2000b](#)). Additionally, based on the individual variation in placement outcomes, we will examine which factors may be involved in resilience, that is good outcomes despite earlier risk experiences ([Rutter, 2000a](#)). A second aim of this review is to compare the sizes of the effects of the various risk or protective factors on placement breakdown, based on a series of meta-analyses on factors that were found across multiple studies. Third, the relation between the heterogeneity of the findings across studies and differences in study characteristics will be discussed and analyzed quantitatively.

Over the past 45 years, research in the field of foster care has explored a number of characteristics associated with children’s background as well as characteristics of the foster placement in relation to placement outcome. Characteristics associated with children’s background have been labelled as predictors of placement breakdown or placement success. It has been hypothesized that placement will break down less often when children are younger (e.g., [Parker, 1966](#)), better adjusted and socialized (e.g., [Stone & Stone, 1983](#)) and when children have less severe histories of maltreatment (e.g., [Cooper, Peterson & Meier, 1987](#)). Behavior problems as well as health and mental health problems have been hypothesized as predictors of placement breakdown (e.g., [Parker, 1966](#)), although they are also consequences of placement breakdown (e.g., [Takayama, Wolfe & Coulter, 1998](#)) and could be responsible for a vicious circle of breakdown and behavioral and psychological pathology. This review will examine the evidence for the hypothesized effects on placement breakdown.

Characteristics of the foster placement have also been regarded as related to placement breakdown and success. The presence of foster parents’ biological children (e.g., [Parker,](#)

1966), as well as kinship care (e.g., Minty, 1999), quality of foster caregiving (e.g., Stone & Stone, 1983), training of the case worker (e.g., Kalland & Sinkkonen, 2001), and involvement of the biological parents (e.g., Fanshel & Shinn, 1978) have been hypothesized as risk or protective factors, and the evidence from the extant studies will be examined.

Taking stock of this body of research is complicated by the divergence in terminology and definitions of placement breakdown, placement success, placement failure, placement instability, number of placement changes, unplanned removal, etc. In general, these terms describe the same underlying phenomenon, namely that many children have to move multiple times from foster family to foster family or group home, under the responsibility of child protective services or welfare organizations. Based on the assumption that multiple moves between foster homes and group homes are universally seen as undesirable, the term placement breakdown was chosen in this review to refer to the dependent variable under study.

2. Method

2.1. Literature searches

First, a computer search was performed on Web of Science (1945–2005) and PsychINFO (1872–2005), using the following key words: placement failure, placement disruption, placement breakdown, failed placement, disrupted placement, placement instability, placement stability, placement movements, placement transitions, unsuccessful transitions, multiple placements, placement changes, foster care and disruption, foster care and breakdown, foster care and failed placement, foster care and placement disruption, foster care and transitions, foster care and discharge, foster care and departure and foster care and placement movements. Second, the reference lists of retrieved articles were checked on relevance.

2.2. Inclusion and exclusion criteria

To be included in the present review, studies had to describe original data and had to include factors associated with children's background or foster placement factors. In addition, studies were only included when the placement outcome, that is breakdown, was unplanned. Consequently, studies in which the moves were planned, for example when children were adopted or reunified with biological parents, were not included. Studies on placement breakdown outside foster family care (e.g., group care, institutional settings) were also excluded, with the exception of studies that described previous placements in group care. Two publications included almost the same sample (James, 2004; James, Landsverk, & Slymen, 2004). In contrast to James (2004), the study of James et al. (2004) excluded children who left out of home care at the end of the data collection period. The study of James (2004) was included because this sample was supposed to be more representative of the total group of children in foster care. Further, studies had to include sufficient data to determine effect sizes. Finally, unpublished papers or reports (e.g., early reports of the British Agencies for Adoption and Fostering, BAAF) were not included in the review. Of all studies, 26 studies satisfied these criteria. Publication years of these studies ranged from 1960 to 2005 (see Table 1).

2.3. Calculation of effect sizes

A meta-analytic approach was used to examine the combined effect sizes of factors that were included by five or more similar studies, that is age, placement history (residential care and

Table 1
 Characteristics of studies on predictors of placement breakdown

Study (year of publication)	Country	Study interval (in months)	<i>N</i>	Age of child min–max (mean) (in months)	Method	Indicator of placement failure
Trasler (1960)	UK	36	57	12–	Univariate	Successful (second) placement
Parker (1966)	UK	60	209	0–	Univariate	Placement success (child remained 5 years in placement)
George (1970)	UK	60	112	0–156	Univariate	Placement success (child remained 5 years in placement)
Kraus (1973)	Australia	24	157	72–	Univariate	Placement success (child remained at least 24 months in placement)
Fanshel and Shinn (1978)	USA	60	577	0– (8.9)	Univariate	Number of placements
Stone and Stone (1983)	USA	18	64	42–	Univariate	Placement failure (removal within 1 1/2 years)
Pardeck (1984)	USA	60	4288		Univariate	Multiple placement (3 or more placements)
Berridge and Cleaver (1987)	UK	60	145		Univariate	Placement breakdown (within 1, 3 or 5 year placement)
Cooper et al. (1987)	USA		172	0–168	Univariate	Placement rate (number placements/ time in transition)
Walsh and Walsh (1990)	USA		51		Univariate	Placement breakdown
Thorpe and Swart (1992)	UK		115	–180 (5.9)	Univariate	Number of placements
Iglehart (1994)	USA	5	990	192–	Univariate	Number of placements
Fernandez (1999)	Australia	48	201	0–216	Multivariate	Second or third placement
Usher et al. (1999)	USA	36–48	146		Univariate	Placement breakdown
Drapeau et al. (2000)	Canada		335		Univariate	Length of time in current placement
Palmer (1996)	Canada	18	81	48–204	Univariate	Number of placements
McAuley and Trew (2000)	Ireland	20	19	(8.5)	Multivariate	Disrupted/non-disrupted
Newton et al. (2000)	USA	17	415	(6.6)	Univariate	Placement changes
Webster et al. (2000)	USA	96	5137	0–72	Univariate	Placement instability (3 or more moves after first year of placement)
Smith (2001)	USA	6	90	24–192	Multivariate	Placement disruption (unplanned move from the foster home)
Barber et al. (2001)	Australia	4	230	48–204 (10.8)	Univariate	Placement instability (2 or more placements between baseline and follow-up)
Kalland and Sinkkonen (2001)	Finland	60	234	0–157	Univariate	Placement breakdown (independent of the reason)
Sinclair and Wilson (2003)	UK	14	385		Univariate	Placement breakdown
Wulczyn et al. (2003)	USA	42	5663	0–23	Multivariate	Placement moves (changes between placements: changes to another type of care not included;

Table 1 (continued)

Study (year of publication)	Country	Study interval (in months)	<i>N</i>	Age of child min–max (mean) (in months)	Method	Indicator of placement failure
James (2004)	USA	18	580	12–192	Multivariate	except if change is from kinship care to an unrelated foster family) First behavior related placement change
Leathers (2005)	USA	60	197		Univariate, multivariate	Placement disruption

previous placements), behavioral problems and kinship care. The correlation coefficient (r) was used as effect size estimate (Mullen, 1989). If a study reported no significant effects and did not provide adequate test statistics, we conservatively estimated the effect size as $p = .50$. If a study revealed significant effects in the absence of test statistics, the effect size was conservatively estimated as $p = .05$ (Mullen, 1989). When studies included multiple measures of a specific predictor, effect sizes within each study were averaged to yield a single correlation for assessment of the overall strength of the relation between the predictor and placement breakdown. Combined effect sizes were computed by weighting each study as a function of sample size (Mullen, 1989; Rosenthal, 1991). Unweighted analyses were also conducted, because a few studies, which were included in one of the meta-analyses, were extremely large (Pardeck, 1984; Webster, Barth & Needell, 2000; Wulczyn, Kogan & Harden, 2003). Where unweighted analyses provided different results from weighted analyses, both were reported. Further, tests for homogeneity were performed and predictor variables were used to examine the variation in study outcomes (Mullen, 1989). That is, the predictor variables described the major differences between the studies. With respect to the meta-analyses of age as a risk factor, the following predictors were included: year of publication, country, study interval, minimum age of child, maximum age of child, age range of child and type of analysis (univariate or multivariate). For the meta-analyses on residential care, previous placements and kinship care, the predictors year of publication, analysis, study interval and country were included. Age was not included as predictor because only one study reported appropriate age details. For the meta-analysis on behavioral problems, year of publication, country, study interval, mean age child, report (parent report or 'objective' report, e.g., foster care worker report) and the method of measurement (standardized or not standardized) were included. Cohen's criteria (Cohen, 1988) for small ($r = .10-.29$), medium ($r = .30-.49$) and large ($r \geq .50$) effect sizes were used to evaluate the magnitude of the effect sizes. Tables 2 and 3 summarizes the effect sizes of factors associated with children's background and foster placement that were examined in relation to placement breakdown.

3. Results and conclusions

3.1. Factors associated with children's background

3.1.1. Age of child

Early studies on predictors of placement breakdown (Parker, 1966; Trasler, 1960) showed that children placed in foster care at older age were more likely to experience placement disruption. Children under age 3 more often remained in a particular placement for 5 years or more than

Table 2
Predictors of placement breakdown associated with child's background

Study	Predictors associated with child's background	Findings	E.S.
Trasler (1960)	Age	Age ↑ (>7)× Placement success ↓	<i>r</i> = .26
	Time in institutional care during first 3 years of life	Time in institutions ↑× Successful placement ↓	<i>r</i> = .34
Parker (1960)	Age	Age ↓ (<4)× Placement success ↑	<i>r</i> = .23
	Mother was dead	Loss of mother× Placement success ↓	<i>r</i> = .22
	First placement in foster care	First placement× Placement success ↓	<i>r</i> = .14
	Number of previous placements	<i>ns</i>	<i>r</i> = .14
	Time in institutional care, number of institutions, institution during first 2 years, length of time in institutions during first 2 and 5 years of life	<i>ns</i>	<i>r</i> = .09 ^b
	Behavior problems: objective report/not standardized ^d Mental disability	Behavior problems ↑× Placement success ↓ Mental disability× Placement success ↓	<i>r</i> = .23 <i>r</i> = .15
George (1970)	Age	Age ↓× Placement success ↑	<i>r</i> = .41
	Mother was dead	<i>ns</i>	<i>r</i> = .16
	Biological parents living together vs. living apart (<i>n</i> = 72)	<i>ns</i>	<i>r</i> = .01
	Number of institutions	>2× Placement success ↓	<i>r</i> = .27
	Behavior problems: objective report/not standardized ^c	Behavior problems ↑× Placement success ↓	<i>r</i> = .24
Kraus (1973)	Age	<i>ns</i>	<i>r</i> = .00
Fanshel and Shinn (1978)	Age	<i>ns</i>	<i>r</i> = .03
	Child behavior (vs. other reasons)	Behavior× Number of placements ↓	<i>r</i> = -.10
	Parent unwilling to care (vs. other reasons)	Unwilling ↑× Number of placements ↓	<i>r</i> = -.10
	(Log) days in care over 5 years	Days in care ↑× Number of placements ↑	<i>r</i> = .44
	First placement in institution (vs. foster family care)	Placement in institution× Number of placements ↑	<i>r</i> = .17
	Behavior problems: objective report/standardized ^d	<i>ns</i>	<i>r</i> = .07
	Developmental problems	<i>ns</i>	<i>r</i> = -.03
	Age	<i>ns</i>	<i>r</i> = .00
	Acute (vs. chronic) family problems (e.g., abuse, neglect)	Acute family problems× Placement failure ↓	<i>r</i> = -.26
	Behavior problems: objective report/standardized ^c	Aggressive behavior ↓× Placement success ↑	<i>r</i> = .27
Stone and Stone (1983)	Socialization	Socialization ↑× Placement success ↑	<i>r</i> = -.30
	Adjustment	Adjustment ↑× Placement success ↑	<i>r</i> = -.34
	Contact between child and caseworker	Contact ↑× Placement success ↑	<i>r</i> = -.27
	'Normal' attachment	'Normal' attachment ↑× Placement success ↑	<i>r</i> = -.30

Table 2 (continued)

Study	Predictors associated with child's background	Findings	E.S.
Pardeck (1984)	Alcoholism of father	Alcoholism ↑× Multiple placements ↑	$r=.16$
	Alcoholism of mother	Alcoholism ↑× Multiple placements ↑	$r=.18$
	Drug addiction of the mother, abuse, neglect, abandonment, emotional problems and mental illness of parents, conflict between child and parents, intactness of family	<i>ns</i>	$r=.07^a$
	Behavior problems: objective report/not standardized ^c	Behavioral problems ↑× Multiple placements ↑	$r=.24$
	Physical handicap	<i>ns</i>	$r=-.06$
	Mental retardation	<i>ns</i>	$r=.05$
	Length of time in residential care ($n=145$)	<i>ns</i>	$r=.16$
Berridge and Cleaver (1987)			
Cooper et al. (1987)	Age	Age ↑× Placement rate ↑	$r=.37$
	Drug/alcohol abuse in family (vs. no abuse)	Abuse× Number of placements ↑	$r=.19$
	Number of maltreated children in family	Maltreated children ↑× Number of placements ↑	$r=.12$
	Family income, age of mother, age of father	<i>ns</i>	$r=-.05^a$
	Behavior problems: objective report/not standardized ^c	<i>ns</i>	$r=.04$
Walsh and Walsh (1990)	1 or >1 placement in institutions	Placement institutions ↑× Placement breakdown ↑	$r=.53$
	Number of placements	Number of placements ↑× Placement breakdown ↑	$r=.37$
	Behavior problems: objective report/not standardized ^c	Passive-aggressive behavior ↑× Placement breakdown ↑	$r=.46$
	Fail to attach	Fail to attach × Placement breakdown ↑	$r=.41$
Fernandez (1999)	Age	<i>ns</i>	$r=.00$
	Behavior problems, environmental and situational factors, parent illness/disability child abuse/neglect, parent behavior	Behavior problems × Second/third placement ↑	$r=.15^a$
	Income status	Income ↑× Second placement ↓ (Third: <i>ns</i>)	$r=-.02^a$
	Family composition, living in public accommodation	<i>ns</i>	$r=.07^a$
	Type of first and second placement (residential)	Residential (vs. other) × Second/third placement ↓	$r=-.04^a$
Palmer (1996)	Age	<i>ns</i>	$r=.00$
	Behavior problems: objective report/standardized ^c	Difficulty behavior ↑× Number of placements ↑	$r=.43$
McAuley and Trew (2000)	Behavior problems: foster parent report/standardized ^d	Externalizing behavior ↑× Placement disruption ↑	$r=.38$
Newton et al. (2000)	Behavior problems: foster parent report/standardized ^d	Behavior problems ↑× Number of placements ↑	$r=.16$
Webster et al. (2000)	Age	Toddlers (vs. infants) × Placement instability ↑	$r=.13$
	Neglect (vs. abuse; e.g., physical or sexual abuse)	Neglect × Placement instability ↓	$r=-.04$
	More than one placement move during first year of foster care (vs. one or none placement move)	>1 placement move × Placement instability ↑	$r=.09$

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Table 2 (continued)

Study	Predictors associated with child's background	Findings	E.S.
Smith (2001)	Age	Age ↑ (12+) × Placement disruption ↑	$r = .17$
	Number of previous placements	<i>ns</i>	$r = .00$
Barber et al. (2001)	Age	Age ↑ × Placement instability ↑	$r = .15$
	Neglect (vs. abuse: physical, sexual or emotional)	Neglect × Placement instability ↓	$r = -.17$
	Behavior problems: objective report/standardized ^d	Conduct disorder ↑ × Placement breakdown ↑ Hyperactivity ↑ × Placement breakdown ↑ Emotionality ↑ ×	$r = .16^b$
	Social adjustment	Placement breakdown ↑ Social adjustment ↓ × Placement breakdown ↑	$r = -.15$
	Age	Age ↑ × Placement breakdown ↑	$r = .86$
Kalland and Sinkkonen (2001)	Severity of history (neglect, physical or sexual abuse)	<i>ns</i>	$r = .05^a$
	Number of previous placements	<i>ns</i>	$r = .00$
	Developmental or health problems	<i>ns</i>	$r = .00$
Sinclair and Wilson (2003)	Behavior problems: foster parent report/standardized ^c	Difficulties score ↑ × Placement breakdown ↑	$r = .21$
	Pro-social behavior	Pro-social behavior ↑ × Placement breakdown ↓	$r = -.12$
	Motivation	Motivation ↑ × Placement breakdown ↓	$r = -.16$
	Age	Adolescents × Placement moves ↑	$r = .05$
Wulczyn et al. (2003)	Time (first 6 months of placement)	First 6 months × Placement moves ↑	$r = .40$
	Age	Age ↑ × Placement change ↑	$r = .12$
James (2004)	Emotional abuse (vs. sexual and physical abuse and neglect)	Emotional abuse × Placement change ↑	$r = .39$
	Routine placement moves	Routine × Placement change ↓	$r = -.61$
	Behavior problems: foster-parent report/standardized ^c	Externalizing behavior ↑ × Placement change ↑	$r = .51^b$
		Internalizing behavior: <i>ns</i>	

^aMean effect size, ^bcombined effect size, ^cconducted at time of placement, ^dconducted at the end of the study interval, ^eunknown when conducted.

Note. The sign of the effect sizes was defined in relation to placement breakdown.

children above age 3. The association between age and placement breakdown was examined by $k = 15$ studies including $n = 13,564$ participants. Effect sizes in these studies ranged from $r = .00$ (Fernandez, 1999; Kraus, 1973; Palmer, 1996; Stone & Stone, 1983) to $r = .86$ (Kalland & Sinkkonen, 2001).

The meta-analytical results for the relation between age and placement breakdown revealed a combined correlation of $r = .12$, which was a significant ($p < .001$) but small effect. The combined correlation on the basis of unweighted analyses was $r = .21$. In order to control for the effects of other factors such as child behavior problems, gender, ethnicity, number of prior placements, time in care and reason for out of home placement, several investigations ($k = 4$, $n = 6534$) used multivariate analysis. The contrast between univariate and multivariate effect sizes was significant, $z = 4.29$, $p < .001$. Outcomes of multivariate studies were homogeneous but the combined

Table 3
Predictors of placement breakdown associated with foster placement

Study	Predictors associated with foster placement	Findings	E.S.
Trasler (1960)	Biological child of the same sex and not more than 3 years older or younger than foster child	Biological child of same sex and <3 years older or younger × Successful placement ↓	$r = .42$
	Presence of another child	<i>ns</i>	$r = .24$
	Presence of a sibling	With sibling × Successful placements ↑	$r = -.42$
	Presence of another foster child in the foster family	Another foster child × Successful placements ↑	$r = -.43$
Parker (1966)	Age of foster mother	<40 × Successful placements ↓	$r = .35$
	Number of biological children (none vs. one or more)	None × Placement success ↑	$r = .22$
	Separated from siblings (vs. not separated or reunified)	<i>ns</i>	$r = -.06$
	Age of foster mother	<i>ns</i>	$r = .11$
George (1970)	Experience foster mother	No experience × Placement success ↑	$r = -.15$
	Number of biological children (none vs. some)	None × Placement success ↑	$r = -.25$
	Separated from all siblings (vs. not separated or separated from some siblings) ($n = 86$)	Separated from all siblings × Placement success ↑	$r = -.35$
	Age of foster mother	Age of 25–34 years × Placement success ↑	$r = -.29$
Kraus (1973)	Visits biological parents	<i>ns</i>	$r = .02$
	2 biological children in foster family	Biological children × placement success ↑	$r = -.13$
	Ability to cope with child's behavior problems	<i>ns</i>	$r = .00$
	Motivation: generally interested	Interested ↑ × Placement success ↑	$r = -.13$
	Know child	Know child ↑ × Placement success ↑	$r = -.13$
	Want company for own child	Want company ↑ × Placement success ↓	$r = .13$
	Presence of another foster child in the foster family	Another foster child × Placement success ↑	$r = -.13$
	Age of foster mother	Age of foster mother >46 × Placement success ↑	$r = -.13$
	Income, religion of foster parents, occupation, preference in age and sex, total children in the house	<i>ns</i>	$r = .00^a$
	Fanshel and Shinn (1978)	Visits biological parents	Visits ↓ × Number of placements ↓
(Negative) evaluation of biological mother		Negative evaluation × Number of placements ↓	$r = -.16$
Stone and Stone (1983)	Competence	Competence ↑ × Placement failure ↓	$r = -.32$
	Opportunities for intellectual development	Opportunities ↑ × Placement failure ↓	$r = -.30$
	Caseworker contacts	Contacts ↑ × Placement failure ↓	$r = -.61$
	Rapport between foster parents and agency	Rapport ↑ × Placement failure ↓	$r = -.37$

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Table 3 (continued)

Study	Predictors associated with foster placement	Findings	E.S.	
Pardeck (1984)	Motivation	Motivation ↑× Placement failure ↓	$r = -.31$	
	Number of workers	Workers ↑× Multiple placements ↑	$r = .30$	
	Educational level of social worker	<i>ns</i>	$r = .00$	
	Years of experience of social worker	<i>ns</i>	$r = .07$	
Berridge and Cleaver (1987)	Visiting biological parents	<i>ns</i>	$r = -.03$	
	Kinship care ($n = 206$)	<i>ns</i>	$r = -.20^a$	
Walsh and Walsh (1990)	Toleration unassimilated aspects of foster child	Toleration ↑× Placement breakdown ↓	$r = -.47$	
	Good relation with own family	Good relation ↑× Placement breakdown ↓	$r = -.44$	
	Foster father's emotional involvement	Involvement ↑× Placement breakdown ↓	$r = -.39$	
	Overnurturing foster home	Overnurturing ↑× Placement breakdown ↓	$r = -.37$	
	Child-centered foster home	Child-centered ↑× Placement breakdown ↓	$r = -.37$	
	Foster parent's length of marriage	Marriage ↑× Placement breakdown ↓	$r = -.49$	
	Age of foster father	Age ↑× Placement breakdown ↓	$r = -.35$	
	No contact with biological father	No contact ↑× Placement breakdown ↓	$r = -.35$	
	Thorpe and Swart (1992)	Placement with siblings	With sibling × Number of placements ↓	$r = -.24$
		Iglehart (1994)	Kinship: 36%	Kinship care × Number of placements ↓
Fernandez (1999)	Legal status of placement (voluntary)		Voluntary × Second placement ↓	$r = -.09^a$
Palmer (1996)	Worker's training in separation	Training ↑× Number of placements ↑	$r = .20$	
	Preparation of child by biological parents	Preparation ↑× Number of placements ↓	$r = -.21$	
Usher et al. (1999)	Kinship: 39.7%	Kinship care × Placement breakdown ↓	$r = -.26$	
Drapeau et al. (2000)	Placement with siblings	With siblings × Length of time in placement ↑	$r = -.11$	
Webster et al. (2000)	Kinship: 52%	Kinship care × Placement moves ↓	$r = -.15$	
		Biological children × Placement breakdown ↑	$r = .31$	
Kalland and Sinkkonen (2001)	Biological children in the family	Biological children × Placement breakdown ↑	$r = .31$	
	Family resources	Family resources ↑× Placement breakdown ↓	$r = -.70$	
	Training foster parents	Training ↑× Placement breakdown ↓	$r = -.40$	
	Foster parents received support from relatives	Support ↑× Placement breakdown ↓	$r = -.50$	
	Foster parents received support from social worker	Support ↑× Placement breakdown ↓	$r = -.40$	
	Foster parents received support from local authorities	Support ↑× Placement breakdown ↓	$r = -.30$	

Table 3 (continued)

Study	Predictors associated with foster placement	Findings	E.S.
	Foster parents had enough info about the child	Info ↑× Placement breakdown ↓	$r = -.40$
	Child received support from professionals	Support ↑× Placement breakdown ↓	$r = -.20$
	Good cooperation birth and foster parents	Good cooperation ↑× Placement breakdown ↓	$r = -.40$
	Cooperation of social worker and biological family	Cooperation × Placement breakdown ↓	$r = -.20$
	Cooperation with local authorities	Cooperation × Placement breakdown ↓	$r = -.20$
Sinclair and Wilson (2003)	Parenting scores	Parenting scores ↑× Placement breakdown ↓	$r = -.16$
	Rejection scores	Rejection scores ↓× Placement breakdown ↓	$r = .22$
Wulczyn et al. (2003)	Kinship ($n = 433$)	First placement in kinship × Placement moves ↓	$r = -.05$
	No siblings in care or not at same time in care (vs. sibling at same time in care)	Sibling in care × Placement moves ↑	$r = .05$
James (2004)	Kinship: 53.4%	Days in kinship ↑× Placement change ↓	$r = -.01$
Leathers (2005)	Placement with same number of siblings (vs. other patterns)	With siblings × Placement disruption ↓	$r = -.20$
	Placed with siblings, consistent vs. placed alone, history of sibling placements	Placed alone × Placement disruption ↑	$r = .12$

Note. The sign of the effect sizes was defined in relation to placement breakdown.

^a Mean effect size.

effect size was low ($r = .06$), although significant ($p < .001$). The combined effect size of studies that used univariate analyses ($k = 11$, $n = 7030$) was $r = .17$, $p < .001$, but this set of outcomes was heterogeneous. In particular the study by Kalland and Sinkkonen (2001) showed an outlying effect size of $r = .86$. Without this study, however, the set of studies was still heterogeneous. Comparisons of these studies revealed several moderators of the effects of age. Studies in which the minimum age was higher revealed smaller effect sizes ($p < .001$). Differences in maximum age were not a significant moderator. Studies with a larger age range, however, yielded larger effect sizes ($p < .001$). The length of the study interval was positively related to effect size, that is, studies with longer study intervals yielded larger effect sizes ($p < .01$). Further, it appeared that studies from the US had lower effect sizes than studies from other countries ($p < .001$). Finally, year of publication was not related to differences in effect sizes.

One study (Smith, 2001) examined specific factors moderating the relation between age and placement breakdown. Results revealed an interaction effect with gender, indicating that older girls were more likely to experience placement disruption than younger girls and than older and younger boys.

In conclusion, meta-analyses showed significant, but small combined effect sizes of children's age at placement on placement breakdown, indicating that children placed at older age experienced more placement breakdown. The effects were even smaller in multivariate studies, when controlling for other factors. One study suggested moderating effects of other factors such as behavior, gender and placement type. Furthermore, moderators of age effects were also evident from comparisons of studies, indicating that age effects were stronger for recent and non-US studies.

3.1.2. Reason for out of home placement

Parker (1966) showed that loss of the mother caused by death was associated with lower placement success. The study of George (1970), however, did not confirm these findings. Fanshel and Shinn (1978) listed several other reasons for out of home placement which could contribute to the number of placements children experience during foster care. Neglect, abuse, family problems or abandonment were associated with a higher number of placements, whereas child behavior problems and unwillingness of the biological parent to assume or continue care as reasons for placement, were related to less number of placements. Kalland and Sinkkonen (2001) investigated differences between severity of history in relation to placement breakdown in a sample that included 75% out of home placements due to neglect. No differences were found between children with a history of neglect and children with a more severe history of physical and/or sexual abuse. Webster et al. (2000) found that children were more likely to experience placement stability when the reason for the removal was neglect and not physical or sexual abuse. This was confirmed in a follow-up study of 170 children within the age range of 4–7 years (Barber, Delfabbro & Cooper, 2001). Subgroup analyses, however, revealed that this finding was only significant in the subgroup of children with a replacement and not in the subgroup children who were new in care.

Two studies used multivariate models. Fernandez (1999) showed that children were more likely to experience a second placement when the reason for placement was the child's behavior problems, rather than parental illness or disability and child abuse and neglect. Additionally, James (2004) showed that behavior related placement changes were associated with emotional abuse, rather than neglect or sexual or physical abuse.

Another interesting perspective on reasons for placement in relation to placement breakdown came from the study of Stone and Stone (1983) in which children who were removed from their natural homes because of physical or sexual abuse, neglect or abandonment or parental inability to provide adequate care were included. Results revealed that children who experienced chronic rather than acute family problems had a lower likelihood of a successful foster placement.

Effect sizes in these eight studies ranged from $r = .00$ for the effects of severity of history on placement breakdown (Kalland & Sinkkonen, 2001) to $r = .39$ for the effect of emotional abuse on a first behavior related placement change (James, 2004).

To conclude, despite the fact that not all the studies described and examined similar reasons for out of home placement, it appeared that children in care for reasons of abuse had more placement breakdown than children in care for neglect, at least for children in a second placement. However, Barber et al. (2001) suggested that the negative association between neglect and placement breakdown might also be explained by age and behavior, because children with a history of neglect were younger and tended to score lower on conduct disorder. The hypothesis regarding behavior problems was confirmed by results of multivariate studies which suggested that problem behavior of the child was a better predictor of placement breakdown than several types of child abuse or neglect. On the other hand, child abuse or neglect might determine or influence the existence and/or the course of behavior problems. Other possible moderators of the link between reason for out of home placement and placement breakdown referred to the chronicity of family problems and the unwillingness of the biological parent to continue care. Following Fanshel and Shinn (1978), these findings could be partly explained by the degree of active involvement of the biological parents, that is the more the parents were out of the picture, the higher the stability of placements. It should be noted that this explanation concerned studies in which planned reunifications were excluded, which was also one of the exclusion criteria in the current review.

3.1.3. *Biological parent and family characteristics*

Three studies examined placement breakdown in relation to biological parents and family characteristics. Pardeck (1984) found a significant positive relationship between alcoholism of the biological parents of the foster child and the experience of multiple placements in foster care. However, the relation between alcoholism of the biological father and multiple placements was only significant when the child was more than 3 years in care. Cooper et al. (1987) found, in a group of abused and/or neglected children who had been placed in a residential home for maltreated children, that children with drug or alcohol addicted parents experienced more disruptions while in foster care than children without a family history of drug and alcohol abuse. The authors also examined the number of maltreated children in the biological family of the foster child in relation to the number of subsequent placements. The abused and/or neglected children from families with a higher number of maltreated children experienced more placement disruptions when in care (Cooper et al., 1987). However, these factors were not significantly related to placement rate, that is the number of placements divided by the amount of time the child spent across all placements. In contrast to Cooper's findings, research of Pardeck (1984) indicated neither significant relations between abuse, neglect and abandonment and multiple placements, nor significant relations between drug addiction of the mother and multiple placements. Other factors such as emotional problems and mental illness of parents, conflicts between child and parents and intactness of the child's biological family (Pardeck, 1984), as well as age of the parents (Cooper et al., 1987), accommodation (parents living in public accommodation at time of the placement) and family composition (Fernandez, 1999; George, 1970), were not significantly related to placement breakdown. With regard to family income, Cooper et al. (1987) reported no significant findings, whereas Fernandez (1999) showed that children were less likely to experience a second placement when their parents had a higher income. However, the latter finding was not significant with regard to a third placement.

In general, the diversity among the examined characteristics was striking whereas most of the biological parent and family characteristics were not significantly related to placement breakdown. In addition, effect sizes in these studies were low, ranging from $r = .02$ (Cooper et al., 1987) for the effects of age of the biological mother on number of placements to $r = .19$ (Cooper et al., 1987) for the effects of drug or alcohol abuse in the family on number of placements. Because this latter finding was also showed by Pardeck (1984), it appeared that there was some evidence for a positive relation between drug and alcohol abuse in the biological family and placement breakdown.

3.1.4. *Placement history*

Parker (1966) reported three factors concerning placement history which were related to placement breakdown. The first factor was placement in institutional care. Seven studies including $n = 1397$ participants examined the effects of institutional care on placement breakdown. Effect sizes ranged from $r = -.04$ (Fernandez, 1999) to $r = .53$ (Walsh & Walsh, 1990). The meta-analytical results indicated a combined correlation of $r = .18$ which was a significant but small effect. Unweighted analyses revealed a higher, but also small combined effect size of $r = .24$. Chi-square tests indicated that the effect size distribution was heterogeneous, $\chi^2(6) = 17.04, p < .01$. This was confirmed by disjoint cluster analyses, which indicated an outlying effect size for the study of Walsh and Walsh (1990), whereas the other effect sizes were part of a single cluster ($p < .01$). Moderator analyses revealed stronger effect sizes for univariate studies, $z = 2.77, p < .01$. Two studies have used multivariate analyses (Fernandez, 1999; Walsh & Walsh, 1990). In contrast to the univariate findings, Fernandez (1999) showed that children with a first placement in residential care were more likely to stay longer in a following placement in a foster family.

Results concerning the relative risk of a second placement in relation to a background of residential care were not significant. Walsh and Walsh (1990) found a positive univariate association between one or more previous placements in institutions and placement breakdown, whereas results of multivariate analyses were not significant. Other significant effect size moderators were study interval and country, indicating that studies with a longer interval and studies from the US yielded stronger effect sizes ($p < .02$). Differences between the studies regarding year of publication were not significant.

In sum, these results suggest that children with a background of residential care had more placement breakdowns, but the association was moderately strong. The effects were even weaker when other factors were included in multivariate analysis, such as child behavior problems and number of previous placements.

Number of previous placements was also in itself studied as a risk factor for placement breakdown. In six samples including $n = 6301$ participants, effect sizes ranged from $r = .00$ (Kalland & Sinkkonen, 2001; Smith, 2001) to $r = -.61$ (James, 2004). The combined effect size for the relation between previous placements and placement breakdown was $r = .04$. Results of unweighted analyses revealed a combined effect size of $r = -.01$ (*ns*). The effect sizes were heterogeneous, $\chi^2(5) = 366.92$, $p < .01$. In particular the study of James (2004) showed an outlying effect size, $r = -.61$. It should be noted that James (2004) examined placement changes in the routine system that were defined as standard moves from shelters to short-term care and from short-term care to long-term care or moves to kinship care or placement with siblings. These moves were found to be associated with decreased risk of a behavior related placements change. However, these placement moves occurred partly because change was intended to be beneficial for the child. Therefore, this study may differ from the other studies that examined previous placements. When the study of James (2004) was excluded, the set of study outcomes was homogeneous and revealed a combined effect size of $r = .12$ ($p < .001$). Analyses of variance indicated several significant moderators. Univariate studies yielded larger effect sizes than multivariate studies ($p < .001$), whereas recent studies ($p < .001$) and studies from the US ($p < .05$) yielded lower effect sizes. Finally, samples with a longer study interval yielded larger effect sizes ($p < .001$).

This evidence suggests that children with previous placements in foster care experienced more placement breakdown. Multivariate results, however, cast doubt whether number of placements is a significant independent predictor, for example independent from age (e.g., Smith, 2001).

A third placement history factor was whether the placement was also the first placement in foster care (Parker, 1966). Unexpectedly, children were more likely to experience placement breakdown when the specific placement was the first in foster care.

Apart from the factors mentioned by Parker (1966), length of time in foster care proved to be related to placement breakdown, indicating that the number of placements was higher for children who were longer in foster care (Fanshel & Shinn, 1978; George, 1970). In addition, Wulczyn et al. (2003) showed that placement breakdown in foster family care was more likely to occur during the first 6 months interval and declined thereafter. Effect sizes of these studies were moderate ($r = .44$ and $r = .40$). The findings of Wulczyn et al. (2003) were confirmed by studies on treatment foster care (Smith, 2001) and kinship care (Terling-Watt, 2001), indicating higher disruption rates in the first 6 months of placement, although differences were not statistically tested.

Overall, findings regarding placement history were reasonably consistent, although not the size of effects. The combined effect sizes were low, even lower for studies in which multivariate models were used, which suggest predictive power of other factors such as children's age, gender and behavior problems. Moderate effect sizes were found for length of time in foster care, indicating that the first 6 months of placement pose the most risk of breakdown.

3.1.5. Behavior problems

Parker (1966) mentioned children's behavior as an important risk factor for placement breakdown. This hypothesized relationship between behavior problems and placement breakdown was tested in 13 studies including $n=7163$ participants. Effect sizes ranged from $r=.04$ (Cooper et al., 1987) to $r=.51$ (James, 2004) and were mainly based on outcomes for externalizing behavior problems although some studies included also measures for internalizing behavior problems (Barber et al., 2001; James, 2004; Newton, Litrownik & Landsverk, 2000; Pardeck, 1984). The meta-analytical results for the relation between behavioral problems and placement breakdown revealed a combined effect size of $r=.24$, indicating a small effect. The combined correlation on the basis of unweighted analyses was $r=.28$. The effect sizes were heterogeneous, $\chi^2(12)=94.70, p<.001$. Moderator analyses showed that it was not possible to create homogeneous groups on the basis of the analyses (univariate and multivariate) that were used in these studies. However, we found differences in combined effect sizes of studies that used univariate analyses and studies that used a multivariate model, $z=1.88, p<.05$. The combined effect size of studies with univariate analyses (11 samples, $n=6564$) was $r=.22, p<.001$. In contrast, the combined effect size of studies with multivariate analyses (2 samples, $n=599$) was $r=.51, p<.001$.

Comparisons across the 12 studies also revealed moderators of the effects of behavior problems. More recent studies yielded larger effect sizes ($p<.05$) whereas studies with a longer study interval yielded smaller effect sizes ($p<.05$). Only 5 studies included the mean age of the children in their samples, but these were significantly related to differences in effect sizes, that is older age is associated with smaller effect sizes ($p<.05$). Surprisingly, neither the extent to which studies have made use of administration data or well-established measures such as the Child Behavior Checklist (Achenbach, 1991) nor differences between the use of caseworkers ratings or foster parents ratings as well as country of the study did contribute to the explanation of variation of effect sizes between the studies.

Overall, behavior problems appeared a reasonably robust predictor of placement breakdown, especially when other factors were controlled for. Nevertheless, study as well as meta-analytical results suggest that the existing variation in outcomes might partly be explained by the age of the foster children.

3.1.6. Mental disabilities and developmental problems

One study found that foster children with mental disabilities were less likely to have placement success, although the effect size was low, $r=.15$ (Parker, 1966). However, Pardeck (1984) found no significant association between mental disabilities and multiple placements. Studies including developmental or health problems revealed no significant associations with placement breakdown (Fanshel & Shinn, 1978; Kalland & Sinkkonen, 2001; Pardeck, 1984). These mainly non-significant results suggest little association between placement breakdown and mental disabilities as well as developmental problems.

3.1.7. Other child characteristics

Four studies examined the association between several child characteristics in relation to placement breakdown. First, Stone and Stone (1983) showed that better socialization (e.g., child's empathy, sensitivity, maturity) and adjustment (classroom behavior and response to teacher's discipline) was associated with placement success. Further, they found a positive association between foster child and caseworkers contact, which was defined by emotional and verbal spontaneity in meetings and placement success. Another factor mentioned by Stone and Stone (1983) was the child's attachment behavior, especially in relation with the biological parents.

Children who showed ‘normal’ attachment behavior on separation, that is, behavior characterized by fear and depressive signs, were more likely to experience placement success. Further, [Walsh and Walsh \(1990\)](#) found a positive association between children who failed to attach in earlier foster placements and placement breakdown. Third, [Barber et al. \(2001\)](#) found that children with unstable placements scored lower on social adjustment. Finally, [Sinclair and Wilson \(2003\)](#) showed that children with pro-social behavior and positive characteristics such as resilience, loving nature, attractiveness and humor as well as children who were motivated to stay in the placement were less likely to experience placement breakdown and more likely to have successful placements.

Overall, these studies yielded small to medium effect sizes. The lowest effect size ($r = -.12$) was found for the effects of pro-social behavior on placement breakdown ([Sinclair & Wilson, 2003](#)) whereas the highest effect size ($r = .41$) was found for the effects of failure of attachment on placement breakdown ([Walsh & Walsh, 1990](#)). However, studies with multivariate models may add knowledge about moderating effects of other variables such as caregiving aspects. It is worth noting in this connection that parental behavior appeared to moderate the relation between children’s behavior and placement breakdown, which will be discussed in greater detail later.

3.2. Placement related factors

3.2.1. Kinship care

In a review of outcomes in long-term foster care, [Minty \(1999\)](#) mentioned that one of the factors associated with reduced placement breakdown is placement with relatives. Six studies ($n = 11,390$ participants) examined comparisons between kinship and non-kinship care in relation to placement breakdown. The effect sizes ranged from $r = -.01$ ([James, 2004](#)) to $r = -.26$ ([Usher, Randolph & Gogan, 1999](#)) and the combined effect size across these studies was $r = -.10$ (*ns*). Unweighted analyses revealed a combined effect size of $r = -.12$ (*ns*). The effect size distribution was heterogeneous, $\chi^2(5) = 37.97$, $p < .001$. Moderator analyses revealed that studies with univariate analyses (4 samples, $n = 6479$) yielded larger effect sizes ($p < .001$) than studies with multivariate models (2 samples, $n = 4911$). Among the factors that were controlled for in these studies were age, behavior problems, ethnicity, previous placements and maltreatment type ([James, 2004](#); [Wulczyn et al., 2003](#)). Further, more recent studies as well as studies with a shorter interval also yielded larger effect sizes ($p < .05$ and $p < .001$).

To conclude, the combined effect size for the negative association between kinship care and placement breakdown was not significant. One study suggested moderator effects of age ([Webster et al., 2000](#)), indicating that older children in kinship care were more likely to experience placement breakdown than younger children. However, it was not possible to perform moderator analyses for age across the studies, because only one study ([James, 2004](#)) included the mean age of the foster children. Moderator analyses were indeed performed for year of publication, indicating larger effects for more recent studies while the difference between the oldest and the most recent study was only 10 years.

3.2.2. Foster parent's biological children

[Parker \(1966\)](#) identified the presence of biological children of the foster family as a potential risk factor because it may elicit situations of jealousy and rivalry. Whereas the studies of [Parker \(1966\)](#) and [George \(1970\)](#) found that especially the presence and absence of biological children was related to placement failure and placement success, another early study on foster care ([Trasler, 1960](#)) found that age played a role in combination with sex. Children placed in foster

families with a biological child of the same sex and not more than 3 years younger or older than the foster child were more likely to experience placements that ended in failure. Different were the findings of Kraus (1973) on school-aged children, which indicated that foster placements tended to be more successful when the foster family had two biological children. More recently, Kalland and Sinkkonen (2001) found an association between placement breakdown and foster parent's having biological children. However, Kalland and Sinkkonen (2001) found that foster children in the foster families with biological children were older than the foster children placed in the families without biological children. Effect sizes of these outcomes ranged from $r = -.13$ (Kraus, 1973) to $r = .42$ (Trasler, 1960).

In sum, the evidence for a positive relation between the presence of biological children of the foster family and placement breakdown was reasonably consistent. Only one study revealed contradictory findings (Kraus, 1973), which were partly explained by the suggestion that in the case of foster parents having more than one biological child, it might be plausible that the foster parents were not looking for a playmate for their biological child. These results suggest at least, that other factors, among which motivation of the foster parents as well as children's age, may offer alternative explanations of the findings concerning the presence of biological children in the foster family.

3.2.3. Siblings

Trasler (1960) showed that placements were more successful if a foster child was placed with a sibling or the foster family had another foster child. This early finding was confirmed by three later studies (Drapeau, Simard, Beaudry & Charbonneau, 2000; Leathers, 2005; Thorpe & Swart, 1992). The study of Parker (1966), however, revealed no differences in placement outcomes between placement with and without siblings. Moreover, George (1970) showed that children placed with siblings had less placement success. Two studies have made use of multivariate analyses. Research of Wulczyn et al. (2003) indicated that children in foster family care, who had never a sibling in care or whose sibling was not on the same moment in care, were less likely to move than foster children with a sibling at the same time in care. However, it remained unclear whether the children with siblings in care were also placed in the same foster family. After controlling for behavior problems as well as child and placement characteristics, Leathers (2005) showed that children who had been placed alone but with a history of sibling placements had a greater risk for disruption than children consistently placed with siblings throughout their stay in foster care. Effect sizes in these studies ranged from $r = .05$ to $r = -.42$, indicating respectively more placement moves for children placed with siblings (Wulczyn et al., 2003) and, by way of contrast, a more successful second placement for children placed with siblings (Trasler, 1960).

In sum, although most of the findings concerning siblings in care were in the same direction, that is placement with siblings was associated with less placement breakdown, there was considerable diversity in types of placements (e.g., with siblings, reunified with siblings, siblings in care, siblings at same time in care, same number of siblings during stay in care, history of sibling placements), which hampers comparisons across the studies. Multivariate studies (Leathers, 2005; Wulczyn et al., 2003) showed the relevance of examining specific sibling placements patterns in the prediction of the relative risk of placement without siblings, although the association between placement with siblings and less placement breakdown was weaker when controlled for the possible influence of other child and placement characteristics.

3.2.4. Foster caregiving

Five studies emphasized the relevance of examining caregiving aspects in relation to placement disruptions. To start with, Stone and Stone (1983) found an association between the

opportunities for intellectual development provided by the foster parents and successful foster placement. In addition, the same study revealed associations between high competence scores of foster parents and successful foster placement. In line with this finding, Walsh and Walsh (1990) showed negative associations between tolerance of the foster family towards unassimilated behavior of the child and placement breakdown. By way of contrast, the study of Kraus (1973) indicated that foster parents' ability to cope with child's behavior problems was not related to placement success. Further, Walsh and Walsh (1990) found that foster children in foster families with better relationships with the own extended family were less likely to disrupt while in treatment foster care. This was confirmed by Kalland and Sinkkonen (2001), who found associations between successful placement and family resources, as evaluated by the foster care case worker. In addition to family resources, the authors stressed the importance of support from relatives in relation to placement breakdown. Finally, data reported by Sinclair and Wilson (2003) revealed that placements were more successful when caregivers were warm and child-oriented and the interaction between child and caregiver was positive. Moreover, when the caregiver showed less rejection, there was no relation between disturbed and pro-social behavior of the child to placement outcome. However, for caregivers showing high rejection, the difficulty of the children predicted more placement breakdown and less placement success. On the other hand, children with high pro-social scores were less likely to experience placement breakdown but experienced not necessarily more successful placements. Effect sizes in these studies ranged from $r = -.16$ for the association between parent scores and placement breakdown (Sinclair & Wilson, 2003) to $r = -.70$ for the association between family resources and placement breakdown (Kalland & Sinkkonen, 2001).

Overall, studies included a highly diverse set of indicators with a large range of effect sizes. Only two studies have performed multivariate analyses which revealed for example that tolerance towards the child and quality of the relationships within the extended foster family were not significant predictors when other child and placement characteristics (e.g., behavior problems, previous placements) were taken into account (Walsh & Walsh, 1990). This result stands in contrast to the univariate findings concerning tolerance and quality of extended family relationships. Multivariate analyses in the study of Sinclair and Wilson (2003) indicated that placement breakdown was only predicted by parenting and rejection scores, despite strong univariate associations between children's behavior and breakdown. Instead of using univariate models, studies examining moderating effects of, for example, behavior problems, may reveal possible mechanisms through which predictors lead to placement breakdown or placement success.

3.2.5. Foster care related aspects

Associations between several foster care related factors and placement breakdown were examined in seven studies. One set of findings regarded the motivation or attitude of foster parents. Kraus (1973) showed that foster children from foster parents who were highly interested in caring for a child or were interested to care for a specific child, experienced more successful placements whereas foster children in families who wanted company for the biological children had less successful placements. This is in line with the study of Stone and Stone (1983) in which foster parents' high motivation to provide foster care was positively related to successful foster placement. In addition, Walsh and Walsh (1990) found that foster fathers' involvement with the foster child, and more generally, a child centered and, surprisingly, over-nurturing foster home was associated with placement stability. In contrast to studies that have only used univariate analyses, Walsh and Walsh (1990) have also used a multivariate approach with other factors included, such as previous placements, behavior problems and several aspects of the quality of

foster caregiving. Results revealed that the negative association between child-centered foster home and placement breakdown was not significant.

Another set of findings regarded the practice of foster care agencies and the professionalism of workers. Walsh and Walsh (1990) found that more caseworker contacts and rapport between the foster parent and agency were positively associated with placement success. Kalland and Sinkkonen (2001) showed that foster children who received support from professionals were less likely to experience placement breakdown. Additionally, a positive association was found between the energy expended by the caseworker in the foster family and placement success (Stone & Stone, 1983). It has also been shown that training of the foster parents was associated with placement success (Kalland & Sinkkonen, 2001). However, training of social workers with a particular focus on helping foster children to deal with the separation from the biological parents was associated with more placement moves (Palmer, 1996). Pardeck (1984) found a positive relation between the number of workers that were assigned to the child and multiple placements. When controlled for time in care, however, the association did only hold during the first 3 years of care.

Finally, several other foster care factors appeared to be unrelated or inconsistently related to placement breakdown. One factor was age of the foster parents. While Parker (1966) found no significant association, other studies showed that respectively age of the foster mother (Kraus, 1973; Trasler, 1960) and age of the foster father (Walsh & Walsh, 1990) were negatively associated with placement breakdown. Furthermore, George (1970) showed that especially children placed with foster mothers between 25 and 34 years old had more placement success than children placed with younger and older foster mothers. Walsh and Walsh (1990) found a negative univariate association between the length of the marital relationship between foster parents and placement breakdown whereas multivariate findings indicated no significant effects. Further, Kraus (1973) investigated whether successful placement was related to the agreement between the foster child's age and sex with those desired by the foster parents and found no significant association. Finally, Pardeck (1984) found that caseworker's educational level and years of experience were not related to multiple placements.

In sum, these findings showed a large variability in aspects that were included in the different studies. Effect sizes for the association between several foster care related aspects and placement breakdown ranged from $r = .00$ for the effects of several variables, among which educational level of the social worker, income, religion and occupation of the foster parents, child preferences by the foster parents and number of foster children in the foster family on placement breakdown (Kraus, 1973; Pardeck, 1984) to $r = -.61$ for the effects of number of caseworkers contacts on placement breakdown (Stone & Stone, 1983). Further, the study of Palmer (1996) is worth noting because of the surprising effects of training of social workers. It should be mentioned that these findings concerned placements according to the principles of inclusive practice, in which biological parents were actively involved in the placement process. As will be discussed later, the involvement of biological parents during the placement process appeared to be positively related to placement breakdown. Many of the univariate effects of this diverse set of factors became non-significant after controlling for other risk and protective factors in multivariate analyses.

3.2.6. *Role of biological parents during placement*

Biological parents may influence the success or breakdown of a placement through the amount and quality of the contact with their children during placement. Fanshel and Shinn (1978) found that children whose biological parents visited less frequently experienced less replacements. This was confirmed by the study of Walsh and Walsh (1990), but only with regard to contact and

involvement of the biological father. This factor was, however, not significantly related to placement breakdown when analyzed with multivariate models. In addition, [George \(1970\)](#) and [Pardeck \(1984\)](#) showed that visiting patterns of biological parents were not related to multiple placements in foster care. Together, there is no conclusive evidence that the amount of contact between biological parents and their children in placement may increase or decrease the risk of placement breakdown. [Kalland and Sinkkonen \(2001\)](#) reported positive associations between successful placement and good cooperation between biological parents, foster parents, social worker and local authorities. Other findings point indirectly to the positive or negative influence that biological parents may have before or during placement. Children of mothers who were negatively evaluated by a child welfare agency had less number of placements ([Fanshel & Shinn, 1978](#)). Finally, research of [Palmer \(1996\)](#) indicated that children who were prepared for placement by their parents had less placement disruptions. [Fernandez \(1999\)](#) showed that children placed in foster families on voluntary basis instead of placement under court orders were more likely to stay longer in the first placement and thus had less chance on a second placement.

Effect sizes in these studies ranged from $r = -.03$ for the effects of visits by biological parents on number of placements ([Pardeck, 1984](#)) to $r = -.40$ for the effects of good cooperation between biological and foster parents on placement breakdown ([Kalland & Sinkkonen, 2001](#)). To conclude, these studies included a diverse set of indicators and except the study of [Fernandez \(1999\)](#), all the studies have performed univariate analyses. Therefore, a multivariate model may be useful to examine whether, for example, good cooperation between different parties ([Kalland & Sinkkonen, 2001](#)) may moderate the association between risk factors and placement breakdown, and whether quality of contact with biological parents may mediate the effects of parental attitude to placement on placement success.

4. General discussion and conclusions

This review evaluated predictors of placement breakdown across 26 studies of children in foster care. Although study outcomes were highly diverse, combined effect sizes as well as effect sizes of individual studies provided evidence for the predictive power of several child and placement characteristics. Older age at placement and behavior problems as well as the experience of previous residential care or placements are risk factors for placement breakdown. Quality of foster caregiving is a possible protective factor in the case of risk for placement breakdown. Surprisingly, kinship foster care did not appear as a protective factor.

With regard to the risk posed by behavior problems of foster children, no differences in effect sizes were found between studies based on foster parent report of behavior problems and studies based on caseworker ratings. A difference might have been expected if the risk posed by behavior problems should be assessed relative to the resilience of foster families to handle and accept these difficulties ([Sinclair & Wilson, 2003](#)). If the caseworkers' ratings are largely based on the reports of foster parents, that might still be the case. However, following [Walsh and Walsh \(1990\)](#), who emphasized the professionalism of caseworkers in assessments of behavior, this lack of a difference between the views of the foster parents and the views of the caseworkers might also mean that behavior problems pose a risk, independent of the subjective experience of foster parents of the problems. More research should be done on the mediating processes between behavior problems and placement breakdown, using subjective as well as objective ratings of behavior, in order to derive concrete recommendations for practice to neutralize the risk of behavior problems. In univariate analyses, the risk of behavior problems appeared moderately low ($r = .22$), but in multivariate analyses with other factors controlled, the risk appeared as strong

($r = .51$). In addition, studies examining reasons for out of home placement indicated that behavior problems may be a better predictor of placement breakdown than maltreatment in the history of the child. Further research should test whether behavior problems may actually explain (mediate) the risk posed by exposure to maltreatment.

The findings on children's age as a risk factor were that multivariate studies yielded a homogeneous set of small positive effects and univariate studies yielded a heterogeneous set of small-to-moderate effects. The risk of placement breakdown appears to be only slightly elevated for older children. In this regard, Triseliotis (1989) hypothesized that placement breakdown would be more likely to occur when older age and disturbances go together. This has been supported by Barber et al. (2001), who showed that older children with signs of conduct disorder were more likely to experience placement breakdown due to disruptive behavior than younger children without signs of conduct disorder. It should also be noted that it seems to be common practice in many countries to prefer group foster care for older children and adolescents above family foster care. Therefore, the size of risk may have been stronger if these older children would have been placed in family foster care, despite this preference does not find strong support from the research data. The question of the size of the risk effect may only be settled using controlled experiments.

With respect to the risk factors related to placement, previous placements as well as residential care appeared to be significant predictors of placement breakdown. However, the effects were smaller when examined in multivariate models, which indicated that the variance might be partly explained by other factors than placement history. The anomalous finding that children in a first placement experienced more placement breakdown than children with previous experience in a foster family is interesting from both a theoretical and a practical perspective. Parker (1966) mentioned that having a good experience with foster care in terms of personal relationships may prepare the child for a second placement, but from an attachment theoretical point of view, unstable caregiving may be detrimental to placement success. However, an alternative explanation may be that first matches may be less successful because the urgency of the placement limits the choice of foster families. A second placement may be done under less constraints of time, and based on better knowledge of the characteristics of the child.

This review also examined several protective factors which referred to both child and placement characteristics. Within the field of foster care, it has been assumed that placements in kinship care are generally more successful than other placements, because placement with relatives is supposed to be more secure (Minty, 1999). However, our examination of protective factors for placement breakdown revealed no significant effect of kinship care on placement breakdown. More recent studies yielded larger effects, which may indicate that as experience with the pitfalls of kinship care accumulates, agencies become better in capitalizing on the potential benefits inherent in kinship care. Terling-Watt (2001) has analyzed what specific factors may result in placement breakdown in kinship care. One factor referred to the continued detrimental influence of the biological parents. The hypothesized relationship between continual contact between child and biological parent and placement breakdown was confirmed by two studies in this review (Fanshel & Shinn, 1978; Walsh & Walsh, 1990), indicating that reduced or no contact with the biological parents during placement was associated with reduced placement breakdown. Terling-Watt (2001) also pointed to the difficulties that kinship caregivers may have in coping with children's behavior as a result from lack of training and information. This review confirmed that placements were indeed more likely to succeed if foster parents were able to respond to children's needs and problems (Stone & Stone, 1983; Sinclair & Wilson, 2003; Walsh & Walsh, 1990). The actual benefit of kinship care might therefore be shown in studies which control for these possible mitigating factors.

Another protective factor in this review was the motivation of foster parents, indicating that foster children in highly motivated, involved and nurturing foster families experienced less placement breakdown (Kraus, 1973; Stone & Stone, 1983; Walsh & Walsh, 1990). Factors that also yielded moderate to strong effect sizes were family resources (Kalland and Sinkkonen) and support from relatives (Kalland & Sinkkonen, 2001; Walsh & Walsh, 1990) or caseworkers (Stone & Stone, 1983). These factors may exert their protective effects through the quality of caregiving, which may be the more proximal process that protects against risks for placement breakdown.

Future research might focus more on caregiving itself, because the quality of caregiving might ultimately explain the effects of some of the more distal factors noted in this review (such as motivation and resources of foster parents) as well as some of the effects of risk factors that were relatively modest. It may thus depend on the quality of caregiving whether a particular risk ultimately results in placement breakdown (Sinclair & Wilson, 2003). Recognizing that placement in foster care following out of home placement is in itself an experience which confers risk for maladaptation, Dozier and her colleagues have focused on foster caregivers' sensitivity and nurturance as important determinants of placement success. As a result of separation from the biological parents and/or experiences of inadequate care, foster children often behave as if they do not need caregivers. Some foster parents react on this outward behavior by withdrawal, which was associated with insecure attachment between child and foster parent, while other foster parents react by making it even more explicitly clear to the child that the foster parent would welcome and accept the child in times of distress, which was associated with secure attachment (Dozier, Higley, Albus & Nutter, 2002; Stovall and Dozier, 2000). It should be noted from the current review that two studies examined the effects of attachment on placement outcomes, indicating that children with 'normal' attachment behavior were more likely to experience placement success (Stone & Stone, 1983), whereas children who failed to attach in previous placements were more likely to experience placement breakdown (Walsh & Walsh, 1991). Dozier's work suggests that the development of attachment is partly or completely a function of caregiving, and she has translated her findings in preventive interventions that support foster parents in providing optimal caregiving from the start of a placement (Dozier et al., 2002; Dozier & Sepulveda, 2004). To summarize, although there has been a considerable amount of work done, some key issues concerning the nature of 'attachment problems' and the ways these are linked to, for example, behavior problems, remain unresolved. Therefore, more studies are needed to examine how attachment and caregiving mitigate or increase risk factors.

To conclude, the amount of data available for review on risk factors for placement disruptions was impressive, and one of the most remarkable conclusions may be that there was no evidence for the existence of a few strong risk or protective factors. In contrast, several factors were found to be associated with placement breakdown which implicates that foster care practice needs to focus on multiple domains for management and support. With respect to children with severe behavior problems, it may be desirable to provide more intensive and specialized types of care. Reddy and Pfeiffer (1997) showed for example the effectiveness of treatment foster care by reducing problem behavior in children and adolescents.

With regard to other key issues, such as the benefit of kinship care, foster parent characteristics, and placement factors, the data of the current review are inconclusive. Findings were especially contradictory when results from univariate analyses were compared to multivariate analyses. Multivariate analyses may provide a better view of the independent prognostic value of risk and protective factors. But at the same time, it may obscure important effects when conducted without the guidance of causal models specifying distal and proximal risk factors, as well as factors that may moderate the association between risk and placement outcome by exerting

protective effects. Recognizing that experimental research is often not feasible for ethical and practical reasons, theoretical progress may come from combining individual and family-level research on proximal processes such as caregiving and attachment, with organizational and policy-level research on distal processes, such as the way in which kinship care is put in practice as well as how foster parents and children are matched and supported by the agencies. Insights from this type of multiple level research may help practice even more with focused suggestions on how to improve the fate of children who have to leave their homes.

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