

Original Article

A Meta-Analysis of Informal and Formal Family Social Support Studies: Relationships with Parent and Family Psychological Health and Well-Being

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Abstract

Background. Family social support from informal and formal social network members provide parents and other primary caregivers the time and psychological energy to carry out child-rearing responsibilities.

Objective. Conduct a meta-analysis of family social support studies to evaluate the associations between informal and formal family social support and parent and family general health, depression, stress, and well-being.

Method. Studies that used the Family Support Scale to measure informal and formal family support which included one or more scales measuring parents' and other primary caregivers' health and well-being were eligible for inclusion in the meta-analysis. The correlations between measures were used as the sizes of effect for the relationships between informal and formal family social support and four different health-related outcomes. Twenty-three studies including 26 independent samples of study participants (N = 2929) were included in the meta-analysis.

Results. Informal family social support was related to all four outcome measures and formal family social support was related to 3 of the 4 outcome measures. The sizes of effect for the associations between measures were larger for informal compared to formal family social support. The relationships between both types of family social support and the outcome measures were also moderated by several child and parent background variables.

Conclusion. Results showed that both informal and formal family social support were related to less negative and more positive parent and family psychological health and well-being.

Keywords: Family support, informal support, formal support, parents' psychological health, family well-being, meta-analysis

Introduction

Social support includes the perceived and received help, advice, resources, and assistance (Nurullah, 2012) from both informal and formal support network members (Bruggeman, 2013). Informal social support network members include a spouse or partner, one's parents, blood and marriage relatives, friends and neighbors, co-workers, clerics, church members, and other acquaintances. Formal social support network members include health care providers, educators, psychologists, social

workers, specialized professionals (special educators, therapists, etc.), other helping professionals, preschool and childcare professionals and programs, and governmental and nongovernmental programs and agencies.

Family social support includes the perceived and received help, advice, resources, and assistance from informal and formal social network members that provide parents and other primary caregivers the time and energy to carry out child-rearing responsibilities in a competent manner (Dunst, 2022c). For

example, Bronfenbrenner (1979) stated “Whether parents can perform effectively in their child-rearing roles within the family depends on...the adequacy of child care arrangements, the presence of friends and neighbors who can help out in large and small emergencies, and the quality of health and social services” (p. 7). Crockenberg (1988) and Cochran and Niego (2002) also describe how informal and formal social network members are sources of instrumental, emotional, informational, and material resources and support necessary for carrying-out parenting responsibilities.

Social Support and Psychological Health

More than a dozen meta-analyses of social support studies with diverse samples of children, adolescents, and adults show that both perceived and received support are related to attenuated negative psychological health and enhanced psychological well-being (Dunst, 2022a). In meta-analyses of both perceived and received social support, the sizes of effect are almost always larger for perceived compared to received social support (e.g., Chu et al., 2010; Prati & Pietrantonio, 2010; Schiller et al., 2021).

There are surprisingly few studies comparing the relationships between informal and formal social support and the psychological health and well-being of children, adolescents, or adults. Lauzier-Jobin and Houle (2022) noted in their study of informal and formal help that “research is needed to shed light on the similarities and differences between [social support] provided by family and friends and [social support] provided by practitioners” (p. 730). These investigators go on to note that informal and formal social support has usually been studied separately, and rarely have been compared empirically in terms of the strengths of the relationship with psychological health and well-being.

Family Social Support and Psychological Health

A narrative review (Dunst et al., 1997) and a meta-analysis (Schiller, 2019; Schiller et al., 2021) of social support studies both included results of the relationships between different

social support measures and parents' psychological health and well-being. The Dunst et al. (1997) review included studies of families of children with and without developmental disabilities and delays. The Schiller (2009; Schiller et al., 2021) meta-synthesis included studies of families of children with autism spectrum disorders. Results reported in both research syntheses showed that both informal and formal social support were related to different dimensions of parent and family psychological health and well-being. The strength of the relationships between informal social support and the study outcomes tended to be stronger than those for the relationships between formal social support and the study outcomes. The investigators of both research syntheses, however, did not conduct any comparative analyses of the differences between informal and formal social support and the study outcomes. The investigators also did not conduct any comparative analyses of the differences between informal or formal social support and different dimensions of psychological health and well-being.

(Dunst, 2022a, 2022c) recently completed two meta-analyses of family social support studies. Investigators of all the studies in the meta-analyses used the *Family Support Scale* (FSS; Dunst et al., 1984; Dunst et al., 1986) as the social support measure. The FSS includes 19 sources of informal and formal social support network members. The informal social support items include spouse or partner, relatives and friends, neighbors and coworkers, and parent and social groups. The formal social support items include physicians, teachers, other helping professionals, childcare programs, social service agencies, and public and private programs and agencies. The scale differs from other family support scales in terms of the targets of appraisals of the scale items (Bugental et al., 1998). A parent or another primary caregiver is asked to indicate, on a 7-point scale ranging from not-at-all-helpful to extremely helpful, “How helpful has each [network member] been to you in terms of raising your child or children?” The psychometric properties of the scale have been ascertained in multiple studies (Dunst, 2022a).

The independent variable in each study in the meta-analyses was the total FSS scale score (sum of the 19-item ratings). The outcome measures included different dimensions of psychological health (general health, depression, stress, well-being, negative life events) and different parenting appraisals and behavior (caregiver burden, beliefs, practices). The study participants included parents (mothers and fathers) and other primary caregivers (grandparents raising grandchildren) of children and adolescents with and without identified disabilities, chronic health conditions, or at-risk conditions. The results from both meta-analyses showed that the FSS total scale scores were related to attenuated negative psychological health, attenuated parenting stress, attenuated caregiving burden, and enhanced positive parenting well-being, beliefs, and practices.

As part of both meta-analyses, a subset of studies was identified that used informal and formal FSS family social support subscale scores as the independent measures. This meta-analysis includes results for the relationships between both types of family social support and parent psychological health and family well-being, the similarities and differences in the sizes of effect between the two types of family social support and the study outcomes, and tests for any differential relationships between the two types of family social support and different psychological health and well-being measures. The meta-analysis is part of a line of research evaluating the basic tenets of an applied family social systems intervention model (Dunst, 2017, 2022b).

Research Questions

1. Are informal and formal family social support related to parent and family psychological health and well-being?
2. Are the sizes of effect between informal family social support the same or different for different dimensions of parent and family psychological health and well-being?
3. Are the sizes of effect between formal family social support the same or different

for different dimensions of parent and family psychological health and well-being?

4. Are the sizes of effect between informal and formal family social support and parent and family psychological health and well-being the same or different?

5. Are the sizes of effect between informal and formal family social support and parent and family psychological health and well-being moderated by child and family background variables?

Method: The guidelines described by Siddaway et al. (2019) for conducting a systematic review and meta-analysis were used to identify, select, and appraise the results reported in the FSS studies. The *American Psychological Association* reporting standards for meta-analyses were used to describe the results of the meta-analysis (Appelbaum et al., 2018).

Study Identification: Five primary (e.g., PsycNET, ProQuest Central, PubMed) and six secondary (e.g., Google Scholar, Bielefeld Academic Search Engine, Directory of Open Access Journals) electronic databases were searched for FSS studies. Search terms included “family support scale”, “family support” AND “scale OR questionnaire OR instrument OR measure”, and “family social support scale”. If a search source identified more than one thousand papers, the search was repeated by adding “helpfulness” “helpful* or “perceived” to the above terms (depending on the database).

Study Selection: Studies were included if either or both the FSS informal and formal family support subscales were used as the independent measures, one or more psychological health or well-being measures were used as an outcome measure, the correlations between FSS subscale scores and the outcome measures were reported, and the study participants were the parents or primary caregivers of children with or without disabilities or medical conditions birth to 18 years of age. No limitation was placed on the type of research report (published or unpublished) or where the studies were conducted.

The search results identified 2,348 papers after duplicates were removed. The initial review of the papers identified 817 research reports that included only a reference or citation to the FSS scale or where the FSS was used as a dependent measure in between group studies. Further screening identified 178 papers where full-text articles were assessed for eligibility. The full-text articles (N = 155) excluded at this stage were research reports that did not include any correlations between measures, did not include any psychological health-related outcomes, included incomplete correlations between measures, or had modified the FSS scoring procedure. Twenty-three studies met the inclusion criteria.

Study Characteristics: The 23 studies included 26 independent samples of study participants (Table 1). The studies were conducted between 1987 and 2016. The 26 samples were considered the number of studies for performing the meta-analysis.

The 26 samples included 2,929 parents and other primary caregivers. Sample sizes ranged between 14 and 992 (Median = 61). The studies were conducted in nine countries: the United States (12 samples), Canada (3 samples), the United Kingdom (3 samples), Australia (2 samples), Portugal (2 samples), and one study each in China, Lebanon, Macedonia, and Taiwan. Half of the research reports were peer-reviewed journal articles (N = 13) and half were unpublished papers (N = 13).

The study sample characteristics: Mothers were the primary participants in 21 samples (82%), grandmothers were the primary study participants in three samples (11%), and fathers were the sample participants in two samples (7%). The participants' average ages ranged from 29 to 65 years (Median = 38) and they completed, on average, between 10 and 16 years of formal schooling (Median = 13). All but two samples completed, on average, high school (92%), 64% completed, on average, some education beyond high school, and only one sample completed a university degree. The percentage of the samples who were married or living with a partner ranged between 38% and 100% (Median = 83%). In studies including

marital status (N = 19), 75% or more of the samples were married or living with a partner. The children's age ranged from less than one year to 21 years of age. The median average child age was 8 years. Ten samples were preschoolers (<1-5 years of age), 14 samples were elementary-age children (7-11 years of age), and two samples were adolescents (13-15 years of age). The study participants' children were identified as having autism spectrum disorders (N = 12 samples), developmental or intellectual disabilities (N = 8 samples), or no identified disabilities (N = 3 samples). One sample included children with rare diseases (Rodrigues, 2013) and one sample included children with and without developmental disabilities or delays (Machado & Correia, 2012).

Measures

Family Support Scale. The participants in all 26 samples completed the FSS informal family social support subscale and 23 samples completed the FSS formal family social support subscale. Twenty-three samples completed both subscales.

Psychological Health Scales. Sixteen different scales were used to measure parent and family psychological health and well-being. The items on each scale were first examined to identify the targets of appraisals (Bugental et al., 1998) to group the measures into four types of psychological health and well-being measures (parent general health, parent depression, parenting stress, and family well-being).

Table 3 shows the scales measuring each construct. The *Parenting Stress Index-Short Form* (Abidin, 1995) was the most frequently used scale followed by the *Center for Epidemiological Studies Depression Scale* (Radloff, 1977) and *Beach Center Family Quality of Life Scale* (Hoffman et al., 2006). The other scales were completed by only one or two samples.

Data Preparation: The studies, sample sizes, and correlation coefficients between the FSS subscale measures and the parent and family psychological health and well-being measures are included in Appendix A for the informal support subscales and in Appendix B for the formal support subscales. These data together

with the child and family variables in Tables 1 and 2 were used in the meta-analysis.

Method of Analysis: *Meta-Essentials* was used to perform the meta-analysis (Suurmond et al., 2017; Van Rhee et al., 2015). The correlation coefficients between the informal and formal family social support subscale scales and the psychological health and well-being scales (Table 3) were used as the sizes of effects between measures. Random effects models were used to perform the analyses.

Publication bias was evaluated by comparing the sizes of effects for the peer-reviewed studies and the nonpeer-reviewed studies to determine if a file drawer effect was present (Wagner, 2021). The average, weighted zero-correlations between the FSS informal and formal family social support scores and the psychological health and well-being scaled scores were used as the sizes of effect between measures. The heterogeneity in the sizes of effect for each type of health and well-being measure was evaluated using the I^2 statistic which is a measure of between-study variability (Higgins & Thompson, 2002). $I^2 = 0\%$ to 25% indicates low heterogeneity, 26% to 50% indicates medium heterogeneity, and 75% to 100% indicates high heterogeneity. In those cases where heterogeneity is medium to high, random effects models are warranted for a meta-analysis.

Separate analyses were performed for informal and formal family social support and the four different outcome measures (Table 3). Q_{Between} (Q_B) was used to evaluate any differences in the sizes of effect between the four different outcome measures (Lipsey & Wilson, 2001) and meta-regression analyses were used to evaluate moderators of the relationships between the family social support and outcome measures (Thompson & Higgins, 2002).

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Table 1 Selected Characteristics of the Family Support Scale Studies

Study	N	Country	Source	Child Conditions
Allen & Knott (2016)	51	United Kingdom	Journal Article	Developmental coordination disorders
Benson (2006)	68	USA	Journal Article	Autism spectrum disorders
Benson & Karloff (2009)	90	USA	Journal Article	Autism spectrum disorders
Brown (2014)	60	USA	Dissertation	Autism spectrum disorders
Eid (2016)	54	Lebanon	Master's Thesis	Autism spectrum disorders
Hassall et al. (2005)	46	United Kingdom	Journal Article	Intellectual disabilities

Ho (2013)	121	Taiwan	Dissertation	Developmental disabilities
Hutchinson (2010)	114	Canada	Dissertation	Autism spectrum disorders
Kresak et al. (2014) Sample 1	26	USA	Journal Article	Developmental disabilities
Kresak et al. (2014) Sample 2	24	USA	Journal Article	No disabilities or at-risk conditions
Letiecq & Koblinsky (2003)	61	USA	Journal Article	At-risk (Neighborhood violence)
Littlewood (2008)	175	USA	Dissertation	At-risk (kinship care)
Machado & Correia (2012)	160	Portugal	Conference Presentation	With and without disabilities or delays ^a
McStay et al. (2014) Sample 1	98	Australia	Journal Article	Autism spectrum disorders
McStay et al. (2014) Sample 2	98	Australia	Journal Article	Autism spectrum disorders
Nolcheva & Trajkovski (2015)	35	Macedonia	Journal Article	Autism spectrum disorders
Rodrigues (2013)	14	Portugal	Honor's Thesis	Rare diseases or disorders
Rutstein (2014)	25	USA	Dissertation	Autism spectrum disorders
Shackell (2011)	30	Canada	Master's Thesis	Developmental disabilities
Taylor (1999; Taylor et al., 1993)	992	USA	Unpublished Report	Developmental disabilities and delays
Trivette & Dunst (1987)	224	USA	Book Chapter	Developmental disabilities and delays
Trivette & Dunst (1992)	88	USA	Journal Article	Developmental disabilities and delays
Wang (2016) Sample 1	45	China	Dissertation	Autism spectrum disorders
Wang (2016) Sample 2	59	USA	Dissertation	Autism spectrum disorders
Weiss et al. (2013)	138	Canada	Journal Article	Autism spectrum disorders
White & Hastings (2004)	33	United Kingdom	Journal Article	Intellectual disabilities

^aThe sample included 60 children with disabilities or delays and 100 children without disabilities or delays.

Table 2: Selected Characteristics of the Family Support Scale Study Participants

Study	N	Participant Characteristics ^b					Child Age ^c	
		Primary Study Participants ^a	Percent of Sample	Mean Age (Yrs.)	Mean Yrs. of School	Percent Married	Mean Age (Yrs.)	Age Range (Yrs.)
Allen & Knott (2016)	51	Mothers	100	NR	NR	NR	8	5-11
Benson (2006)	68	Mothers	88	38	15	NR	7	4-10
Benson & Karloff (2009)	90	Mothers	93	40	15	NR	8	10-12
Brown (2014)	60	Mothers	83	35	11	90	4	2-7
Eid (2016)	54	Mothers	100	39	14	85	10	2-17
Hassall et al. (2005)	46	Mothers	100	38	NR	85	9	6-16
Ho (2013)	121	Mothers	100	36	13	96	5	3-6
Hutchinson (2010)	114	Mothers	100	42	15	87	11	3-21
Kresak et al. (2014) Sample 1	26	Grandmothers	100	58	13	50	9	2-21
Kresak et al. (2014) Sample 2	24	Grandmothers	100	63	13	38	9	2-21
Letiecq & Koblinsky (2003)	61	Fathers	100	36	13	46	4	3-6
Littlewood (2008)	175	Grandmothers	71	65	13	NR	10	1-18
Machado & Correia (2012)	160	Mothers	81	NR	12	77	4	2-6
McStay et al. (2014) Sample 1	98	Mothers	100	42	15	91	9	2-6
McStay et al. (2014) Sample 2	98	Fathers	100	44	14	91	9	2-6
Nolcheva & Trajkovski (2015)	35	Mothers	77	41	NR	94	9	5-12
Rodrigues (2013)	14	Mothers	86	42	10	67	9	6-17
Rutstein (2014)	25	Mothers	100	38	12	NR	4	2.5-10
Shackell (2011)	30	Mothers	NR	NR	NR	67	7	3-12
Taylor (1999; Taylor et al., 1993)	992	Mothers	97	30	13	79	2	<1-5
Trivette & Dunst (1987)	224	Mothers	78	29	12	62	2.5	<1-5

Trivette & Dunst (1992)	88	Mothers	100	29	12	80	3	1-5
Wang (2016) Sample 1	45	Mothers	82	32	15	100	4	<1-6
Wang (2016) Sample 2	59	Mothers	90	35	13	NR	4	<1-6
Weiss et al. (2013)	138	Mothers	100	44	NR	NR	13	4-41
White & Hastings (2004)	33	Mothers	88	43	16	88	15	13-18

^aMothers include biological mothers, stepmothers, and adoptive mothers. Grandmothers include maternal grandmothers and great-grandmothers.

^bParticipant characteristics for some samples were estimated based on information in the research reports.

^cMean child age and age range for some samples were estimated based on information in the research reports.

NOTES. Married includes living with a partner. NR = Not reported or insufficient information included in the research reports to estimate the participant characteristics.

Table 3: Parent and Family Psychological Health and Well-Being Measures Used in the Family Support Scale Studies

Parent and Family Measures	Sources	No. of Samples
Parent General Health Scales		
General Health Questionnaire-12	Goldberg and Hillier (1979)	2
Questionnaire on Resources and Stress-Short Form	Friedrich et al. (1983)	2
Questionnaire on Resources and Stress Short Form Health Survey (SF-36)	Holroyd (1974)	1
	Ware et al. (1993)	1
Parent Depression Scales		
CES-Depression Scale	Radloff (1977)	4
HADS-Depression Subscale	Zigmond and Snaith (1983)	1
Psychological Well-Being Scale	Bradburn (1969)	1
Parent Stress Scales		
Parenting Stress Index-Short Form	Abidin (1995)	9
Parenting Stress Index	Abidin (1983)	2
Sources of Stress Questionnaire	Yatchmenoff et al. (1998)	2
Hospital Anxiety and Depression Scale	Zigmond and Snaith (1983)	1
Family Well-Being Scales		
Family Quality of Life Scale	Hoffman et al. (2006)	4
QRS Family Integrity Subscale	Holroyd (1974)	1
BFDS-Family Distress Subscale	Weiss and Lunsky (2011)	1
Family Unpredictability Scale	Ross and Hill (2000)	1
Family Adaptability and Cohesion Scale	Olson et al. (1985)	1

NOTES. CES = Center for Epidemiological Studies, HADS = Hospital Anxiety and Depression Scale, QRS = Questionnaire on Resources and Stress, and BFDS = Brief Family Distress Scale

Table 4 Publication Bias Results Comparing the Sizes of Effect for Peer-Reviewed and Nonpeer-Reviewed Studies

Type of Family Support	Peer-Reviewed Studies			Nonpeer-Reviewed Studies			Q-test	df	p-value
	k	r	95% CI	k	r	95% CI			
Informal Social Support	19	-.30	-.37, -.24	16	-.23	-.29, -.17	5.74	1,33	.017
Formal Social Support	15	.16	-.22, -.10	15	-.10	-.16, -.05	3.30	1,28	.069

Table 5 Average Weighted Effect Sizes for the Relationships Between the Informal and Formal Family Support Scale Measures and Parent and Family Psychological Health and Well-Being

Health and Well-Being Measures	k	N	r	95% CI	Z-value	p-value	I ²
Informal Family Social Support							
All Parent Measures Combined	26	2892	-.23	-.29, -.18	8.85	.000	34
Parent General Health Measures	6	501	-.24	-.40, -.05	3.28	.001	47
Parent Depression Measures	6	536	-.26	-.44, -.07	3.42	.001	69
Parent Stress Measures	14	1855	-.21	-.25, -.17	11.48	.000	0
Family Well-Being Measures ^a	9	1778	.30	.21, .38	7.88	.000	42
Formal Family Social Support							
All Parent Measures Combined	22	2646	-.12	-.16, -.07	5.55	.000	6
Parent General Health Measures	5	468	-.14	-.37, .10	1.63	.102	53
Parent Depression Measures	4	413	-.17	-.31, -.03	3.88	.000	0
Parent Stress Measures	13	1765	-.10	-.15, -.05	4.64	.000	0
Family Well-Being Measures ^a	8	1640	.13	.03, .13	3.13	.002	38

NOTES. k = Number of samples, N = Number of study participants, r = Average, weighted effect size, CI = Confidence interval, and I² = Heterogeneity in the sizes of effects in individual studies.

^aThe direction of effects for the family well-being measures was reversed when compared to the other measures.

Table 6 Meta-Regression Results for the Comparisons of the Sizes of Effect Between Informal and Formal Family Social Support and Parent and Family Psychological Health and Well-Being

Health and Well-Being Measures	k	B	Z-value	p-value	R ²
All Measures Combined	64	-.56	4.67	.000	31.37
Parent General Health Measures	10	-.33	1.50	.135	11.10
Parent Depression Measures	9	-.44	2.11	.035	19.39
Parent Stress Measures	26	-.63	3.47	.001	40.29
Family Well-Being Measures ^a	16	.65	4.30	.000	42.46

NOTES. Informal family support was coded 2 and formal family support was coded 1 for the between type of family social support comparisons. k = Number of effect sizes for each between type of family social support comparison. B = The standardized regression coefficient for the between type of family social support comparisons. R² = The amount of variance accounted for in the size of effects for informal compared to formal family social support.

^aThe direction of effect between family social support and family well-being was reversed for computing the "all measures combined" comparison.

Table 7 Moderator Analyses for the Relationships Between Informal and Formal Family Social Support and Parent and Family Psychological Health and Well-Being

Moderator Variables	k	B	Z-Value	p-value	R ²
Informal Family Social Support					
Child Condition	30	.01	0.08	.939	0.01
Child Age	34	-.27	1.94	.052	7.08
Caregiver Age	31	-.04	0.29	.771	0.17
Caregiver Education	29	.04	0.23	.821	0.12
Marital Status	25	.31	1.91	.056	9.42
Formal Family Social Support					
Child Condition	29	.15	0.99	.323	2.34
Child Age	33	-.44	2.91	.004	19.28
Caregiver Age	30	-.25	1.48	.138	6.14
Caregiver Education	29	-.36	2.12	.034	12.80
Marital Status	25	.05	0.34	.733	0.30

NOTES. k = Number of effect sizes for each moderator analysis. B = the standardized regression for the relationships between the moderator variables and family social support sizes of effect. R² = The amount of variance accounted in the sizes of effect by the moderator variables.

Results and Discussion

Publication Bias

Table 4 shows the publication bias results. The sizes of effect for peer-reviewed publications were larger than those for nonpeer-reviewed research reports. The two types of research reports were therefore combined for all further analyses to obtain the best estimate of the sizes of effect between the two types of family social support and the parent and family psychological health and well-being measures. (Table 4)

Meta-Analysis Findings

Table 5 shows the results for the relationships between informal and formal family social support and the psychological health and well-being measures. Informal family social support was related to all four outcome measures and all parent psychological health measures combined. Formal family social support was related to 3 of the 4 outcome measures and all parent psychological health measures combined. Informal and formal family social support behaved in the same way regarding the pattern of results. The findings showed that higher FSS support scores were related to attenuated poor parent psychological health and more positive family well-being. More specifically, informal and formal family social support were both associated with less stress and depression and enhanced general health functioning and family well-being (Table 5).

There were no significant differences in the sizes of effect between informal family social support and the three parent psychological health measures, $Q_B = 0.42$, $df = 2, 23$, $p = .811$, or between formal family social support and the three parent psychological health measures, $Q_B = 1.99$, $df = 2, 19$, $p = .369$. There were also no significant differences between informal family social support and the three parent psychological health measures and the family well-being measures, $Q_B = 2.17$, $df = 1, 33$, $p = .141$, or between formal family social support and the three parent psychological health measures and the family well-being measures, $Q_B = 0.04$, $df = 1, 28$, $p = .835$.

The results indicated that the strength of the relationships between informal family social support and the four health and well-being measures were much the same which was also the case for formal family social support.

The heterogeneity results showed that there was low, medium, and high variability in the studies for three, three, and two health and well-being measures respectively. The heterogeneity indices for all parent measures combined were medium for informal family social support and low for formal family social support. The health and well-being measures with the highest heterogeneity indices are ones where variability in the results is likely due to other study or participant factors (e.g., moderator variables).

Informal vs. Formal Family Social Support

The differences in the sizes of effect between informal and formal family social support and the psychological health and wellbeing measures were evaluated by 2-between type of family support analyses with meta-regression. Informal family social support was coded a two (2) and formal social support was coded a one (1). The results are shown in Table 6.

The sizes of effect for informal family social support were larger than those for formal family social support for 3 of the 4 health and well-being measures as evidenced by the standardized beta regression coefficients and associated Z and p values for the between type of family social support comparisons. The sizes of effect were also larger for all outcome measures combined as evidenced by the standardized regression coefficient and associated Z and p values. These differences can be ascertained by examining the average, weighted effect sizes in Table 5. The amount of variance accounted for in the health and well-being measures ranged between 11% and 42%. The results, taken together, indicate that informal family social support is a more robust predictor of parent and family psychological health and well-being compared to formal family social support (Table 6).

Moderator Analyses

Two child and three caregiver variables were examined as moderators of the sizes of effect between informal and formal family social support and parent and family psychological health and well-being. The child variables were age and condition (autism spectrum disorders vs. other identified conditions). The caregiver variables were age, years of formal education, and marital status. The results are shown in Table 7.

Neither child condition nor caregiver age moderated the relationships between informal or formal family social support and the psychological health and well-being measures. The results for child condition indicate that the influence of informal and formal family social support on parent and family psychological health and well-being is much the same for parents and other caregivers of children with autism spectrum disorders and children with identified disabilities and delays. Follow-up analyses found the sizes of effect between informal support and the health and well-being outcomes did not differ for children with autism spectrum disorders, $r = -.25$, 95% CI = $-.31, -.18$, and children with other identified conditions, $r = -.28$, 95% CI = $-.28, -.35$, $Q_B = 0.63$, $df = 1, 29$, $p = .428$, nor did the sizes of effect differ between formal support and the health and well-being outcomes for children with autism spectrum disorders, $r = -.15$, 95% CI = $-.20, -.09$, and children with other identified conditions, $r = -.15$, 95% CI = $-.24, -.06$, $Q_B = 0.00$, $df = 1, 28$, $p = .985$. The results for caregiver age showed that both informal and formal family social support behaved in the same way among parents and other caregivers regardless of their ages (Table 7).

Child age moderated the relationships between both informal and formal family social support and both the psychological health and well-being measures. In both analyses, the strength of the relationships between both types of family social support was stronger in households with older children. The results indicated that both informal and formal family social support had more potent effects on

parents' and other caregivers' health and well-being in households with older children.

Marital status moderated the relationship between informal family social support and both the psychological health and well-being measures. The sizes of effect decreased as the percentage of study participants who were married increased. The results showed that informal family social support had a smaller effect among married couples and those living with a partner compared to unpartnered or widowed caregivers.

Caregiver education moderated the relationship between formal family social support and both psychological health and well-being. The sizes of effect between measures increased among more educated parents and caregivers. The results indicated that the study participants who completed more years of formal education reported fewer negative health outcomes.

General Discussion

Results from the meta-analysis showed that both informal and formal family social support were related to different dimensions of parent and family psychological health and well-being. The sizes of effects between informal family social support and the different dimensions of psychological health and well-being were much the same. The same was the case for the sizes of effect between informal family social support and the different dimensions of psychological health and well-being. Results also showed that informal family social support was a more robust predictor of parent and family psychological health and well-being compared to formal family social support. The sizes of effect for informal family social support were twice as large as those for formal family social support for 3 of the 4 health and well-being measures (see Table 5). Child age moderated the relationships between both informal and formal family social support and the health and well-being measures. Additionally, marital status moderated the relationship between informal family social support and the health and well-being measures, and caregiver education moderated the relationship between formal family social support and the health and well-being measures.

Bronfenbrenner (1975) and others (e.g., Cochran, 1993; Crockenberg, 1988) contended that social support available from social network members provides parents the time and psychological energy to carry out parenting responsibilities. This contention includes the proposition that social support in general, and family social support in particular, should be related to attenuated negative psychological health and enhanced positive psychological functioning. Results from the meta-analysis indicated that both informal and formal family social support had these effects on parents and other primary caregivers. These results together with the findings in companion meta-analyses of family social support studies (Dunst, 2022a, 2022c) point to the importance of help, assistance, advice, etc. from social network members as part of rearing children birth to 18 years of age.

Contributions to Research

Social support researchers have noted the limited evidence for the relationships between both informal and formal social support and health and well-being outcomes (e.g., Lauzier-Jobin & Houle, 2022; Shiba et al., 2016). For example, Shiba et al. (2016) stated that “few studies have simultaneously examined the effects of formal and informal social supports on [psychological health]” (p. 622). In those studies where both types of social support have been investigated the results are mixed. For example, Gerard et al. (2006) and Landry-Meyer et al. (2005) found that both informal and formal social support were related to caregivers' psychological health and well-being. In contrast, Shepherd et al. (2020) found that neither informal nor formal social support was related to parents' psychological health and parenting stress. In some studies, informal but not formal social support was related to parents' health and well-being (e.g., Honey et al., 2005), and in other studies, formal but not informal social support was related to parents' health and well-being (e.g., Gouin et al., 2016). The mixed results in previously conducted social support studies of parents and other caregivers of children and adolescents with and without identified or at-risk conditions can be attributed to at least four methodological factors. First, the

sources of informal and formal social support in the different studies were often not the same.

Second, some sources of support were considered informal support in some studies and formal support in other studies. Third, the types of social support that were the targets of appraisals were in most studies not the same. Fourth, the procedures for ascertaining informal and formal social support were in some cases not the same. These methodological concerns were not present in this meta-analysis since the same family social support scale was used in each study, the sources of informal and formal family social support were the same, and the procedure for assessing the helpfulness of family social support was identical in all of the studies in the meta-analysis.

The meta-analysis contributes to the research literature in several ways. The research synthesis addresses both Lauzier-Jobin and Houle (2022) and Shiba et al. (2016) call for studies that examine the relationships between both informal and formal family social support and different dimensions of psychological health and functioning. The research synthesis is, to the best of the author's knowledge, the first meta-analysis that showed (a) that both informal and formal family social support are related to different dimensions of parent and family psychological health and well-being and (b) that informal family social support is a more robust predictor of health and well-being compared to formal family social support. The latter finding is especially important given the fact that research indicates that parents and other primary caregivers often report that informal social network members are primary sources of support (e.g., Leahy-Warren, 2007; Lightfoot et al., 2018) and that this type of support is related to different dimensions of parent psychological health (e.g., Ekas et al., 2010; Leahy-Warren et al., 2012).

A minor finding but a significant contribution to research is the finding that the relationships between informal and formal family social support and the health and well-being outcomes were much the same for parents and other caregivers raising children with autism spectrum disorders and children with other

developmental and medical conditions. Results from the companion meta-analyses of family social support studies, the sizes of effect between the total FSS scores and multiple dimensions of parenting psychological health and caregiving practices were nearly identical for children with and without identified disabilities or medical conditions (Dunst, 2022a, 2022c). The same was the case in this meta-analysis for the relationships between both informal and formal family social support and the parent and family health and well-being measures.

Implications for Practice: As noted in the introduction to the paper, the meta-analysis is part of a line of research investigating the hypothesized relationships between key components of a family systems intervention model and parent, family, and child behavior and functioning (Dunst, 2017, 2022b). The key components of the model include family-identified needs, family strengths, family supports and resources, and practitioner use of capacity-building family-centered practices. The model has been used for intervention purposes with families of children with identified disabilities, children with chronic medical conditions, and children experiencing at-risk conditions for poor outcomes. A major premise of the model is that when appropriate informal sources of support and resources should first be used before formal support and resources are mobilized to meet family-identified needs. This is the case, in part, because there are never likely to be enough formal support and resources to meet the needs of families raising children and adolescents (Sarason et al., 1988).

Meta-analyses of studies of each component of the family systems intervention model show that needs satisfaction, adequacy of family supports and resources, the actualization of family strengths, and practitioner use of capacity-building help-giving practices are related to less negative and more positive parent, family, and child functioning (see Dunst, in press, for a summary of this evidence). Results from the present meta-analysis indicate that informal family social support has similar consequences, and indicated that the use of

informal supports as a focus of family intervention practices for meeting family-identified needs.

Limitations: Several limitations need to be highlighted to place the meta-analysis and results in conceptual, methodological, and procedural perspectives. One limitation is the fact that the effect sizes between informal and formal family social support are correlational and causal inferences may not be warranted. A second limitation is the fact that the Family Support Scale used to measure family social support measures only the perceived helpfulness of support from social network members and other social support dimensions may prove to be other predictors of parent and family psychological health and well-being. A third limitation is the fact that the number of effect sizes between family social support and the different health and well-being outcomes are small and may not be the best estimates of the strength of the relationships between the independent and dependent measures. These limitations need to be addressed in future meta-analyses of family social support studies.

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Appendix A

Forest Plot Data for the Relationships Between Informal Family Social Support and Parent and Family Psychological Health and Well-Being

Study	Measures	N	r	95% CI	
				Lo	Hi
Parent General Health Measures					
Eid (2016)	General Health Questionnaire-12	54	-.07*	-.34	.21
Ho (2013)	Short Form Health Survey (SF-36)	121	.26	.42	-.08
Littlewood (2008)	General Health Questionnaire-12	175	.11*	-.26	.04
Shackell (2011)	Questionnaire on Resources and Stress-SF	30	-.53	-.75	-.19
Trivette & Dunst (1992)	Questionnaire on Resources and Stress	88	-.21	-.40	.01
White & Hastings (2004)	Questionnaire on Resources and Stress-SF	33	-.46	-.70	-.12
Parent Depression Measures					
Benson (2006)	CES-Depression Scale	68	-.37	-.56	-.14
Benson & Karloff (2009)	CES-Depression Scale	90	-.13	-.33	.08
Brown (2014)	CES-Depression Scale	60	-.10	-.35	.16
Letiecq & Koblinsky (2003)	CES-Depression Scale	61	-.05	-.30	.21
Trivette & Dunst (1992)	Psychological Well-Being Index	224	.44*	.33	.54
White & Hastings (2004)	HADS-Depression Subscale	33	-.42	-.67	-.08
Parent Stress Measures					
Allen & Knott (2016)	Parenting Stress Index-Short Form	51	-.30	-.54	-.02
Benson (2006)	Sources of Stress Questionnaire	68	-.24	-.46	.00
Benson & Karloff (2009)	Sources of Stress Questionnaire	90	-.11	-.31	.10
Hassall et al. (2005)	Parenting Stress Index-Short Form	46	-.31	-.56	-.01
Ho (2013)	Parenting Stress Index-Short Form	121	-.10	-.28	.08
Hutchinson (2010)	Hospital Anxiety and Depression Scale	114	-.27	-.43	-.09
McStay et al. (2014) Sample 1	Parenting Stress Index-Short Form	98	-.22	-.40	-.02
McStay et al. (2014) Sample 2	Parenting Stress Index-Short Form	98	-.28	-.46	-.08
Nolcheva & Trajkovski (2015)	Parenting Stress Index-Short Form	35	-.44	-.68	-.11
Rodrigues (2013)	Parenting Stress Index	14	-.45	-.81	.17
Rutstein (2014)	Parenting Stress Index-Short Form	24	-.08	-.49	.36
Taylor (1999)	Parenting Stress Index	992	-.21	-.27	-.15
Wang (2016) Sample 1	Parenting Stress Index-Short Form	45	-.10	-.39	.21

Wang (2016) Sample 2	Parenting Stress Index-Short Form	59	-.17	-.41	.10
Family Well-Being Measures					
Kresak et al. (2014) Sample 1	Family Quality of Life Scale	26	.56	.20	.79
Kresak et al. (2014) Sample 2	Family Quality of Life Scale	24	.54	.15	.78
Machado & Correia (2012)	Family Unpredictability Scale	160	-.25*	.10	.39
McStay et al. (2014) Sample 1	Family Quality of Life Scale	98	.25	.05	.43
McStay et al. (2014) Sample 2	Family Quality of Life Scale	98	.37	.18	.53
Taylor et al. (1993)	Family Adaptability and Cohesion Scale	992	.22	.16	.28
Trivette & Dunst (1987)	QRS Family Integrity Subscale	224	-.24*	-.11	-.36
Trivette & Dunst (1992)	QRS Family Integrity Subscale	88	-.28*	-.07	-.46
Weiss et al. (2013)	BFDS-Family Distress Subscale	138	-.43*	-.28	-.56

*Indicates that the direction of effect was reversed for computing the average sizes of effect for the relationships between the informal family social support scores and the outcome measures.

NOTES. CES = Center for Epidemiological Studies, HADS = Hospital Anxiety and Depression Scale, QRS = Questionnaire on Resources and Stress, and BFDS = Brief Family Distress Scale.

Appendix B

Forest Plot Data for the Relationships Between Formal Family Social Support and Parent and Family Psychological Health and Well-Being

Study	Measures	N	r	95% CI	
				Lo	Hi
Parent General Health Measures					
Eid (2016)	General Health Questionnaire-12	54	-.09*	-.35	.19
Ho (2013)	Short Form Health Survey (SF-36)	121	.11	-.28	.07
Littlewood (2008)	General Health Questionnaire-12	175	-.05*	-.20	.10
Shackell (2011)	Questionnaire on Resources and Stress-SF	30	-.57	-.78	-.25
Trivette & Dunst (1992)	Questionnaire on Resources and Stress	88	-.09	-.30	.12
Parent Depression Measures					
Benson (2006)	CES-Depression Scale	68	-.15	-.38	.10
Brown (2014)	CES-Depression Scale	60	.00	-.26	.26
Letiecq & Koblinsky (2003)	CES-Depression Scale	61	-.26	-.48	.00
Trivette & Dunst (1992)	Psychological Well-Being Index	224	.20*	-.07	.32
Parent Stress Measures					
Allen & Knott (2016)	Parenting Stress Index-Short Form	51	-.21	-.46	.08
Benson (2006)	Sources of Stress Questionnaire	68	.05	-.20	.29
Hassall et al. (2005)	Parenting Stress Index-Short Form	46	-.25	-.51	.05
Ho (2013)	Parenting Stress Index-Short Form	121	-.08	-.26	.10
Hutchinson (2010)	Hospital Anxiety and Depression Scale	114	-.15	-.33	.04
McStay et al. (2014) Sample 1	Parenting Stress Index-Short Form	98	-.19	-.38	.01
McStay et al. (2014) Sample 2	Parenting Stress Index-Short Form	98	-.20	-.39	.00
Nolcheva & Trajkovski (2015)	Parenting Stress Index-Short Form	35	-.11	-.44	.24
Rodrigues (2013)	Parenting Stress Index	14	.05	-.54	.61
Rutstein (2014)	Parenting Stress Index-Short Form	24	-.39	-.70	.04
Taylor (1999)	Parenting Stress Index	992	-.07	-.13	-.01
Wang (2016) Sample 1	Parenting Stress Index-Short Form	45	.03	-.27	.33
Wang (2016) Sample 2	Parenting Stress Index-Short Form	59	-.18	-.42	.09
Family Well-Being Measures					
Kresak et al. (2014) Sample 1	Family Quality of Life Scale	26	.50	.12	.75
Kresak et al. (2014) Sample 2	Family Quality of Life Scale	24	.15	-.29	.54
Machado & Correia (2012)	Family Unpredictability Scale	160	-.11*	-.26	.05
McStay et al. (2014) Sample 1	Family Quality of Life Scale	98	.21	.01	.39
McStay et al. (2014) Sample 2	Family Quality of Life Scale	98	.29	.09	.46
Taylor et al. (1993)	Family Adaptability and Cohesion Scale	992	.12	.06	.18
Trivette & Dunst (1987)	QRS Family Integrity Subscale	224	-.01*	-.14	.12
Trivette & Dunst (1992)	QRS Family Integrity Subscale	88	.04*	-.25	.17

*Indicates that the direction of effect was reversed for computing the average sizes of effect for the relationships between the formal family social support scores and the outcome measures.

NOTES. CES = Center for Epidemiological Studies and QRS = Questionnaire on Resources and Stress.