

Original Article

Perceived Social Support among Greek-Cypriot Mothers of Children with Cancer and Mothers of Healthy Children

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Abstract

Background: Social support may play a critical and protective role in the physical and psychological well-being of mothers of children with cancer (MCC), enhancing their adjustment and coping with the care giving demands. The way social support is conceptualized and operationalized differs widely between several studies.

Aim: To assess the psychometric properties of the Greek translation of the 19-item MOS Social Support Survey- Greek version (MOS – SSS-G) and investigate the perceived functional social support as well as reported sources of support among mothers of children with cancer (MCC) as compared to mothers of healthy children (MHC).

Sample and Methods: A descriptive comparative study with a purposive sample of 52 MCC and 208 MHC was used. Exploratory factor analysis was used to assess the construct validity of the tool. Differences in reported sources of support and perceived social support between the study groups and in terms of socio-demographic characteristics were investigated.

Results: A clear structure of three factors has been identified, explaining 79% of the total variance – tangible (4 items, Cronbach's $\alpha=0.92$), emotional/informational (8 items, $\alpha=0.95$) and positive social interaction/affectionate support (7 items, $\alpha=0.96$). In both groups, consistently lower social support was reported by unmarried mothers, those with lower educational attainment, lower income, not owning their house and higher residential mobility. While no statistical significant differences were observed in terms of overall perceived social support between the comparison groups, MCC tended to report lower emotional/ informational support but higher tangible support, lending support to the tool's scale discriminant validity. Family was identified as the foremost source of support followed by other parents of children with cancer while health care professionals ranked very low.

Conclusions: The MOS-SSS appears to be a valid and reliable measure of functional aspects of social support among Greek-speaking Cypriot mothers, further supporting the cross-cultural applicability of the tool.

Keywords: childhood malignancy, mothers, caregivers, perceived social support, validation

Introduction

The diagnosis of childhood cancer is an intense and disruptive experience that brings many changes in the lives of young patients and their families (Wiersma - Vrijmoet et al., 2008; Sjolander et al.,

2011). The crucial role of social support on an individual's physical and psychosocial well-being has been well acknowledged within the cancer literature for years and the importance of strong support systems in children with cancer and their families is largely appreciated (Katz and Varni,

1993). Social support seems to have a moderating effect on the impact of anxiety, depressive symptoms and posttraumatic stress disorder (Barakat et al., 1997; Sloper, 2000; Manne, DuHamel & Redd, 2000; Dockerty et al., 2000; Frank et al., 2001; Norberg – Lindahl, Lindblad & Boban, 2005). Of course, it is also likely that the psychological distress that parents of children with chronic illness experience influences in turn their perception of social support as well as the satisfaction with received support (Klassen et al., 2007).

The concept of social support has been widely studied. It broadly refers to the supportive ways different people behave in a social context (Helgeson, 2003). Social support models generally fall into two types: structural and functional (Helgeson, 2003; Decker, 2007; Sjolander & Ahlstrom, 2012). Structural models consider the individual's social network of support resources or relationships from which individuals receive assistance in coping with demands and achieving goals (Kahn & Antonucci, 1980). Functional models of support, on the other hand, assess the individual's perceptions of the types and qualities of relationships (Decker, 2007). In effect, functional measures refer to the resources that people within an individual's social network provide (Helgeson, 2003). The functions most often cited are (a) emotional support, (i.e. having access to people who listen, care, sympathize), (b) tangible or instrumental support, (i.e. help with household chores, lending money, running errands,) (c) informational support (i.e. advice, information, that can provide a solution to a problem, (d) positive social interaction (i.e. the availability of other people to interact with and do fun things with), (e) appraisal support, (i.e. feedback of relevance to self-evaluation) and, (f) affectionate support (i.e. expressions of love and affection) (Norberg – Lindahl, Lindblad & Boban, 2006; Helgeson, 2003; Sherburne and Stewart, 1991).

In the pediatric oncology literature, several studies have investigated the association between social support and several health outcomes, either in mothers or both parents (Manne, DuHamel & Redd, 2000; Dockerty et al., 2000; Hoekstra-Weebers et al., 2001; Barrera et al., 2004a; Norberg- Lindahl, Lindblad & Boman, 2006; Wijnberg – Williams et al., 2006; Demirtepe – Saygili and Bozo, 2011; Enskar et al., 2011; Klassen et al., 2011; Fayed et al., 2011) in children themselves (Haluska et al., 2002; Van Riel et al., 2014), in both parents and children

(Trask et al., 2003) or even in siblings (Barrera, Fleming and Khan, 2004b). While a number of researchers used qualitative approaches, such as phenomenology, to investigate the lived experiences in relation with social support (Fletcher, 2011; Wong & Chan, 2006; McGrath, 2001), most studies are quantitative in nature and use a variety of tools of social support. The cross-cultural applicability of such measures has not always been established while studies which use a common tool are scarce, limiting the capacity to compare findings across studies. A number of studies focus on structural support (Mulhern et al., 1992), while others measure both structural and functional social support (Dockerty et al., 2000; Hoekstra-Weebers et al., 2001; Wijnberg – Williams et al., 2006). Most tend to focus on perceived (rather than received) functional support (Manne, DuHamel & Redd, 2000; Sloper, 2000, Frank et al., 2001; Trask et al., 2003; Norberg-Lindahl, Lindblad & Boman, 2006; Demirtepe – Saygili and Bozo, 2011; Klassen et al., 2011), as it is well established that people who perceive themselves to be supported by others exhibit more positive physical health status, mental health, and longevity than those who perceive themselves as not having support from others (Cutrona and Russell, 1990).

One of the tools that has been used extensively in clinical and community samples worldwide with good psychometric properties in different populations and several languages (Kornblith et al., 2001 Surkan et al. 2006; Coyle, 2011) is the MOS Social Support Survey tool (MOS – SSS), originally developed by Sherbourne & Stewart (1991). The tool has been used in a study of patients with primary Sjogren's syndrome (Karaiskos et al., 2009). We are not aware of any other studies among Greek-speaking populations that have used this tool. In the pediatric oncology literature, Fayed et al (2011) and Klassen et al. (2011) used MOS–SSS in a sample of Canadian parents of children in active treatment for cancer to investigate its association with optimism (Fayed et al, 2011) and health-related quality of life (HRQoL) (Klassen et al., 2011) respectively. Mack et al. (2007) used MOS-SSS to explore parents' of children with cancer understanding of prognosis and optimism.

The overall aim of the present study was to explore the perceived social support of MCC. Specifically, the objectives were:

- a) To assess the psychometric properties of the Greek translated version of the MOS Social

Support Survey (MOS-SSS-G) in terms of its construct validity and internal consistency.

- b) To compare the perceived social support and reported sources of support between MCC and a control group of MHC and
- c) To explore potential differences in perceived social support in terms of MCC's and MHC's socio-demographic characteristics and reported sources of support

Methods

Design, setting and sample

A cross-sectional descriptive comparative design was used involving a sample of Mothers of Children with Cancer – MCC (main study group) and Mothers of otherwise Healthy Children – MHC (comparison group). The study took place in a pediatric Hospital in Nicosia, Cyprus. Over April 2012 to April 2013, the study recruited a purposive sample of MCC diagnosed with any type of cancer receiving active treatment at the Pediatric Oncology Centre, the only referral center on the island. Other eligibility criteria were the following: child not older than 18 years of age, at least one month post-diagnosis or in relapse and not considered palliative. For each participating mother of a child with cancer, four mothers of age- and gender-matched children receiving in-patient treatment for a transient health problem (e.g. gastroenteritis, pneumonia, appendisectomy) at the two Pediatric Units or Pediatric Surgical Unit were approached in parallel time. The chosen 1:4 allocation ratio allows testing the construct validity of the tool (i.e. >10 participants per item) and provides 90% power to detect a medium effect size (i.e. a 0.5 SD difference between comparison groups) at the 5% statistical significance level.

Instruments

MOS social support survey- Greek version (MOS – SSS-G)

The MOS – SSS (Sherbourne & Stewart, 1991) is a self-administered 19 item tool that measures the perceived availability of emotional, informational, tangible, affectionate support and positive social interaction. Responders indicate how often each type of support is available to them if they need it and all items start with “Someone...” e.g. “... to give you good advice about a crisis”. The answer is provided on a 5-point Likert-scale (1= none of the time to 5= all of the time). A double back-translation was used to maintain semantic equivalence of the translated

tool. The original was translated independently into Greek by two translators. A back-translation into English was undertaken by two additional translators familiar with the culture of the source language independently of each other. The final version was piloted for cognitive understanding and readability among ten mothers of healthy children.

Socio-demographic characteristics

Participants provided information with regards to socio-demographic variables including tenure status (e.g. whether home owners), residential stability and financial status. The participants were also asked to identify sources of social support. Information in terms of the child's condition was extracted from medical records, including age, gender, type of date of diagnosis, treatment stage, type of treatment.

Ethical considerations

The study was approved by the Cyprus Bioethics Committee, the Ministry of Health and the Commissioner for the Protection of Personal Data. Participation was voluntary. All participants provided a signed informed consent form.

Statistical analysis

The construct validity of the MOS-SSS was assessed in the overall sample (i.e. both groups combined) using exploratory factor analysis with orthogonal rotation, after assessing the adequacy of the data by the Kaiser–Meyer–Olkin coefficient and Bartlett's test of sphericity. Differences in overall social support as well as subscale scores in terms of socio-demographic characteristics and reported sources of support among mothers in each group were investigated using analysis of variance and independent t-tests. Differences between comparison groups in overall and subscale scores after adjusting for important socio-demographic variables were investigated in multiple regression models.

Results

Socio-demographic characteristics of study participants

A total of 52 MCC participated in the study (response rate=93%) as well as 208 mothers of otherwise healthy children (response rate=89%). As many as 69.2% of the children with cancer were males and half were diagnosed with acute lymphatic leukemia. The vast majority (94.2%) were receiving chemotherapy and the rest a combination of chemotherapy and radiotherapy. The socio-

demographic characteristics of the participating mothers are presented in Table 1. No significant differences were observed between the two comparison groups in terms of their socio-demographic characteristics.

Construct validity and internal consistency of Greek version of MOS-SSS

The theoretical dimensions in the original scale (Sherbourne & Stewart, 1991) include tangible,

emotional/informational, positive social interaction and affectionate support.. In the current study, a clear structure of three factors was identified explaining 79.2% of the total variance with no cross-loading of an absolute value higher than 0.3 – see *Table 2*. The three factors were: emotional/ informational (EMO/INFO items 1-8, 32.1% of total variance), tangible support (TANG items 9-12, a further 28.9%) and positive social interaction/affectionate support (AFF/POS items 13-19, 18.2%).

Table 1: Socio- demographic characteristics of the study participants

Variables		Mothers of children with cancer (main study group) N=52		Mothers of control children (comparison group) N=208		p-value ¹	
		N	%	N	%		
Age of mother	18-29	8	15.4	45	21.6		
	30-44	40	76.9	143	68.8		
	≥45	3	5.8	16	7.7		.496
	Not reported	1	1.9	4	1.9		
Nationality	Cypriot	48	92.3	188	90.4		
	Other	4	7.7	20	9.6		.668
Marital Status	Married	45	86.5	170	81.7		
	Other	7	13.5	34	16.3		.574
	Not reported	0	0	4	1.9		
Number of children	1 child	9	17.3	40	19.2		
	2 children	24	46.2	80	38.5		
	3 children	14	26.9	51	24.5		
	>3 children	4	7.7	33	15.9		.432
	Not reported	1	1.9	4	1.9		
Education	Primary	1	1.9	8	3.8		
	Secondary	21	40.4	92	44.2		
	Tertiary	12	23.1	41	19.7		
	University	16	30.8	63	30.3		.846
	Not reported	2	3.8	4	1.9		
Employment	Full Time	31	59.6	117	56.2		
	Part Time	7	13.5	18	8.7		

	Not Working	13	25	68	32.7	.393
	Not reported	1	1.9	5	2.4	
Monthly Family Income	<2000	22	42.3	106	51	
	2001-3000	11	21.2	50	24	
	3001-5000	9	17.3	25	12	
	5001-7000	5	9.6	6	2.9	
	>7001	2	3.8	6	2.9	.186
	Not reported	3	5.8	15	7.2	
Allowance	Yes	24	46.2	72	34.6	
	No	25	48.1	129	62.0	.089
	Not reported	3	5.8	7	3.4	
Financial difficulties	Yes	24	46.2	117	56.2	
	No	22	42.3	76	36.5	.295
	Not reported	6	11.5	15	7.2	
Change of residence	Never/10 years	22	42.3	67	32.2	
	Once/10 years	15	28.8	76	36.5	
	2-3 times/10 years	12	23.1	49	23.6	
	≥4 times/10 years	1	1.9	9	4.5	.524
	Not reported	2	3.8	7	3.4	
House tenure	Owner	43	82.7	152	73.1	
	Renting	5	9.6	39	18.8	
	Other	2	3.8	10	4.8	.265
	Not reported	2	3.8	7	3.4	
Type of house	House	45	86.5	165	79.3	
	Apartment	5	9.6	37	17.8	.158
	Not reported	2	3.8	6	2.9	
Hospital psychologist	Yes	18	34.6	17	8.2	
	No	30	57.7	180	86.5	<0.001
	Not reported	4	7.7	11	5.3	
Antidepressants	Yes	3	5.8	10	4.8	
	No	49	94.2	198	95.2	.776

Notes: ¹ p-value of chi-square test comparing main study group and comparison group restricted among those who provided an answer i.e. excluding category "not reported"

The three items of the original “positive social interaction” factor (items 16, 17, 18) loaded on the same factor as the three items of “affectionate support”. Extracting and rotating four factors (rather than three factors) did not result in separating these factors. Instead, items 1-3 of information support form the fourth factor. Thus, it was decided to extract only three factors since a single factor on information and emotional support is commonly observed and used in studies elsewhere including the original study. Cronbach’s α internal consistency coefficients were factor 1 =0.95, factor2= 0.96 and factor 3= 0.92. All factor scores correlated highly in-between them (correlation coefficients 0.6-0.8) as well as with the overall scale score (~0.9).

Perceived social support in terms of socio-demographic characteristics

Tables 3 and 4 present differences in perceived social support in terms of socio-demographic characteristics in the main study and comparison group respectively. Only variables for which a statistical significant difference was observed in at least one dimension of support and in at least one, if not both study groups are reported. The observed differences were generally in the expected direction. In brief, consistently lower social support was reported by unmarried/divorced mothers, those with lower educational attainment or lower income, those not owning their house and higher residential mobility, a further support of the known-group validity of the tool. No difference was observed in terms of age, nationality, district of residence or number of children.

It is noteworthy that, even though in some cases the observed differences among MCC mothers did not reach statistical significance due to the small sample size, both the direction as well as the magnitude of the differences were consistent with those observed among the control group, if not even larger. It should also be noted that while differences in overall or dimensions of support in terms of educational attainment were not statistically significant among the much larger control group, in MCC there was a clear stepwise decrease in perceived social support, which was statistically significant at the 10% level for overall support, and statistically significant in terms of POS/AFF support ($p=0.047$). In contrast, stronger associations with social support (overall and dimensions) were observed in terms of financial status among control mothers.

Sources of support

While one in five participants did not include family in their responses, family was the most frequently reported source of support both among MCC as well MHC (80.8% and 78.4% respectively) – see *Figure 1*.

Friends was the second most commonly reported source of support, while in the case of MCC, parents of other children with cancer were also identified by an equal proportion of participants. Health professionals ranked low with only 17.3% of MCC identifying them as a source of support. A similar proportion was observed among the MHC, and in both cases this was only slightly higher than neighbours. The strongest difference was observed with regards to priests. In contrast to as many as half of the main study group, only one in four among the control group included them in their choices.

While a large proportion of MCC identified other parents of children with cancer, friends and priests as important sources of support, there was no difference in perceived social support among those who did and did not. In fact, with regards to MCC, the only difference in perceived social support was observed between those who did ($M=73.9$) and did not ($M=53.9$) identify family as a source of support ($p<0.05$) – results not shown in detail. In contrast, the observed differences in perceived social support in terms of family as a source of support were not as large or statistically significant among MHC (70.6 vs. 66.0; $p=0.268$). Instead, the highest levels of perceived social support among MHC were observed among those reporting friends as a source of support (mean overall social support 75.1 Vs. 65.2 respectively; $p=0.003$) and even more so among those also identifying neighbors as a source of support (84.2 Vs. 68.1; $p=0.006$).

Comparison of levels of perceived social support among cases and controls

Figure 2 presents the comparison between the two study groups in terms of perceived social support. While no significant differences were observed in terms of perceived social support between the groups, mothers of children with cancer tended to report lower emotional/ informational support but higher tangible support, lending support to the tool’s discriminant validity.

Figure 1: Reported sources of support among mothers of children with cancer and among control mothers in descending order in terms of the frequency of positive response.

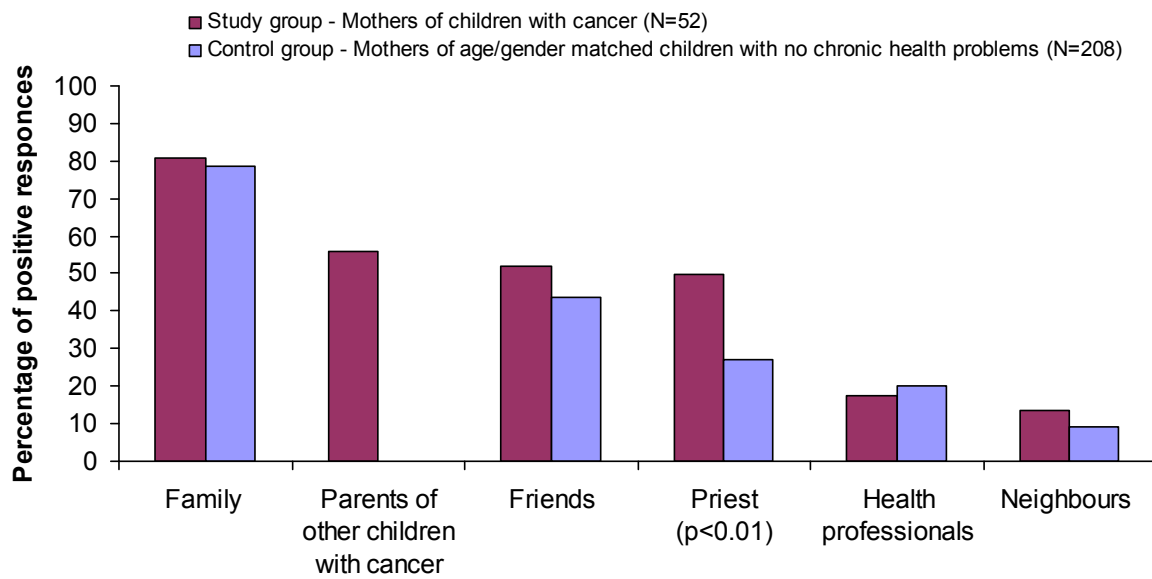
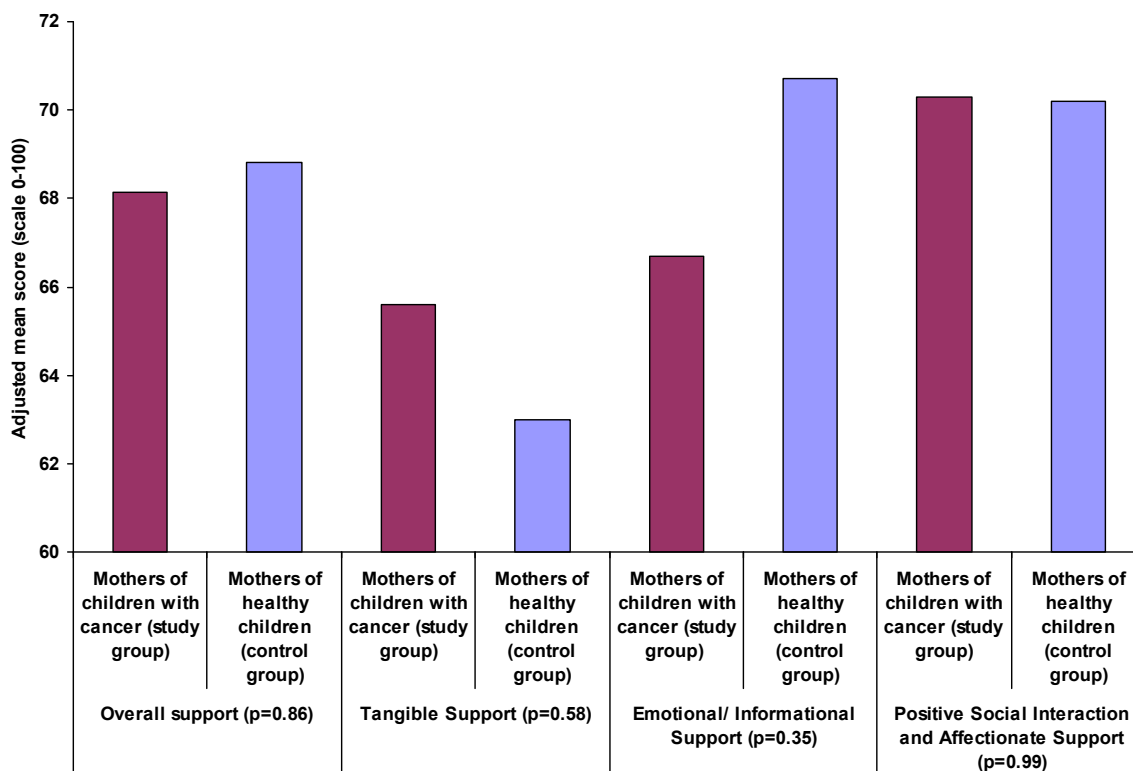


Figure 2: Differences in Overall, Tangible, Emotional/Informational and Positive Interaction/ Affectionate Social Support between the comparison groups after adjusting for socio-demographic characteristics



Discussion

Main findings

The observed dimensionality of the Greek translation of the tool appears consistent with studies elsewhere (Kornblith et al., 2001; Young et al., 2001; Bachanas et al., 2002; Teixeira et al., 2002; Lee and Woo, 2004; Anderson et al, 2005; Yea-Ing Lotus et al, 2006; Surkan et al., 2006; Coyle, 2011) Lower social support was reported by unmarried/divorced mothers, those with lower income or educational attainment, those not owning their house and higher residential mobility. While no significant differences were observed in terms of overall perceived social support between the study groups, MCC tended to report lower emotional/ informational support but higher tangible support. Family was identified as the foremost source of support, followed by other parents of children with cancer and friends, while health professionals were ranked very low. The results indicate that MCC compare favorably with MHC in terms of perceived social support. Barrera et al., (2004a) found that mothers of children with cancer actually reported more social support compared to mothers of children with acute illnesses. Nevertheless, social support did not seem to act as a

mediator in predicting mother’s psychological adjustment. Dockerty et al., (2000) evaluated the mental health of parents of children with cancer. Similar levels of support were reported between the study group and parents of children from the general population. Nevertheless, satisfaction with social support was significantly lower among the mothers of cases than controls, who also reported a significantly lower mean number of supporters. Parents of children with cancer reported poorer mental health outcomes which was associated with lower social support.

In the current study, social support varied in terms of the socio-economic characteristics of MCC. Mothers with lower educational attainment perceived that lower social support was available to them in terms of all dimensions of support. Unsurprisingly, marital status was also associated with social support. As also expected, employed MHC reported higher levels of perceived social support. Employment may create further opportunities for social contact. The economic burden can have long-term effects on the future well- being of the family, but in particular the mother as she is the one who may have to terminate or reduce her work hours (Elcigil & Conk, 2010). It

should be noted that while MHC at a worse financial situation reported lower levels of perceived social support, differences in perceived social support by financial status among mothers of children with cancer did not appear as large. The extended family model is still prevalent in Cyprus, and it is likely that the extended family contribute to alleviate parents from the financial demands of the child's care. Finally, lower levels of perceived social support was associated with residential instability and house tenure, further supporting the known-group validity of the tool since there is consistent evidence that families who cope well are those who find and use social support through connections to others in the community (Young et al., 2001).

The primary role of family as a source of support was identified. A Canadian study investigating the factors affecting mothers' abilities to cope with pediatric cancer reported that mothers perceived tangible, emotional, informational and financial support coming mainly from families but also from close friends and neighbors (Fletcher, Schneider & Harry, 2010). Support from other parents of children with cancer was considered essential and sometimes even more important than family members. In a study from Hawaii, half of the mothers reported tangible, emotional support and financial aid originating from friends, neighbours, church members, work colleagues and the community at large (Fletcher, 2011; McCubbin et al., 2002). Consistent findings about the role of the wider community were reported in studies from Sweden (Enskar et al., 2011), Australia (McGrath, 2001) the US (Patterson, Holm & Gurney, 2004; Manne, DuHamel & Redd, 2000; Sloper, 2000) and China (Wong and Chan, 2006). In the current study, while friends and neighbors appear to make a difference in terms of perceptions of social support available to mothers of otherwise healthy children, this was not the case among MCC.

More similar to this study, Turkish mothers reported that they generally received support by their spouses and other mothers with similar problems but they considered their neighbors unable to give them any support, something that made them wanting to avoid seeing them (Elcigil & Conk, 2010). More formal types of support from health care professionals or support groups are commonly found to be important elsewhere (McCubbin et al., 2002; Fletcher, Schneider & Harry, 2010; Enskar et al., 2011; Tsitsi, 2015). In contrast, Cypriot MCC ranked health professionals quite low while many more reported

priests as an important source of support. Other than cultural differences in terms of religious practices, perhaps this highlights the current limitations of the health care system and more specifically the lack of Family-Centered Care available elsewhere (Klassen et al., 2011).

Study limitations

The small culturally homogeneous sample limits the generalization of the findings. Nevertheless, the high response rate and the fact that the study was conducted in the only one referral hospital on the island ensure that the sample is largely representative of MCC in Cyprus. The same cannot be stated for the control sample. Even though based on the exclusion criteria only mothers of children with a transient health problem were included, the extent to which this is a representative sample of the general population of mothers in Cyprus is not known since to some extent it would exclude the sect of the population seeking private health care. There was a tendency of mothers in the control group to be of lower socio-economic status (associated with lower social support) compared to MCC. Hence, it is likely that the difference in perceived social support between the two groups is somewhat underestimated.

Conclusions

The MOS-SSS appears to be a valid and reliable tool in providing a multidimensional measure for the functional aspect of perceived social support among Greek-speaking mothers, further supporting the cross-cultural applicability of the tool and its use in cross-national studies.

Furthermore, qualitative approaches or mixed method approaches would be more suitable in order to enable an in-depth investigation of the lived experience and the perception about the dimensions of social support during the care process of a child with cancer. The results of this study suggest that health professionals might not utilize resources and opportunities to support these families to full effect. All members of the healthcare team, and nurses in particular, who interact with families of children with cancer in both inpatient or outpatient settings should provide opportunities for these families to maintain their interpersonal interactions and social networks within family, with friends and with parents of other children with cancer though establishing support groups and other interventions to enhance psychosocial well-being.

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Table.2 Factor structure of the Greek version of Medical Outcomes Study-Social Support Survey

“How often is each of the following kinds of support available to you if you need it?”	<u>Factor 1 –</u> Emotional/ Informational (EMO/INFO)	<u>Factor 2 –</u> Affectionate/ Positive Social Interaction (AFF/POS)	<u>Factor 3 –</u> Tangible Support (TANG)
Someone....			
Item 5 – ... whose advice you really want	0.833		
Item 4 – ... to confide in or talk to about yourself or your problems	0.830		
Item 7 – ... to turn to for suggestions about how to deal with a personal problem	0.829		
Item 6 – ... to share your most private worries and fears with	0.826		
Item 3 – ... to give you good advice about a crisis *	0.775		
Item 2 – ... to give you information to help you to understand a situation *	0.750		
Item 1 – ... you can count on to listen to you when you need to talk*	0.740		
Item 8 – ... who understands your problems	0.739		
Item 16 – ... to have a good time with		0.852	
Item 15 – ... who hugs you		0.838	
Item 17 – ... to get together with for relaxation		0.833	
Item 18 – ... to do something enjoyable with		0.801	
Item 14 – ... to love and make you feel wanted		0.793	
Item 19 – ... to do things with to help you get your mind off things		0.730	
Item 13 – ... who shows you love and affection		0.693	
Item 11 – ... to prepare your meals if you were unable to do it yourself			0.841
Item 12 – ... to help with daily chores if you were sick			0.798
Item 9 – ... to help you if you were confined to bed			0.762
Item 10 – ... to take you to the doctor if you needed it			0.748
Initial eigenvalues	11.84	1.98	1.23
Total variance explained (79.23%)	32.12%	28.94%	18.17%
Cronbach’ s a	0.95	0.96	0.92

Note: * These items (three out of four informational social support items) are grouped together, if four rather than three factors are extracted, with 82.65% of total variance explained

Table 3: Differences in Overall, Tangible, Emotional/Informational and Positive Interaction/Affectionate Social Support in terms of socio-demographic characteristics among mothers of children with cancer (main study group)

		Overall Social Support				Tangible				Emotional/Informational				Interaction/Affectionate			
Socio-demographic characteristics		N	M	SD	P	N	M	SD	P	N	M	SD	P	N	M	SD	P
Marital Status	Married	45	73.5	22.3		45	72.6	25.7		45	69.1	25.9		45	77.9	25.8	
	Other	7	53.9	30.0	.045	7	52.7	36.8	.078	7	49.1	29.6	.068	7	58.7	30.1	.079
Education	≤Secondary	22	62.0	27.7		22	61.6	31.9		22	59.2	27.7		22	64.6	31.2	
	Tertiary	12	75.1	18.8		12	72.9	23.6		12	66.4	30.9		12	85.4	18.8	
	University	16	78.3	19.7	.089	16	76.9	24.2	.224	16	74.4	22.0	.236	16	81.7	22.2	.047
Employment	F/T	31	73.4	20.8		31	71.9	25.0		31	67.2	26.3		31	79.6	23.8	
	P/T or Not Working	20	65.5	28.0	.252	20	65.3	31.8	.409	20	63.4	28.1	.626	20	67.3	30.3	.112
Family Income	<2000	22	65.4	27.4		22	65.0	31.0		22	63.2	29.1		22	68.0	30.6	
	2001-3000	11	75.9	27.7		11	75.0	31.1		11	70.5	29.0		11	81.5	28.5	
	>3001	16	74.0	16.3	.408	16	69.0	22.6	.634	16	67.8	24.0	.752	16	81.5	19.6	.232
Allowance	Yes	24	67.3	29.2		24	65.4	33.1		24	62.4	29.8		24	72.6	30.7	
	No	25	72.2	18.1	.483	25	71.8	22.4	.431	25	67.8	24.1	.490	25	76.4	23.8	.629
Financial difficulties	Yes	24	71.4	27.0		24	71.1	30.7		24	68.9	28.8		24	74.4	28.7	
	No	22	68.9	22.2	.731	22	66.8	27.6	.618	22	62.4	26.0	.426	22	75.6	26.7	.880
Change of residence last 10 years	Never	22	70.7	23.9		22	72.4	25.7		22	66.2	28.3		22	73.0	28.0	
	Once	15	80.4	21.0		15	75.8	28.1		15	78.1	22.7		15	87.1	21.0	
	≥Twice	13	58.2	24.0	.049	13	56.3	29.8	.143	13	51.0	23.8	.027	13	64.6	28.4	.078
House tenure	Owner	43	73.9	21.9		43	73.1	25.2		43	69.0	25.8		43	79.0	25.3	
	Not owner	7	48.5	27.6	.008	7	45.5	35.1	.014	7	46.0	28.6	.035	7	51.0	27.2	.010

Table 4: Differences in Overall, Tangible, Emotional/Informational and Positive Interaction/Affectionate Social Support in terms of socio-demographic characteristics among mothers of otherwise healthy children (comparison group)

Socio-demographic characteristics		Overall Social Support				Tangible				Emotional/Informational				Interaction/Affectionate			
		N	M	SD	P	N	M	SD	P	N	M	SD	P	N	M	SD	P
Marital Status	Married	170	72.0	23.1		170	67.8	27.4		170	69.9	25.8		170	77.3	24.1	
	Other	34	60.1	27.9	.009	34	55.5	33.2	.023	34	63.7	26.3	.204	34	59.0	33.7	.000
Education	≤Secondary	100	67.9	25.5		100	63.4	29.4		100	66.8	27.6		100	71.9	27.4	
	Tertiary	41	74.9	22.7		41	68.3	28.5		41	74.4	23.7		41	79.3	25.7	
	University	63	70.4	23.4	.301	63	67.8	28.0	.531	63	68.5	24.5	.290	63	74.7	26.2	.328
Employment	F/T	117	72.6	23.1		117	69.3	26.7		117	70.4	25.2		117	77.2	25.2	
	P/T or not Working	86	66.4	25.6	.074	86	60.8	31.0	.037	86	66.4	26.8	.281	86	69.9	28.3	.056
Family Income	<2000	106	66.4	24.8		106	62.1	29.3		106	67.1	25.5		106	68.4	28.7	
	2001-3000	50	72.9	22.3		50	67.1	26.5		50	69.5	26.0		50	81.3	22.3	
	>3001	37	77.7	23.3	.033	37	76.2	27.5	.033	37	74.9	24.6	.286	37	81.7	23.5	.003
Allowance	Yes	72	62.2	25.0		72	56.3	29.5		72	63.7	26.2		72	64.1	29.0	
	No	129	74.5	22.7	.000	129	71.1	26.8	.000	129	71.9	25.3	.030	129	80.0	23.6	.000
Financial difficulties	Yes	117	66.9	25.5		117	61.0	30.3		117	67.0	27.2		117	70.8	28.7	
	No	76	74.9	21.8	0.25	76	72.5	25.1	.007	76	72.4	23.6	.160	76	79.1	23.6	.036
Change of residence last 10 years	Never	67	71.0	24.1		67	66.9	27.2		67	70.5	27.0		67	74.0	25.21	
	Once	76	75.8	20.5		76	72.0	25.2		76	73.3	22.9		76	81.0	22.1	
	≥Twice	58	62.5	27.0	.007	58	56.8	33.1	.009	58	61.9	27.0	.035	58	67.4	31.2	.012
House tenure	Owner	152	71.2	23.0		152	67.0	27.5		152	69.2	25.4		152	76.1	24.6	
	Not owner	49	65.3	28.0	.146	49	60.0	32.2	.140	49	66.4	27.9	.508	49	67.4	32.1	.048