



Parental loss in childhood and social support in adulthood among psychiatric patients

Toshiaki Furukawa^{ab*}, Toshiro Yokouchi^c, Toshiyuki Hirai^d, Toshinori Kitamura^e, Kiyohisa Takahashi^d on behalf of the Group for Longitudinal Affective Disorders Study (GLADS)

^aDepartment of Psychiatry, McMaster University, 1200 Main Street West, Hamilton, Ontario, Canada L8N 3Z5

^bDepartment of Psychiatry, Nagoya City University Medical School, Mizuho-cho, Mizuho-ku, Nagoya 467-8601, Japan

^cDepartment of Psychiatry, Kinki University School of Medicine, Osaka, Japan

^dMusashi Hospital, National Center of Neurology and Psychiatry, Tokyo, Japan

^eNational Institute of Mental Health, National Center of Neurology and Psychiatry, Ichikawa, Japan

Received 18 September 1997; revised 28 September; accepted 26 October 1998

Abstract

Psychoanalytic theories hypothesize that early attachment experiences with parents shape the structure and function of adult interpersonal relationships. The present paper aims to examine if parental loss experiences in childhood is related to perceived social support in adulthood. We directly interviewed 1247 patients representative of 31 psychiatric clinics and hospitals all over Japan as to their parental loss experiences in childhood and also administered them Sarason et al.'s Social Support Questionnaire. It was found, to our surprise, that those who had lost the father or mother through death reported as many current support persons as those who had not and that those who had experienced separation from the mother (but not the father) reported greater satisfaction with social support than those who had not. Several hypotheses are advanced to explain these unexpected findings and it is concluded that we must at least entertain some doubt on the direct continuity hypothesis between disruptions of parent-child relationships and the individual's later capacity to enjoy social support. © 1999 Elsevier Science Ltd. All rights reserved.

1. Introduction

A good deal of research from the past two decades now indicates that social support has beneficial effects upon physical and mental health. Although the many retrospective or cross-sectional studies cannot be taken by themselves to prove causal relationships, these data in combination with animal research, prospective studies and intervention studies firmly suggest that social support is indeed a causal factor in physical and emotional well-being (Cohen and Wills, 1985; Kessler et al., 1985; House et al., 1988).

What then are the factors that determine the level of social support that an individual enjoys? Some researchers noted longitudinal stability of social support measures across important life transitions and wondered if an individual had his/her own 'natural' level of availability of social relationships (Henderson et al., 1981). Furukawa and Shibayama (1997) studied social support

among international exchange students who stayed for a year in a completely unfamiliar foreign community and found that between 24 and 86% of the variances of social support measures were stable across situations and were hence considered intra-individual. Sarason et al. (1986) went so far as to propose that what has been called perceived social support may represent a personality variable.

One very plausible explanation for this stability of social support is provided by psychoanalytic and attachment theories (Bowlby, 1969). They hypothesize that a profound link exists between early attachment experiences with significant others (parents) and the nature of subsequent social relationships. Early experiences become internalized in the process of personality formation and influence the perceptions of significant individuals encountered in later life.

Flaherty and Richman (1986) studied medical students' perceptions of their early relationships with the parents and their perceived quality of current social support networks and found that parental care in childhood was significantly related to adult social support levels even when support was limited to that from nonfamily

*Corresponding author. Tel.: +81-52-853-8271; fax: +81-52-852-0837; e-mail: toshi.furukawa@nifty.ne.jp.

members. Parker and Barnett (1988) replicated this finding when they examined the childhood relationships with the parents and the current levels of social support among primiparous women; they concluded that the experience of receiving adequate maternal care in childhood disposes the child to perceiving subsequent intimate relationships as satisfactory in adulthood. Sarason et al. (1986, 1987a, 1987b) also found significant associations between recalled parental care and several measures of perceived social support in two separate samples of college students. Reviewing these empirical studies, Parker et al. (1992) concluded that negative parent–child bonding may dispose to judging social bonding in adulthood negatively, either directly or through shaping mental models. Some prospective data are also available that attest to the association between relationship with the parents in childhood and social support in adulthood: the quality of relationships with the mother and the father was assessed through direct interviews with the parents when the children were aged 10, and, when the availability and perceived adequacy of social support of these individuals were assessed with a self-report questionnaire some 20 years later, they were found to show a significant association with the quality of relationships with the parents (Champion, 1995). On the other hand, a long-term follow-up study of 62 men and women for almost 40 years since infancy on showed that security of attachment in infancy was significantly correlated with the quality of peer relationships in childhood but not with that in adolescence nor with marital satisfaction (Skolnick, 1986). Furukawa (1993) also observed that the influence of the parental rearing attitudes in childhood on perceived social support diminished as adolescents went into new social contexts.

One logical corollary of the psychoanalytic hypotheses is that disruptions of parent–child bonds or dysfunctional relationships would lead to future impairments in the individual's capacity to develop relationships. Theoretically, childhood parental loss may be one such important factor influencing social relationships in adulthood, because apparently one of the more drastic interpersonal events that can occur in childhood is the death of or separation from parents. A ten-year longitudinal research with adolescent boys and girls revealed that girls of recently divorced parents tended to express dissatisfaction with available social support at age 15 but the impact of marital disruption diminished over time as adolescents who had experienced marital disruption in earlier years reported as much social support as adolescents from intact households (Frost and Pakiz, 1990). As far as the present authors are aware, there is no empirical study examining the relationship between childhood loss experiences and the individual's later social support among adults.

The Group for Longitudinal Affective Disorders Study (GLADS) in Japan has been conducting a multi-center

prospective follow-up study of a broad spectrum of affective disorders under the sponsorship of the Ministry of Health and Welfare (Furukawa et al., 1995). In the first stage of the collaborative study we examined representative samples of all the psychiatric patients visiting the participating centers while directly interviewing them about their childhood parental loss as well as administering them a social support questionnaire. In the present paper we would therefore like to examine if childhood parental loss may be related to perceived level of social support among psychiatric patients and if direct continuity hypothesis holds between childhood experiences and adult social relationships.

2. Methods

Subjects were 1247 cases who constituted representative samples of the first-visit patients to 31 psychiatric hospitals and clinics participating in the GLADS Project during the study period, who were aged 16 years old or older, who were given the DSM-III-R diagnoses by psychiatrists using a semistructured interview named the Psychiatric Initial Screening for Affective disorders (PISA) (Kitamura, 1992), and for whom relevant information regarding childhood parental loss as well as the social support questionnaire data were available.

The 31 hospitals and clinics included psychiatric departments of 15 university hospitals, 8 general hospitals, 5 mental hospitals, a community mental health center and an outpatient clinic, and a psychosomatic department of a university hospital from all over Japan. Each hospital and clinic examined a representative subset of its first-visit patients, selected according to the predetermined rules; in certain centers, a representative subsample meant all the first-visit patients examined by the psychiatrist(s) participating in the GLADS Project; in others, it meant all the first-visit patients on a certain day of the week; in still some others, it meant only the first such patient to show up on a certain day of the week. The selection of these preset rules was left to the individual center as time and human resources varied in each hospital.

The Psychiatric Initial Screening for Affective disorders (PISA) is a semistructured interview schedule probing for the presence/absence of 33 psychiatric symptoms and signs to arrive at the DSM-III-R diagnoses (Kitamura, 1992). The inter-rater reliability of these psychopathological variables has been reported to range between kappas of 0.71 and 1.00 (median = 0.85) (Furukawa et al., 1995). The PISA also contains a section inquiring after each parent's current age if alive, or each parent's age and the patient's age when the parent died, and whether and when the patient lived apart from each parent for a period longer than a month before the patient's 16th birthday. The reason for separation was also

to be specified. In the event of more than one period of parental separation, regardless of the cause, only the first separation was considered. We were therefore able to collect data on the patients' parental loss through direct and systematic interviewing.

Social support was measured with the Social Support Questionnaire (SSQ) developed by Sarason et al. (1983, 1987a, 1987b). There are a 27-item version and an abbreviated 6-item version. Each item has two parts. The first part assesses the number of available others the individual feels he or she can turn to in times of need under various situations. The second part of each item measures the individual's degree of satisfaction with the perceived support available in that particular situation. Subjects are instructed to indicate how satisfied they are on a 6-point Likert scale from 'very dissatisfied' to 'very satisfied'. It therefore yields two scores for perceived number of social supports (SSQ Number score) and satisfaction with social support that is available (SSQ Satisfaction score).

The psychometric properties reported for the SSQ among college student populations and psychiatric outpatients are adequate. Good test–retest reliability, factor validity, predictive validity and concurrent validity with an extensive structured interview have been reported for the full SSQ (Sarason et al., 1983; Sarason et al., 1987a; Sarason et al., 1987b). The abbreviated SSQ has also good internal consistency and test–retest reliability and concurrent validity with the longer SSQ (Sarason et al., 1987a, 1987b). The factor validity of the 6-item SSQ has been demonstrated (Furukawa et al., in press). In the present study we used the 6-item SSQ, because we were afraid that the response rate would be lower if we administered the longer 27-item version to psychiatric patients. The six questions for the short SSQ are reproduced in Table 1 with the original authors' permission. The scores for each subject were calculated when he/she answered at least half of the items.

Statistical analyses were carried out using SPSS for Macintosh (SPSS Inc., 1994). When the Kolmogorov–Smirnov test with Lilliefors modification revealed non-

Normal distribution of the variable in question, Mann–Whitney U test was used. All the tests of significance are two-tailed.

3. Results

Of the 1247 patients, 583 (46.8%) were men and 664 (53.2%) were women. Their mean age \pm S.D. was 41.1 ± 16.3 . The median educational level was high school graduation, with 324 (26.0%) attaining less than or up to junior high school graduation, 496 (39.8%) reporting high school graduation and 412 (33.1%) receiving higher education.

The diagnostic composition of the patients according to DSM-III-R is listed in Table 2. The sample consisted of various disorders and was quite heterogeneous but the most frequent diagnoses were mood disorders, anxiety disorders and schizophrenia.

Table 3 examines the influences of childhood parental loss through death or separation on the patients' perceived social support. When the SSQ Number and SSQ Satisfaction scores were compared between those with and without childhood parental loss, it was only separation from mother which was significantly correlated with the subjects' SSQ Satisfaction scores. Quite contrary to our expectation, those who had experienced separation from mother reported greater satisfaction with social support than those who had no such separation experiences (4.80 ± 1.02 vs. 4.57 ± 1.04 , Mann–Whitney $U = 62447.0$, $P = 0.008$). Moreover, this significant difference was restricted to women (4.67 ± 1.21 vs. 4.55 ± 1.11 , Mann–Whitney $U = 13887.0$, $P = 0.20$ for men; 4.90 ± 0.81 vs. 4.59 ± 0.98 , Mann–Whitney $U = 17391.0$, $P = 0.02$ for women).

The reasons for separation from mother were as follows: the patient's illness ($n = 6$, 4.6%), the mother's illness ($n = 21$, 16.2%), the mother's job ($n = 5$, 3.8%), the

Table 1. The six questions of the SSQ

- (1) Whom can you really count on to be dependable when you need help?
- (2) Whom can you really count on to help you feel more relaxed when you are under pressure or tense?
- (3) Who accepts you totally, including both your worst and your best points?
- (4) Whom can you really count on to care about you, regardless of what is happening to you?
- (5) Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?
- (6) Whom can you count on to console you when you are very upset?

Reproduced with the original authors' permission.

Table 2. Diagnostic composition of the patients

Diagnosis	<i>n</i>	%
Disorders usually first evidence in infancy, childhood, or adolescence	31	2.5
Organic mental disorders	34	2.7
Psychoactive substance use disorders	46	3.7
Schizophrenia	104	8.3
Delusional disorders	18	1.4
Psychotic disorders not elsewhere classified	24	1.9
Mood disorders	553	44.3
Anxiety disorders	173	13.9
Somatiform disorders	74	5.9
Dissociative disorders	26	2.1
Sleep disorders	53	4.3
Adjustment disorders	49	3.9
Others	62	5

Table 3. SSQ scores for those with and without childhood parental loss

			SSQ Number			SSQ Satisfaction			
			<i>n</i>	Mean	S.D.	Mann–Whitney	Mean	S.D.	Mann–Whitney
Death	of father	(+)	102	3.13	1.86	$U=56270.5,$	4.67	0.98	$U=55797.0,$
		(–)	1145	3.24	2.00	$P=0.54$	1.05	4.59	$P=0.45$
Separation	of mother	(+)	42	2.75	1.35	$U=21702.0,$	4.52	0.95	$U=23469.5,$
		(–)	1205	3.24	2.01	$P=0.12$	4.60	1.05	$P=0.42$
	from father	(+)	188	3.10	1.65	$U=97240.5,$	4.70	1.03	$U=92485.0,$
		(–)	1059	3.25	2.04	$P=0.61$	4.58	1.05	$P=0.12$
from mother	(+)	130	3.39	1.88	$U=68255.5,$	4.80	1.02	$U=62447.0,$	
	(–)	1117	3.21	2.00	$P=0.26$	4.57	1.04	$P=0.008$	

patient's attending boarding school ($n=16$, 12.3%), adoption ($n=13$, 10.0%), parental divorce ($n=13$, 10.0%) and others/unknown ($n=56$, 43.1%).

Because it was suspected that the influences of early parental loss on perceived social support may differ according to the diagnoses of the patients, the same analyses were conducted for mood disorders patients ($n=553$) and anxiety disorders patients ($n=173$), and similar trends emerged. Mood disorder patients who had experienced separation from mother were significantly more satisfied with social support than those who had not (4.82 ± 1.01 vs. 4.54 ± 1.04 , Mann–Whitney $U=11409.0$, $P=0.04$). Anxiety disorder patients who had lost father through death reported significantly greater SSQ Number score than those who had not (4.14 ± 2.19 vs. 3.03 ± 1.56 , Mann–Whitney $U=886.0$, $P=0.03$).

4. Discussion

To the best of the present authors' knowledge, this study represents the first attempt in the literature to examine empirically the relationship between parental loss in childhood and social support in adulthood. It examined the influence of childhood parental loss, retrospectively assessed through direct interviewing, upon perceived social support, measured by a self-report questionnaire, among first-visit psychiatric patients visiting various psychiatric clinics and hospitals all over Japan.

Several methodological weaknesses of the present study must first be discussed. First and foremost, some may question the reliability and validity of self-reported social support measures among psychiatric patients. We have elsewhere demonstrated, however, that the SSQ showed satisfactory internal consistency reliability and factor validity among the psychiatric patients (Furukawa et al., in press). It means that the subjects were not responding in a random or inconsistent manner. Moreover, if there was a general response bias that determined the way in which patients perceived their social support, it would be expected that significant associations would

be generated for all examinations, but such was not the case in our findings. It must also be emphasized that it is perceived, subjective social support that we are dealing with and that has been shown to be most influential upon psychological well-being (Barrera, 1986). Although the state effect of the patient's psychiatric disorders on the self-reported measures of social support cannot be negated, we believe that our study validly examined the relationships between parental loss and perceived social support among psychiatric patients. Secondly, although we used a semistructured interview for which good inter-rater reliability was reported in a separate study, it must be mentioned that not all of the psychiatrists who took part in the present study had received formal training in its use and the actual inter-rater reliability of the psychiatric diagnoses remains an unexamined topic. Third, because our subjects are limited to psychiatric patients, there is a problem with the generalizability of our findings and we cannot know if the same may be observed among the mentally healthy people. A new study with a general population sample is required to address this problem. Lastly, our sample was diagnostically quite heterogeneous and it is conceivable that childhood parental loss may exert differential impacts on adult social support depending on the diagnosis of the subjects. In our study this possibility could be examined only for the mood disorder and the anxiety disorder for which there were enough numbers of patients, and similar trends were observed.

With these caveats in mind, we must say that our findings were quite contrary to our expectation. Although death of a parent would usually result in a reduced number of persons from whom one could seek social support, the present findings show that subjects who had lost a parent reported at least as many support persons as, and in the case of anxiety disorder patients, more support persons than those who had not. Female patients who had experienced maternal separation were significantly more satisfied with the available social support than those who had never experienced such a loss. Although in a study with a very large number of subjects such as ours

there is a chance of clinically insignificant findings being statistically significant, the two statistically significant findings in this study translate into effect sizes of 0.27 and 0.32 respectively, which are between 0.2 (small effect) and 0.5 (medium effect).

Several hypotheses may be advanced to explain these unexpected findings. Firstly, patients who had experienced childhood parental loss may have learnt to build social ties more easily and/or to appreciate the available support more sensitively than those who had not. Just as controlled stress matures personality (Andrews et al., 1993), so may early parental loss paradoxically prompt the children's socialization. This might be why the former report more perceived social support. The second possibility is that people who had experienced early parental loss might be more vulnerable to psychiatric disorders and can therefore present themselves to psychiatric facilities even while they enjoy higher social support; in other words, those who have not experienced parental loss would seek help at psychiatric hospitals only if and when they have inadequate social support. Thirdly, it is very probable that it is not the death or separation of a parent per se but rather the circumstances leading to and following these life events that exert the strongest influence on the personality formation of the children (Parker et al., 1992; Harris et al., 1986). We were unable to closely examine these processes in the present study but if we did, a third confounding variable such as enlarged network of relatives for the child who lost his/her parent may emerge that mediate between parental loss and increased social support.

Thus, although it is not easy to readily account for the obtained results, the present findings indicate that we must at least cast some doubt on the direct continuity hypothesis between disruptions of parent-child relationships and the individual's later capacity to enjoy social support.

Acknowledgements

This study was supported by the Research Grants 3A-6 and 6A-4 for Nervous and Mental Disorders from the Ministry of Health and Welfare, Japan.

References

- Andrews G, Page AC, Neilson M. Sending your teenagers away: controlled stress decreases neurotic vulnerability. *Archives of General Psychiatry* 1993;50:585–589.
- Barrera M. Jr. Distinctions between social support concepts, measures and models. *American Journal of Community Psychology* 1986;14:413–445.
- Bowlby J. *Attachment and Loss*. Vol. 1. Attachment. London: Hogarth Press, 1969.
- Champion L. A developmental perspective on social support networks. In: Brugha T.S. editor, *Social support and psychiatric disorder*. Cambridge: Cambridge University Press, 1995. p. 61–95.
- Cohen S, Wills TA. Stress, social support and the buffering hypothesis. *Psychological Bulletin* 1985;98:310–357.
- Flaherty, JA, Richman JA. Effects of childhood relationships on the adult's capacity to form social supports. *American Journal of Psychiatry* 1986;143:851–855.
- Frost AK, Pakiz B. The effects of marital disruption on adolescents: time as a dynamic. *American Journal of Orthopsychiatry* 1990;60:544–555.
- Furukawa T. From nurture to network. *American Journal of Psychiatry* 1993;150:1129–1130.
- Furukawa T, Harai H, Hirai T, Kitamura T, Takahashi K. Perceived social support among psychiatric patients with various diagnoses and normal controls. *Social Psychiatry and Psychiatric Epidemiology*, in press.
- Furukawa T, Shibayama T. Intra-individual versus extra-individual components of social support. *Psychological Medicine* 1997;27:1183–1191.
- Furukawa T, Takahashi K, Kitamura T, Okawa M, Miyaoka H, Hirai T, Ueda H, Sakamoto K, Miki K, Fujita K, Anraku K, Yokouchi T, Mizukawa R, Hirano M, Iida S, Yoshimura R, Kamei K, Tsuboi K, Yoneda H, Ban TA. The Comprehensive Assessment List for Affective Disorders (COALA): a polydiagnostic, comprehensive, and serial semistructured interview system for affective and related disorders. *Acta Psychiatrica Scandinavica Supplementum* 1995;387:1–36.
- Harris T, Brown GW, Bifulco A. Loss of parent in childhood and adult psychiatric disorder: the role of lack of adequate parental care. *Psychological Medicine* 1986;16:641–659.
- Henderson S, Byrne DG, Duncan-Jones P. *Neurosis and the social environment*. Sydney: Academic Press, 1981.
- House JS, Landis KR, Umberson D. Social relationship and health. *Science* 1988;241:540–545.
- Kessler RC, Price R., Wortman CB. Social factors in psychopathology: stress, social support and coping processes. *Annual Review of Psychology* 1985;36:531–572.
- Kitamura T. *Psychiatric Initial Screening for Affective disorders (PISA)*. Ichikawa: National Institute of Mental Health, National Center for Neurology and Psychiatry, 1992 (in Japanese).
- Parker GB, Barrett EA, Hickie IB. From nurture to network: examining links between perceptions of parenting received in childhood and social bonds in adulthood. *American Journal of Psychiatry* 1992;149:877–885.
- Parker G, arnett, B. Perceptions of parenting in childhood and social support in adulthood. *American Journal of Psychiatry* 1988;145:479–482.
- Sarason BR, Shearin EN, Pierce GR, Sarason IG. Interrelations of social support measures: theoretical and practical implications. *Journal of Personality and Social Psychology* 1987;52:813–832.
- Sarason IG, Levine HM, Basham RB, Sarason BR. Assessing social support: the Social Support Questionnaire. *Journal of Personality and Social Psychology* 1983;44:127–139.
- Sarason IG, Sarason, BR, Shearin EN. Social support as an individual difference variable: its stability, origins and relational aspects. *Journal of Personality and Social Psychology* 1986;50:845–855.
- Sarason IG, Sarason BR, Shearin EN, Pierce GR. A brief measure of social support: practical and theoretical implications. *Journal of Social and Personal Relationships* 1987;4:497–510.
- Skolnick A. Early attachment and personal relationships across the life course. In: Baltes P.B., Featherman D.L., Lerner R.M., editors, *Life-span development and behaviour*, vol. 7. Hillsdale, NJ: Lawrence Erlbaum, 1986. p. 174–206.
- SPSS Inc. *SPSS 6.1, Macintosh Version*. Chicago, 1994.