

Regular Article

Precedents of perceived social support: Personality and early life experiences

TOSHINORI KITAMURA, FRCPsych,¹ NOBUHIKO KIJIMA, MA,²
KYOKO WATANABE, MA,³ YOSHIE TAKEZAKI, MA⁴ AND ERIKO TANAKA MA⁵

¹National Institute of Mental Health, National Centre of Neurology and Psychiatry, Ichikawa, ²National Institute of Vocational Rehabilitation, Japan Association of Employment of the Disabled, Chiba, ³Graduate Programme in Developmental Psychology, Shirayuri College, Chofu, ⁴Health Care Centre, NTT Data Communications System Corporation, Tokyo and ⁵Department of Psychology, Keio University, Tokyo, Japan

Abstract

In order to examine the effects of personality and early life experiences on perceived social support, a total of 97 young Japanese women were investigated. Current interpersonal relationships were measured by an interview modified from Henderson *et al.*'s Interview Schedule for Social Interaction (ISSI). Personality was measured by Cloninger *et al.*'s Temperament and Character Inventory. Early life experiences at home and outside of home were also identified in the interview. The number of sources of perceived support was correlated with self-directness, while satisfaction with perceived support was correlated with novelty seeking and with low harm avoidance. No early life experiences — early loss of a parent, perceived parenting, childhood abuse experiences, experiences of being bullied and/or other life events — showed significant correlations with the number or satisfaction of supportive people. The quantity and quality of perception of social support differ in their link to personality, and perceived social support may, to some extent, be explainable in terms of personality.

Key words early life experience, personality, social support.

INTRODUCTION

Social support is one of the key concepts in psychiatry and psychology for the understanding of many aspects of mental health.^{1–3} With particular attention to the functions of social relationships, Barrera classified social support into perceived social support and received (enacted) social support.⁴ Perceived social support is the perception of individuals that support would be available when it is wanted. This is therefore subjective assessment of the availability of future support. On the other hand, received (enacted) support is the actual support individuals have received in recent situations where they needed it. This is, therefore, an objective assessment of the existence of past support. Perceived support is correlated with better mental health, while received support is correlated with mental ill-health.^{5,6}

The availability of future social support (i.e., perceived support) may be further classified into: (i) the number of people who the subject believes would be available as a source of support when needed; and (ii) the contentment of the subject as to the number and nature of the supportive people. Thus, the former is the quantitative (availability) and the latter the qualitative (satisfaction) aspect of perceived support. There is evidence that availability and satisfaction of perceived support have different effects on buffering the impact of adversity in terms of psychiatric morbidity. For example, Henderson and his colleagues reported that psychiatric caseness was associated with reduced satisfaction of perceived support in the face of life's adversities, but that the availability of support (i.e., number of supportive individuals) was not predictive of caseness.^{7–10} The discreteness of these two types of perceived support is also indicated by their only moderate correlation.¹¹

For the last decade, there has been much investigation of the effects and mechanism of perceived support on the prevention of mental ill-health in the situation of negative life events. Research attention

Correspondence address: T. Kitamura, FRCPsych, Department of Sociocultural Environmental Research, National Institute of Mental Health, 1-7-3 Kohnodai, Ichikawa, Chiba 272-0827, Japan.

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has been paid to what mediates the effects of perceived support in reducing rates of minor psychiatric morbidity. For example, studying pregnancy as an adversity, Terry and Rawle found that the effects of perceived support on postnatal depression were mediated by the coping style which the women adopted after childbirth.¹²

What remains to be answered is why some individuals view their social relations as supportive, while others do not. Perception of human support may not be unexpected. As noted, satisfaction with relationships was not necessarily derived directly from the number of supportive people. Some people may be content with support from a single confidant, while others may feel dissatisfied with a spuriously great number of friends and peers. Also, perceived social support may be determined by the current situation. For example, Kitamura *et al.* studied over 1000 pregnant women and found that their perception of nurturing opportunities, an aspect of perceived support, was correlated with older age and more children.¹³ The quality and quantity of support received in the course of past events may determine an individual's satisfaction with current interpersonal relationships. Confidence and contentment in social relationships may date back to childhood; childhood experiences and parental behavior towards the subject may influence the later cognitive style. In turn, this cognitive style may determine the way individuals view their interpersonal environment. Thus, the perception of social support may be interpreted as part of personality.

It may, therefore, be conceptualized that perceived social support, both its quality and quantity, is made up of two parts: one is specific to the current situation and the other is specific to the person. The former is variable and the latter stable over the course of time. The stable aspect of perceived social support⁸ may be viewed as personality.¹⁴ Studying high school exchange students on three occasions, before, during, and after spending a year abroad, Furukawa and Shibayama reported that 24–86% of the variances of social support measures were stable over the course of time and were thought of as intra-individual.¹⁵ Similarly, Kendler showed in a two-wave study of a population of female twins that measures of social support were moderately stable over time and that they were, to some extent, explainable by heritable factors.¹⁶

Recent years have seen a development of the personality study. It is argued that personality may be divided into character, which is environmentally determined and characterizes human behavior in a more social context, and temperament, which is genetically determined and characterizes basic human

behavior.^{17–19} This model's factorial structure,^{20–22} genetic structure,²³ and related neurotransmitter receptors^{24,25} have been extensively studied. In the present study, we hypothesize that availability of support would be associated with character, because character may determine the subject's social behavior patterns which shape the extent of peer-making and the size of one's social network. On the other hand, satisfaction with support was hypothesized to be associated with temperament, because temperament may determine how the subject will basically view the world and how content he/she can be with it.

We also hypothesize that availability of support would be associated with childhood experience outside the home, while satisfaction with support would be associated with parental behavior. When their interpersonal relationships expand to peers, children may learn how to relate to them at school and in a community. From interaction with their parents from the early days of life, they also learn to trust in and be satisfied with intimate relationships.

METHODS

Details of the subjects and methods have been described elsewhere.²⁶ Briefly, a total of 98 women were recruited for the study. The women invited were those who had been employed by a company in Tokyo in 1995; no-one declined to participate in the interview and questionnaire survey. Their ages were between 19 and 25 years (mean age, 22.1 ± 1.0 years). All the data used for these analyses, except perceived parenting and personality, were collected through a structured interview specially designed for this study, the Time Ordered Stress and Health Interview.²⁷ Prior to every interview, written informed consent was obtained.

Social support

The Interview Schedule for Social Interaction⁸ was modified to include the number of individuals and its satisfaction in seven categories of perceived support. There were five forms of emotional support (people to whom you can talk frankly without having to watch what you say; people who know you very well as a person; people with whom you can share your feelings; people with whom you can share your happiness; people to whom you can go when in trouble and tell such feelings), one informational support (people to whom you can turn for advice and guidance), and one instrumental support (people whom you can easily ask the favor of taking over your job). The subject's satisfaction was assessed with a 4-point scale from very dissatisfied (1) to very satisfied (4). Both the

number and satisfaction of social support were factor-analyzed separately. Both showed that only one factor had an Eigen value of more than 1 (number of supportive people 3.6; satisfaction with supportive people 4.3). The percentages of variances explained were 52 and 61%, respectively. Therefore, two composite variables were calculated by adding all the scores of seven categories for both number and satisfaction, to be used for further analyses. The mean total number of supportive people was 46.5 ± 31.5 and the mean total satisfaction of supportive people was 26.8 ± 2.4 .

Personality

The Temperament and Character Inventory (TCI) of Cloninger *et al.* was administered.²⁸ The TCI consists of 125 items with a 2-point scale (No=0, Yes=1). The temperament dimension consists of harm avoidance (HA), novelty seeking (NS), reward dependence (RD), and persistence (P). The character dimension consists of self-directness (SD), co-operativeness (C), and self-transcendence (ST). Both temperaments and characters have subscales: worry and pessimism (HA1), fear of uncertainty (HA2), shyness with strangers (HA3), and fatigability and asthenia (HA4) for HA; exploratory excitement (NS1), impulsiveness (NS2), extravagance (NS3), and disorderliness (NS4) for NS; sentimentality (RD1), attachment (RD3), and dependence (RD4) for RD (persistence was once thought of as RD2 but factor analyses confirmed its independence as a temperament); responsibility (SD1), purposefulness (SD2), resourcefulness (SD3), self-acceptance (SD4), and congruent second nature (SD5) for SD; social acceptance (C1), empathy (C2), helpfulness (C3), compassion versus revenge (C4), and integrated conscience (C5) for C; self-forgetfulness (ST1), transpersonal identity (ST2), and spiritual acceptance (ST3) for ST. The original TCI was in English. It was translated into Japanese and then back-translated into English by a 'blind' translator for Cloninger to verify phrases used in the question items.

Of the 98 women, one did not fill out this part of the questionnaire and was therefore excluded from further analyses.

Early life experience inside the home

This was assessed in terms of early loss of parents, perceived parenting, and childhood abuse experiences.

Early loss was either death of or separation from either father or mother or both for 12 months or longer before the age of 16 years.²⁹

Perceived parenting of father and mother before the age of 16 years was assessed retrospectively by the Parental Bonding Instrument (PBI).³⁰ Both parents were assessed separately. The PBI is a self-report measure which has 25 items with a 4-point scale (very unlikely (0) to very likely (3)). Its two subscales measure care and overprotection of a parent. Only those women without loss of a particular parent were used for analyses of the PBI scores for that parent, because the women who had lost parents may have found it difficult to answer (80 for paternal assessment and 94 for maternal assessment).

Childhood abuse experiences were investigated in terms of both psychological (emotional neglect, threat, and putting the child into shame) and physical (slapping, punching with a fist, kicking, hitting with an object, and burning) abuse, with a 5-point scale tapping frequency from never (1) to several times a week (5). All the item scores were log-transformed, due to their positive skewness. As with perceived parenting, only women who had not experienced the loss of a parent were used for further analyses.

Early life experience outside the home

This was assessed in terms of experiences of being bullied and other life experiences. Experiences of being bullied were measured in categories of: (i) bullying in general; (ii) ignored by peers; (iii) made fun of or laughed at; (iv) own possessions hidden; (v) excluded from the peer circle; (vi) threatened verbally; (vii) money or possessions stolen; (viii) physically abused; and (ix) other. Their frequencies were rated with a 5-point scale (never (1) to several times a week (5)). Because they were positively skewed, they were log-transformed. The participant was then asked whether she had experienced any of 22 categories of life events before the age of 16 years. The early life events studied in the present interview covered not only negative (e.g., own illness), but also positive (e.g., first prize in art) events. Because many of them were positively skewed, they were also log-transformed.

Social desirability

Because perceived social support and personality measures may be biased by socially desirable response style, the questionnaire contained the Japanese version³¹ of the Social Desirability Scale (SDS).³² This consists of 10 items with a 4-point scale. Higher scores indicate greater tendency to answer in a socially acceptable direction. The SDS score was 4.4 ± 2.2 .

RESULTS

The results of the number and satisfaction scores of the perceived social support and TCI measures are shown in Table 1, together with their correlation coefficients with the SDS score and age. Because some of the perceived support and personality variables were correlated significantly with SDS score or age, further analyses were performed, after controlling for the SDS and age.

The number of supportive people showed weak but significant partial correlation with SD (Table 2) after controlling for the SDS score and age. Of the five subscales of SD, only SD4 (self-acceptance) showed significant correlations with the number of supportive people, SD4 ($r=0.27$, $P<0.01$).

Table 1. The results of perceived social support and personality measures and their correlations with social desirability scores

	SDS	Age	Mean	SD
Perceived social support				
Number	0.06	0.02	46.8	31.5
Satisfaction	-0.03	-0.11	26.8	2.4
Temperament and Character Inventory				
Novelty seeking	-0.27**	-0.07	8.7	3.3
Harm avoidance	-0.13	-0.02	9.6	4.2
Reward dependence	-0.01	-0.11	12.1	2.4
Persistence	0.24*	-0.03	2.9	1.5
Self-directedness	0.28**	0.07	18.1	4.0
Co-operation	0.24*	-0.20*	19.4	3.0
Self-transcendence	-0.06	0.03	4.6	2.8

$n=97$; * $P<0.05$; ** $P<0.01$.

Table 2. Partial correlations between perceived social support and Temperament and Character Inventory (TCI) scores after controlling for social desirability and age

TCI items	Perceived social support	
	Number	Satisfaction
Novelty seeking	0.15	0.24**
Harm avoidance	-0.04	-0.23*
Reward dependence	0.04	-0.08
Persistence	0.05	-0.13
Self-directedness	0.28**	0.19
Co-operativeness	-0.03	-0.06
Self-transcendence	0.13	0.12

$n=97$; * $P<0.05$; ** $P<0.01$.

After controlling for the SDS score and age, satisfaction with the current situation of supportive people was weakly correlated positively with NS and negatively with HA (Table 2). Of the four NS subscales, NS1 (exploratory excitability) and NS3 (extravagance) showed significant correlation ($r=0.26$, $P<0.01$ and $r=0.18$, $P<0.01$, respectively). Of the four HA subscales, HA3 (shyness with strangers) and HA4 (fatiguability and asthenia) showed significant correlation ($r=-0.20$, $P<0.05$, $r=-0.26$, $P<0.01$, respectively).

No early life experience, inside or outside the home, was significantly correlated with the number or satisfaction with current supportive relationships.

DISCUSSION

As noted by Cloninger and coworkers, temperament can be viewed as a biological basis of human behavior, regardless of the situation the subject finds herself in. It determines the commencement (NS), maintenance (RD), and inhibition (HA) of human behavior. Human behavior may be colored with social meanings, as the subject accumulates different life experiences. Applying this framework, our results may be interpreted as showing that satisfaction with current interpersonal relationships has a root in genetically determined temperament, while the number of people to whom the subject can relate as a source of social support has a root in environmentally determined character. Thus, although quantity and quality are to some extent mutually influential, they are discrete in their link to different aspects of personality.

More satisfaction was correlated with novelty seeking, in particular excitability, and low harm avoidance. Novelty seeking is generally negatively associated with harm avoidance.^{17,33} Our results are consistent with previous investigations showing that perceived better social support is linked to extraversion and low neuroticism,^{15,34} because extraversion is akin to NS and neuroticism to HA.²² Children who are sensitive to potential dangers from outside and less interested in searching for new things, such as relating to strangers, may be less able to be content with current interpersonal relationships.

Subjects high in self-directedness are likely to have a much larger number of people whom they perceive as supportive. The women we studied might have learnt how to make friends as they grew up and developed their character under the influence of social stimuli. It is conceivable that these women have obtained skills to make, maintain, and expand their social network. It is of note that only SD among character measures had a link to satisfaction with perceived support.

People high in SD are ready to accept themselves as they are and are more aware of what they aim for in life. These individuals may accept other people as independent, and thus are more capable of making reliable relationships with them. Mere cooperativeness does not seem to contribute to a greater number of supportive others.

As expected, perceived social support and personality showed moderate correlations. Furthermore, our results suggested that the quality and quantity of perceived social support are different in terms of their link to different aspects of personality. If Cloninger's psychobiological model of personality were supported by empirical data (as they are now accumulated), it could be argued that the quality of social support is more genetically determined, while the quantity of social support is more environmentally determined.

Contrary to our expectation and the results of a previous investigation,³⁵ no early life experiences were correlated with any of the TCI scores. This may mean that the influence of childhood experiences upon the development of perception of social support is trivial, at least when compared with personality. Parker *et al.* reviewed the literature and failed to find links between perceptions of parenting received in childhood and the quality of current intimate relations, unless there had been extreme deprivation of parental care.³⁶ However, the present subjects were all new graduates of a university or high school; their main social interaction had been either with peers at school, with teachers, or with family members. Their environment had been generally intimate and secure. They had not yet started jobs (being in initial job training). Thus, an alternative interpretation is that childhood experiences exert their influence on the perception of human interaction much later in less intimate social settings. The occupational environment may be more likely to provoke the appearance of a thus far hidden influence of childhood experiences.

Limitations of the present study should be discussed. First, the same subjects reported both social support measures and their predictor variables, personality and early life experiences. This is inherent in studies of this nature. The finding that the number and satisfaction of social support had differential correlations with character and temperament may be viewed as refuting this interpretation, although it may require more stringent assessment using external observers.

Second, all early life experiences relied on retrospective accounts, thus being subject to recall bias. Brewin *et al.*, however, inquired into the accuracy of memories of early experiences and concluded that naturalistic studies on personal memories were fairly accurate.³⁷

Third, our sample was limited to a fairly small number of young women. Different findings may emerge among middle-aged or elderly populations and among men. The small number of the subjects may require caution in interpreting non-significant findings related to childhood experiences.

In conclusion, the present study shows, although tentatively, that the quantity and quality of perceived social support are linked to character and temperament differentially and might be, to some extent, part of personality.

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