Archives of Psychiatry and Psychotherapy
Volume 8, Issue 2, June 2006
pages 5–12

The association between nterpersonal relationships and health in a representative population sample

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Summary

Background and aim: This study investigated the link between relationship patterns and psychological, physical, and psychosocial well-being. The representative sample that was used included N = 1908 subjects interviewed as part of a survey held in Germany in November 1999.

Material and Methods: Relationship patterns were assessed using the self-rated Relationship Patterns Questionnaire [1, 2]. The three aspects of health - psychological, physical, and psychosocial - were assessed using the self-rated health scales [3].

Results: Correlations were found between specific aspects of the subjects' relationships and their physical, psychological, and psychosocial well-being. The most consistent finding was that the nature of the subjects' introject was most correlated with the three health measures. Furthermore, the introject items of the RPQ predicted up to 13% of the variance in psychological impairment.

Conclusion: Results indicate that the quality of an individual's introject is the best predictor of his or her physical, psychological, and psychosocial well-being. Implications of this are discussed.

Key words: relationship patterns, mental health, physical health, psychosocial functioning, introject

Introduction

Recent years have witnessed considerable progress in understanding the relation between social functioning, and physical and psychological health [4, 5, 6]. However, most studies on social functioning have exclusively investigated such dimensions as the network structure, social support, and support quality [5, 7]. Few have examined the relationship patterns or relational dynamic of individuals, and their relation to health.

Rare exceptions can be found in psychodynamic research. A study by Cierpka and colleagues [8] has shown that greater rigidity in one's relationship patterns is related

to greater psychopathology. Defined as "organized representations of past behaviours and experiences in interpersonal relationships" (p.169) [9], relationship patterns or schemas should ideally be flexible enough to allow the individual to adapt to new and unfamiliar situations [10]. However, in patients presenting greater psychopathology, relationship patterns were shown to be more stereotypical, less flexible, and less adapted than in normal subjects. A second study has also shown that relationship patterns with negative perceptions of one's reactions and of those of others are related to greater symptomatic impairment [11].

However, these studies exclusively investigated the relation between interpersonal schemas and psychological symptoms and did not examine their relation with physical health or psychosocial well-being. To our knowledge, these questions have never been addressed empirically. Hence, the aims of this study were to examine the relationship between interpersonal schemas and psychological, physical, and psychosocial impairment.

Material and Methods

Sample and design

The data was drawn from a survey held in Germany in November 1999. This survey was designed to examine test structures, validate instruments, and produce population norms on several psychological questionnaires. The sample was based on a stratified, multistage area probability sampling frame from the non-institutionalized German civilian population [12]. In order to gather a representative sample for the German population, the sampling system was based on the wards of the German parliamentary election of 1994. One hundred and ninety two (192) sample points were selected using a random-route procedure in order to gather a sample representative for Western Germany (N=930) and a sample representative for former Eastern Germany (N=978; total N = 1908) with respondents between 18 and 96 years of age (M = 47.7, SD = 16.9).

The survey and questionnaires were administered face-to-face in the homes of the respondents by trained interviewers. The interviewers were instructed to stay in the background while the respondents completed a package of 6 questionnaires regarding health and psychological, political and sociodemographic issues. This paper presents results regarding the Relationship Patterns Questionnaire [1, 2] and self-rated Health Scales addressing physical and mental health as well as psychosocial functioning.

Instruments

The Relationship Patterns Questionnaire (RPQ)

The Relationship Patterns Questionnaire (RPQ) is a short version of the self-rated Interpersonal Relationship Patterns Questionnaire [13]. It is based on the SASB model (Structural Analysis of Social Behaviour) [14] and the empirically-derived structure of the CCRT method (Core Conflictual Relationship Theme) [15]. Its reliability and

validity have been shown to be adequate using clinical as well as non-clinical populations [2, 13, 16].

The RPQ captures three dimensions: 1) the Responses of Others (RO) to the behaviours of the subject (32 RO items); 2) the Responses of the Subject (RS) to the behaviours of others (32 RS items); and 3) the way an individual treats him or herself in an interaction with a significant other (8 Introject items). The questionnaire presents the subject with a series of pre-set interpersonal situations. The subject is required to determine to what extent he or she (RS items) or the other person interacting with the subject (RO items) is likely to use a particular response in each given situation. Finally, the respondent is also required to determine how he treats himself during the interaction (Introject items; for details see [16]). These ratings are done using a 5 point Likert-type scale (from 0 = not at all, to 4 = very much). In this study, the subjects were asked to rate the items in reference to their most significant relationship.

Previous studies on this measure revealed the following factor structure [16, 17]. For each of the RO and the RS items, three scales were suggested: a) Positive give and take; b) Self-assertion and retaliation; and c) Reaction formation. *The Positive give and take scale* includes interactions where one person reacts with positive feelings or behaviours to another who is also displaying positive feelings or behaviours. For example, "If X is caring, then Y is caring". *The Self-assertion and retaliation scale* includes interactions where a person reacts to another person's generally aggressive or neglectful behaviour by self-asserting or retaliating. For example, "If X attacks Y, then Y fights back'. The third and last scale involves Reaction formation. As defined by Perry [18], an individual using reaction formation deals with emotional conflicts, or internal or external stressors, by substituting behaviour, thoughts, or feelings that are diametrically opposed to his or her unacceptable thoughts or feelings. Hence, where one might expect a reaction of self-assertion or retaliation to aggression, a person would instead display actions or feelings of love or trust. This last scale includes interactions such as '"If X attacks Y, then Y loves X" or '"If X ignores Y, then Y is helpful". Finally, two scales were suggested for the Introject items: *Self-punishment* and *Self-care and integrity*. A punishing introject implies that an individual tortures, harms, devaluates or neglects him or herself. On the other hand, self-care and integrity suggests that an individual improves, loves, accepts, reveals, cherishes him or herself, or tries to do things right and be worry-free. This study reports findings related to the 3 RO, 3 RS, and 2 Introject scales.

The Health Scales

The Self-rated Health Scale contains three subscales addressing the respondent's subjective feeling of psychological, physical, and psychosocial impairment [3]. The items are rated using a 5 point Likert-type scale (from 1 = not at all, i.e. no impairment, to 5 = very much, i.e. much impairment). Hence, lower scores are representative of better functioning. The internal consistency (α) of the three subscales varies from .70 (psychological impairment) to .80 (physical impairment) [16, 17]. For this study, a mean score was computed for each of the three subscales.

Results

Descriptive results for the RPQ scales

Detailed results can be found in Table 1. On average, the subjects reported more Positive give and take than Self-assertion and retaliation patterns for the ROs and RSs, with Reaction formation falling in between. As for the two Introject scales, the most prevalent was Self-care and integrity, followed by Self-punishment.

Table 1.

Partial correlations between the RPQ and measures of health (two-tailed, controlled for age, gender and place of residence) (N = 1908)

			Physical Impairment	Psychological Impairment	Psychosocial Impairment
		M	1.93	1.55	4.11
		SD	0.84	0.76	0.97
	M	SD			
RO-1: Positive give and take	3.03	0.68	-0.12***	-0.25***	-0.20***
RO-2: Self-assertion and retaliation	1.70	0.67	0.04	0.11***	-0.03
RO-3: Reaction formation	2.18	0.73	-0.06	-0.05	0.04
RS-1: Positive give and take	3.17	0.63	-0.09***	-0.24***	-0.20***
RS-2: Self-assertion and retaliation	1.74	0.63	0.01	0.10***	-0.02
RS-3 : Reaction formation	2.13	0.73	-0.02	-0.04	0.01
Introject-1: Self-punishment	0.91	0.83	0.20***	0.38***	0.22***
Introject-2: Self-care and integrity	2.57	0.65	-0.22***	-0.24***	-0.21***

RO = response of the object
RS = response of the subject
***p < .001

Association between relationship patterns and subjective well-being

Partial correlations controlling for age, gender, and place of residence (Eastern and Western Germany) indicated that physical impairment was negatively correlated with both *Positive give and take* for ROs and for RSs. Greater correlations were found between physical impairment and the two *Introject* scales (see Table 1).

Psychological impairment was also negatively correlated with RO and RS *Positive give and take*. Unlike for physical impairment, it also correlated positively with *Self-assertion* and retaliation. Significant correlations were found for the Introject scales,

with greater *Self-punishment* being associated with more physical impairment, and *Self-care and integrity* being associated with greater physical health.

Finally, psychosocial impairment was negatively correlated with RO and RS *Positive give and take* and with the *Self-care and integrity* Introject scale, and positively correlated with the *Self-punishmen*t Introject scale.

How do relationship patterns explain the reported health?

A stepwise multiple linear regression was used to determine to what extent the RPQ scales explain physical and psychological impairment, and psychosocial functioning (see Table 2). Overall, the RPQ scales explained more variance in psychological impairment, than in psychosocial functioning and physical impairment. In all cases, however, the variance explained remained low.

Table 2.

Prediction of physical health, psychological health, and psychosocial functioning using the relationship patterns scales

Dependent variable	Independent variables (entered stepwise)	Adjusted R^2	F ($p < .001$)
Physical impairment			
	Introject-2: Self-care and integrity	0.04	80.56
	Introject-1: Self-punishment	0.05	46.22
	RS-2: Self-assertion and retaliation	0.06	34.79
	RS-3: Reaction formation	0.06	27.81
Psychological impairment			
	Introject-1: Self-punishment	0.12	229.01
	Introject-2: Self-care and integrity	0.13	127.49
Psychosocial impairment			
	Introject-2: Self-care and integrity	0.04	76.49
	Introject-1: Self-punishment	0.06	52.24
	RS-1: Positive give and take	0.06	37.28
	RS-3: Reaction formation	0.07	30.58
	RS-2: Self-assertion and retaliation	0.07	25.28

RS = response of the subject

Six percent (6%) of the variance in physical impairment was predicted by Introject-2 (Self-care and integrity), Introject-1 (Self-punishment), RS-2 (Self-assertion and retaliation), and RS-3 (Reaction formation). The two Introject scales also explained 13% of the variance in psychological impairment. Psychosocial functioning was best predicted by the two Introject scales, followed by RS-1 (Positive give and take), RS-3 (Reaction formation), and RS-2 (Self-assertion and retaliation).

Discussion

When considering the descriptive data for both the RSs and the ROs, results show that people generally consider their reactions to others to be very similar to other's reactions to them. This can be seen in that the rank ordering of the different scales is the same for the ROs and for the RSs, and that the means and standard deviations are very similar. This finding is in agreement with previous studies [16] which have shown that the three RO scales are highly correlated with their RS counterparts. This suggests that individuals who react a given way to a given situation also perceive or imagine others as reacting the same way in the same situation. Freud [19, 20] often suggested that an object can be considered as easily interchangeable with another object. As such, it does not matter who is acting, as long as what has to be acted is successfully put into action. It is as if individuals internalize a given interpersonal pattern and see and create the world through it, no matter who is the main actor or the initiator of the interaction.

Regarding the three health measures, results indicated that the less a subject is experiencing relationships with positive give and take, the more he or she is physically, psychologically, and psychosocially impaired. This is in agreement with the findings of Albani and colleagues [11] who reported that psychotherapy patients who perceive other people's actions and their own actions as negative tend to suffer from greater symptomatic impairment. Furthermore, individuals who tend to self-assert and retaliate also tend to suffer from greater psychological impairment. However, it is still unclear whether the RPQ taps into core interpersonal schemas as do other observer-rated instruments like the Core Conflictual Relationship Theme [15]. It may be argued that the RPQ only captures situational patterns. As such, individuals suffering from greater psychological impairment could tend to self-assert and retaliate simply because they are troubled by psychological symptoms.

The most striking findings involve the introject scales which were correlated to all three health dimensions. The healthier the introject, the less the subject reported physical and psychological impairment and the better he functioned socially. On the other hand, the more punitive and rigid the introject, the more the subject was physically and psychologically impaired and the less he was capable of functioning socially. Overall, the quality of a person's introject is more indicative of his social functioning, his psychological difficulties and his physical impairment than the quality of the subject's or the significant other's reactions.

Finally, the regression analyses indicated that interpersonal relations as assessed with the RPQ explained little of the variance in self-rated health measures. Amongst

the different scales, the Self-care and integrity Introject scale was indicative of physical and psychosocial impairment. On the other hand, the Self-punishment scale was the best predictor of psychological functioning. Overall, the two Introject scales were consistently shown to be greater predictors of health than self (RS) and object (RO) representations. Hence, in many aspects, the manner with which an individual treats him or herself can be closely related to his general health.

Conclusions

This study examined the relation between interpersonal patterns and physical, psychological, and psychosocial functioning. Results showed that the quality of an individual's introject is the best predictor of his or her physical, psychological, and psychosocial well-being. It is unclear however whether the RPQ taps into core relational dynamics or merely reflects a state of mind at a given moment. Hence, future studies will need to address the nature of the interpersonal dynamic suggested by this questionnaire.

Nonetheless, these findings suggest that interpersonal dynamics may have a buffering, if not a direct effect on physical, mental, and psychosocial health. Although social relations in general are often assumed to have positive and enhancing effects on health [5], these findings suggest that the nature of the relations can be detrimental and depends somewhat on the perception of the individual [21]. Clearly, other studies are needed to further explore the relation between interpersonal functioning and measures of health.

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