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The manifestation of job satisfaction in doctor-patient communication; a ten-country European study

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ABSTRACT

Job satisfaction is a common problem in modern western health care. While a lot of studies analyzed the determinants of job (dis)satisfaction, less is known about the consequences of doctors' job satisfaction for medical visits. The aim of this study is to examine - female and male - General Practitioners' (GPs) satisfaction with their work in 10 European countries and to analyze whether the level of satisfaction manifests itself in the communication with their patients.

Data used were from two EU-funded studies together covering ten countries: the Netherlands, United Kingdom, Spain, Belgium, Germany, Switzerland, Sweden, Estonia, Poland and Rumania. 302 GPs (165 male; 137 female) and 4446 patients (1756 male; 2690 female) gave written consent to videotape their consultation and completed short questionnaires. Videotaped consultations were analyzed on verbal communication, percentage patient-directed gaze and general affect measures. Data were analyzed at the aggregated GP-level; a multilevel model was used to check country-specific influences.

Job satisfaction differed slightly between countries. In most countries female GPs were more satisfied than men. Job satisfaction was clearly reflected in GPs' and patients' communication, both showing more verbal and nonverbal affect and talking more about psychosocial issues the higher the job satisfaction of the GP. There is reciprocity between doctors' and patients' way of communicating, mediated by doctors' job satisfaction and reflected in the affective atmosphere of the consultation. Although this study gives no indication of cause and effect, we may conclude that GPs' job satisfaction does impact doctor-patient communication. This may foster research into determinants of job satisfaction

that are amenable to change and may inspire intervention studies aimed at increasing job satisfaction.

INTRODUCTION

Many physicians experience dissatisfaction with their work, especially in countries where major health care reforms have introduced a lot of paperwork and altered old procedures and favored habits. This was shown in studies in the United Kingdom, [1-5] Scotland, [6] Australia, [7] the USA, [8,9] Canada, [10] New Zealand, [11] Sweden, [12] and The Netherlands. [13] Feeling 'overworked, underpaid, inadequately supported and negatively covered by the media' is a feeling that many doctors share. [14] While physicians often blame the Government for the loss of enjoyment in their work, [15] it is clear that job satisfaction is influenced by a myriad of factors, some of which might be in control of doctors themselves or of their professional organizations. [16,17] This is a challenge for social and organizational psychologists, as they are experts in the study of job stress, job (dis)satisfaction and suitable interventions which might help to overcome these problems. Moreover, they can apply their knowledge which is partly accumulated in other types of labour organizations to the health care setting. The relevance is clear: job dissatisfaction may result in recruitment or problems in retaining a post, [18] has a negative impact on GPs' own general health, [1,2,19] as well as mental health, [19,20] and fosters early job leave. [21] Perhaps of even greater concern is the unpleasant idea that GPs' dissatisfaction could well be reflected within the medical consultation itself: in the GPs' attitude towards and communication with the patients, and ultimately, perhaps even in the quality of patient care. [22-24] In one of the rare studies into the relationship between job satisfaction and quality of care, it was found that physicians' job satisfaction was related to several self-perceived problems in quality of care: (a) freedom to make clinical decisions that meet patient needs (Odds ratio 7.89), (b) maintain a continuous relationship that promotes high quality care (Odds ratio 7.11), (c) having enough time for patients (Odds ratio 4.42), (d) provide high quality of care to all my patients (Odds ratio 4.26), and (e) sufficient communication with medical specialists (Odds ratio 3.57). [24] High quality care is unlikely to flourish in an environment that leaves physicians demoralized. [25] An indication of the complex relationship between job satisfaction and the quality of care was shown in a British study which demonstrated that 60 % of the variance in GP rated number of 'heart sink patients' in their practice could be explained by increased perception of workload, lower job satisfaction, lack of training in communication skills and lack of appropriate postgraduate qualifications, [26] suggesting that difficult patients are in the eye of the beholder.

This finding brings us right in the heart of the consultation room, in the encounter between doctor and patient. It suggests that frustrated doctors behave differently in their contacts with patients than their more relaxed colleagues do. [19] It is to be expected that doctors' low morale is visible to patients with unknown effects. However, apart from some exceptions, [27,28] in the literature more attention is given to the determinants of job satisfaction than to its manifestation within the medical consultation. In this study the focus is on how GP job satisfaction - in 10 European countries - is visible in GPs' and patients' verbal and nonverbal communication.

Our theoretical framework is partly derived from the doctor-patient communication literature and partly from the burnout literature. In the doctor-patient literature, the medical encounter is conceived as a meeting with several functions, such as gathering and providing information, making decisions and handling emotions. [29] These functions reflect the basic needs of patients when they enter the consultation room: (1) the need to know and understand which is a cognitive need, and refers to doctors' task-oriented communication, and (2) the need to feel known and understood, which is an affective need and refers to doctors' affective communication. [30,31] Both types of communication are essential for good quality of care. [32] While the relevance of task-oriented communication is at once clear to doctors and patients alike, the relevance of affective communication for the course and outcome of the medical encounter should not be underestimated. [31,33] This is where the burnout literature comes in. If job morale goes down, people tend to become cynical and unhappy, often a precursor to burn out. [34] While low job satisfaction is not the same as burnout, these concepts are conceptually and empirically linked, showing high correlations, [35] so the theoretical framework which is developed in burnout research can help us to predict how a physicians' behavior will change during consultations under conditions of low job-satisfaction. Burnout is characterized by three independent elements: emotional exhaustion, depersonalization and low personal accomplishment. [36,37] Job (dis)satisfaction has an empirical relationship with all three elements of the burnout concept, but especially with emotional exhaustion. [35] From this theoretical perspective, it can be hypothesized that doctors with low job satisfaction will invest less in the relationship with their patients, restricting themselves to the instrumental part of their job, resulting in shorter consultations, and less affective communication. Given the gender differences in communication in health care, [38] differences may emerge between female and male doctors.

METHODS

Data was used from the Eurocommunication studies, two cross-national studies on GP-patient-communication in ten European countries: the Netherlands, the United Kingdom, Spain, Belgium, Germany, Switzerland, Sweden, Estonia, Poland and Rumania. [39,40] In each country, the recruitment of doctors and the data collection were organized by universities or research institutes. The overall co-ordination, analysis and reporting was done by NIVEL (Netherlands institute for health services research). The study can be characterized as a multicenter-multimethod study with a cross-sectional design. Full details of the study are presented elsewhere. [39-43]

Sample and procedures

Overall, 302 GPs participated in the study, of whom demographical data are presented in Table 1. In order to know to what extent the GPs of the Eurocommunication studies were representative of the entire GP population in each participating country, a comparison was made with the study population of the Task Profile Study. [44] To be compatible with earlier research, in the Eurocommunication studies the same GP questionnaire was used as in the GP Task Profile Study. This similarity facilitated the comparison of the two groups of GPs on

certain characteristics, including age, gender, and whether they had followed vocational training. On the basis of this comparison, the representativeness of the participating GPs and the resulting generalization of the results could be examined. Due to the sampling procedures in certain countries, the demographics of the Eurocommunication GPs differed somewhat from the European Task Profile Study showing - in some countries - more female doctors, and doctors in inner cities and less doctors in single-handed practices and rural areas. Besides, Spanish and Estonian doctors were somewhat younger and Belgian doctors somewhat older than in the other countries. Job satisfaction was not different from the Task Profile Study with one exception: UK-doctors in the Eurocommunication Study had significantly higher job satisfaction as compared to the Task Profile Study.

[TABLE 1]

For each doctor the everyday consultations of 20 patients were videotaped. All patients consulting the GP on the day of data collection were approached in the waiting room, asked to participate and to give written consent. [45] Patient refusal rate varied between a mean of 7% (Rumania) and 25% (Belgium), which is comparable with previous studies using video recordings. The representativeness of the patient samples was satisfying in all countries. [39,40] GPs completed a general questionnaire at the beginning of the study and a short consultation-specific questionnaire after each consultation. Patients completed a fairly extensive questionnaire before and a short questionnaire after the consultation. The consultations were recorded with an unmanned video camera. The first three consultations were not coded to avoid a possible bias, caused by the doctors' getting used to the video camera. Beginning with the fourth consultation, consecutive consultations were coded till 15 consultations could be included.

Measures

Job satisfaction was measured by a 7-item questionnaire, developed for general practice. [46] It consists of 5-point Likert-scales, tapping both positive (e.g. 'I find real enjoyment in my work') and negative (e.g. 'my work involves a great deal of wasted effort on my part') evaluations. All items were positively recoded, meaning that a high score corresponds with more job satisfaction (possible range: 1 to 5). Cronbach's alpha was .65. The scale's average score was used in the analyses.

Verbal communication was measured by observing the videotaped consultations, using RIAS as the observation protocol. [47,48] RIAS is a widely used coding system in which all utterances of doctor and patient are coded in mutually exclusive categories, divided in three main groups: affective or emotion-oriented communication, process-oriented communication and instrumental or task-oriented communication.

Nonverbal communication was measured by four global affect-ratings which were identical for doctor and patient. [39,40,48]

Patient-directed gaze was measured as the proportion of time GPs looked at their patient.

Consultation length was measured electronically from the videotaped consultations; interruptions by telephone calls or the entrance of other people were excluded from the total consultation length.

Statistical analyses

Consultation data were aggregated at the GP-level. Due to missing values in one of the key variables 32 GPs (15.5%) were lost for the multivariate analyses and therefore also removed from the bivariate analyses. These GPs were evenly distributed over the participating countries. Analyses were performed using SPSS-14. Countries were compared using Anova with posthoc comparisons. The relationship between job satisfaction and communication was explored by bivariate correlations and tested in a multivariate model with job satisfaction as dependent and verbal as well as nonverbal communication as independent variables. MLWin was used to test the necessity of a multilevel model. However, we found that the variance in job satisfaction at the country level was not significant ($p = .06$). Therefore and also since having only ten higher-level units (countries) can yield unreliable predictions, a multilevel model was only used to explore how much of the variance in job satisfaction at the country-level could be explained by the communication variables.

RESULTS

Job satisfaction per country

Average job satisfaction is 3.45 with a minimum of 1.43, a maximum of 4.86, and a standard deviation of .64. About a quarter of all GPs in our sample (26.4%) is clearly dissatisfied with their job (scores ≤ 3), while one fifth of them can be characterized as highly satisfied (scores ≥ 4). Job satisfaction is higher ($F = 6.495$; $p < .0001$) in Switzerland (mean = 3.89; $sd = .58$), the United Kingdom (mean = 3.77; $sd = .53$) and Estonia (mean = 3.78; $sd = .67$), compared to Germany (mean = 3.17; $sd = .62$) and Poland (mean = 3.10; $sd = .50$). With the UK as a notable exception, job satisfaction scores in the Eurocommunication-study are comparable with the much larger samples of the European Task Profile Study where the same job satisfaction questionnaire was used (see Table 1). In most countries female GPs have a higher job satisfaction than their male colleagues (see Figure 2).

[FIGURE 1]

Communication patterns

GP job satisfaction is reflected in the verbal and nonverbal communication of GP and patient (see Table 2). GPs with a high job satisfaction show less irritation and more commitment and warmth towards the patient. They also have relatively more patient-directed gaze. There is no difference in biomedical communication between GPs with high job satisfaction and GPs with low job satisfaction, nor in the amount of directions they give to structure the consultations (process-oriented communication), but doctors with higher job satisfaction talk slightly more about psychosocial issues (mainly by asking more psychosocial questions) and show significantly more affective communication (social talk, showing concern, and empathy). Patients' communication largely reflects GPs' communication, which means that they also

show more verbal and nonverbal positive affect and talk significantly more about psychosocial issues in encounters with highly satisfied doctors.

[TABLE 2]

A stepwise regression analysis was performed with job satisfaction as dependent and verbal and nonverbal communication as independent variables (see Table 3). In the first step only GP and patient gender were included in the analysis, which explained 3.9% of the variance in job satisfaction. In the second step doctors' verbal communication was added, which explained 7.5% additional variance. In the final step nonverbal communication was added, which explained another 4.9% of the variance. The final model explains 16.4% of GPs' job satisfaction with GP and patient gender, patient-directed gaze, and verbal affective communication as main predictors.

A stepwise multilevel model with GPs' gender and the proportion of female patients as control variables shows that - after including all communication variables - the variance in job satisfaction that we found at country level decreases from 15.2% in the model only containing control variables to 9.7% in the full model. The full model showed a significant decrease in -2 log likelihood ($\chi^2 = 21.62$ at $df=11$, $P < .05$), indicating that the addition of the communication parameters leads to substantial better predictions in job satisfaction, which is concordant with the single level model.

[TABLE 3]

DISCUSSION

Although there are some differences in job satisfaction between the ten countries that participated in this study, job satisfaction shows a wide variation within all countries and a quarter of all doctors are clearly dissatisfied with their job. This means that job satisfaction is an issue that deserves attention. Overall, female GPs in our study had a higher job satisfaction than male GPs, which was also found in several other studies. [1,2,5,36] It is not known where this gender difference originates from. It could be that changes in the organization of primary health care (with larger practices and more possibilities for part-time working) have made it easier for women to become a principal in general practice. Another tentative explanation is that modern medicine, with its changing aims and altering, more horizontal, doctor-patient relationships suits female doctors better than male doctors. This gender issue warrants further investigation.

Perhaps the most relevant result of this study is the finding that job satisfaction is so clearly visible within the consultation, especially in the affective atmosphere of the consultation. Video-observation of real consultations revealed that GPs with low job satisfaction had less patient-directed gaze with their patients, showed less nonverbal warmth and commitment, and were significantly less engaged in affective communication. Furthermore, they showed more irritation and asked less psychosocial questions. There was no relationship between job satisfaction and the amount of biomedical conversation. These results are in conformity with some studies, [28] but differ from others that found that low job satisfaction is related to

more psychosocial talk. [27] The latter study, however, focused exclusively on satisfaction with the available time, only one of the aspects of job satisfaction measured in the present study. The fact that, in our study, job satisfaction manifests itself so clearly in the affective atmosphere of the medical encounter could compromise quality of care as many studies have demonstrated the importance of affective communication for establishing a trusting doctor-patient relationship, [49] revealing the complete medical history, [50] the comprehensiveness of topics discussed, [32] the recognition of psychological distress, [51,52] patient satisfaction, [32,53] less malpractice suits, [54] and even better patient health outcomes. [55]

Interestingly, patients' communication mirrored GPs communication, which means that patients of low morale GPs also showed less friendliness and commitment, were less engaged in affective communication and talked less about psychosocial issues. There seems to be a reciprocity in the level of affect that is exchanged by doctor and patient. More positive affect is exchanged in consultations of doctors who experience higher job satisfaction; less positive affect is exchanged in consultations of doctors with low job satisfaction. It seems that doctors get back from their patients what they invest themselves (and vice versa). Several authors have pointed to this reciprocity of affect between doctor and patient, [32,56] with 'liking' as a possible key factor of the doctor-patient relationship. [57] Hall et al reported a reciprocity in terms of liking, whereby how much each liked the other was related to how much each was liked. [58] There was a remarkable mutuality in assumed and factual liking of each other. Furthermore they found that this was not a trivial finding but really mattered. The physician's liking for the patient was positively associated with the following variables: better patient health, more positive patient affective state after the visit, more favourable patient ratings of the physician's behaviour, greater patient satisfaction with the visit, and greater physician satisfaction with the visit. The patient's liking for the physician was positively associated with better self-reported health, a more positive affective state after the visit, more favourable ratings of the physician's behaviour, and greater visit satisfaction. [58]

Exchange of affect and mutual liking are examples of reciprocal processes which seem both related to physicians' job satisfaction, but they are not the only areas where we find a reciprocity between doctor and patient. There is also a remarkable congruence in physician job satisfaction and patient satisfaction with care. Job satisfaction was the only GP/practice-related variable that was predictive for patient satisfaction in the second Dutch General Practice National Survey, [59] a study under 195 General Practitioners and over 7000 patients. In a series of benchmark-studies in different types of health care institutions in the Netherlands the best predictor of patient or client satisfaction was: provider satisfaction with correlations as high as .62 (PWC 2004, 2006, 2007). These findings are remarkable because in all these studies the data originate from different sources (clients versus professionals) and thousands of respondents are involved. Whether physician satisfaction and patient satisfaction directly influence each other or both are influenced by a third factor, for instance organizational climate, deserves more research. But anyway, these results point to the congruence between doctors' and patients' affect. Moreover, doctors' job satisfaction and patient satisfaction with health care seem to influence each other in

an iterative process over time, which can spiral upwards or downwards. [32] Our study shows that the exchange of affect might play a role in this process. These results fit with theories about burn out, which predict depersonalization and emotional detachment with the risk of a colder, less affective doctor-patient relationship as a result. There are not many longitudinal studies which can shed light on the dynamic nature of the processes at hand, but a study with a five-year longitudinal design found that GPs who attempt to gain emotional distance from their patients as a way of coping with their exhaustion, evoke demanding and threatening patient behaviors. [60] Dissatisfied GPs are in danger of getting caught up in a negative feedback loop, which is detrimental for the quality of care. While there are few studies into the consequences of dissatisfied physicians for the quality of care, the few studies which were published, clearly show the relevance. [23,24]

Strengths and limitations of the study

A strong point of this study is that we succeeded in videotaping GP consultations in 10 different European countries using the same methodology. This gives us a unique picture of the way job satisfaction manifests itself in the medical consultation. However, the study also has several limitations. The most significant is that in some countries no random samples were drawn and in all countries the samples were relatively small. Therefore the results cannot be generalized to all GPs in the participating countries. However, comparison of the job satisfaction scores of this study with the much larger samples of the European Task Profile gives some confidence in the results because in all but one country (the United Kingdom) the job satisfaction scores in our sample were similar to those in the much larger European Task Profile Study, which used the same job satisfaction. Another problem is that, due to the small number of countries involved, we were not able to perform multilevel analyses for identifying country-specific influences on job satisfaction. However, this was also not the aim of this study. The aim of this study was to analyze to what extent job satisfaction was manifest in medical communication. So we were more interested in the process itself than in differences between countries. The fact that only 15.2% of the variance in job satisfaction is bound to country-specific variables, which further diminishes to 9.6% after taking account of communication variables shows that this is a legitimate approach. Because this is a correlational study nothing can be concluded about course and effect of the processes that we described. However, it would be naive to expect a simple cause and effect relationship between job satisfaction and affective communication. Liking, exchange of affect and patient and doctor satisfaction seem to be independent but linked concepts, which are all important for dynamics of doctor-patient relationships, but in a yet unknown and hardly explored way. Probably physician and patient continuously influence each other in short feedback loops, together creating the atmosphere of the consultation and – therewith – the quality of their relationship. [50] Our study gives us some insight in the role of affect in this process. It also shows that it is worthwhile to invest in research and interventions which can enhance job satisfaction in health care professionals.

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TABLE AND FIGURE

Table 1. GP's of the Eurocommunication studies compared with GPs of the Task Profile Study with respect to background and practice characteristics

	Netherlands		UK		Spain		Belgium		Germany		Switzerland		Sweden		Estonia		Poland		Rumania	
	EUR	TPS	EUR	TPS	EUR	TPS	EUR	TPS	EUR	TPS	EUR	TPS	EUR	TPS	EUR	TPS	EUR	TPS	EUR	TPS
Mean age	45.2	44.8	43.1	46.3	38.5	41.5	44.9	42.3	46.2	29.1	47.7	48.1	46.2	47.0	38.6	43.9	41.3	44.8	43.3	40.8
% women	51.6	19.2	14.8	22.0	55.6	34.3	25.8	13.9	25.6	16.3	29.0	7.1	44.0	35.4	88.9	93.9	54.3	42.0	70.0	74.0
% solo	20.0	45.9	0.0	15.9	0.0	23.3	67.7	69.4	35.9	67.5	61.3	72.3	0.0	1.9	25.9	23.6	76.5	76.2	7.1	31.4
% inner city	20.0	10.6	45.8	16.6	56.0	28.9	22.6	17.8	15.8	11.4	12.9	7.1	8.0	10.5	0.0	6.1	47.1	21.2	70.4	34.1
% rural	10.0	28.4	4.2	18.2	0.0	27.9	22.6	30.6	34.2	30.1	19.4	43.1	12.0	10.5	37.1	33.7	29.4	41.6	0.0	17.0
Job satisfaction (sd)	3.57 (.51)	2.98 (.40)	3.78 (.53)	2.98 (.43)	3.30 (.66)	2.92 (.49)	3.33 (.63)	2.96 (.46)	3.17 (.62)	2.88 (.47)	3.89 (.58)	3.14 (.46)	3.50 (.51)	3.27 (.41)	3.78 (.67)	3.43 (.42)	3.10 (.50)	3.25 (.48)	3.32 (.63)	2.97 (.48)
N GPs	31	208	27	296	27	577	31	511	43	166	31	198	25	209	27	165	35	275	30	231

* p < 0.05; ** p < 0.1; *** p < .001

Figure 1. Job satisfaction by gender and country

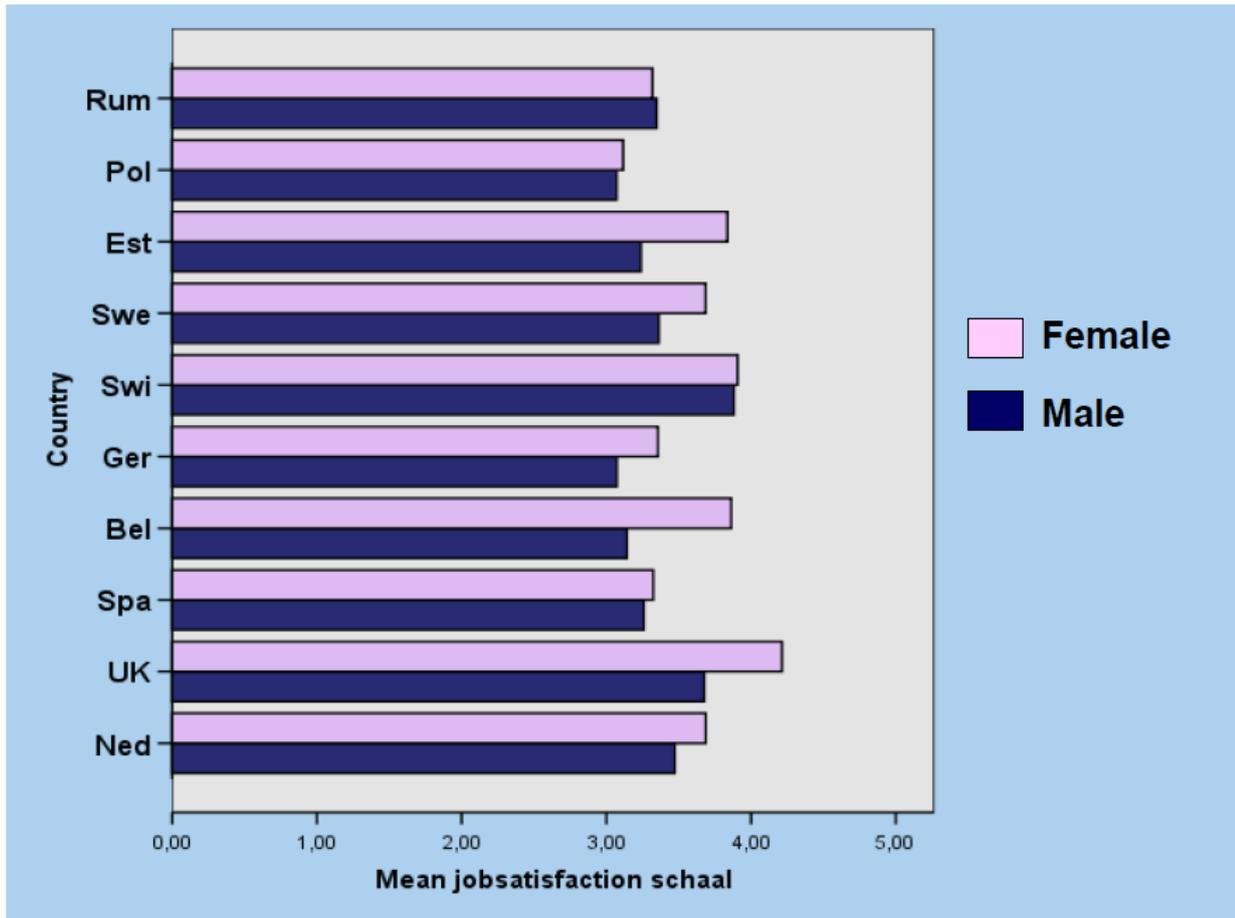


Table 2. Correlations (r) between job satisfaction and the communication patterns of GP and patient

Verbal communication	GP r	Patient r
Affect-oriented	.17 **	.12 *
Process-oriented	-.10	-.04
Task-oriented		
- biomedical questions	.00	-.07
- biomedical information	-.00	.04
- all biomedical talk	-.00	.03
- psychosocial questions	.12 *	-.04
- psychosocial information	.08	.07
- all psychosocial talk	.10 #	.14 **
Nonverbal communication		
% patient-directed gaze	.26 **	-
Global affect measures		
- irritation	-.13 *	-.06
- nervousity	-.10	-.00
- commitment	.14 *	.14 *
- warmth/friendliness	.16 *	.15 **

Table 3. Results of regression analysis with job satisfaction as dependent and verbal and nonverbal communication as independent variables

	Standardized beta		
	coefficients	t	p
(Constant)		7.559	.000
GP gender	.224	3.788	.000
% male patients	-.168	-2.824	.005
affective communication	.183	2.442	.015
process-oriented communication	-.069	-.924	.357
biomedical questions	.030	.429	.668
psychosocial questions	.063	.921	.358
biomedical info & counseling	-.156	-1.912	.057
psychosocial info & counseling	.021	.295	.768
irritation	-.047	-.572	.567
nervosity	-.030	-.361	.719
commitment	.208	1.621	.106
warmth / friendliness	-.150	-1.087	.278
% patient-directed gaze	.228	3.612	.000