Motivation for career choice and job satisfaction of GP trainees and newly qualified GPs across Europe: a seven countries cross-sectional survey

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Motivation for career choice and job satisfaction of GP trainees and newly qualified GPs across Europe: a seven countries cross-sectional survey

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WHAT IS ALREADY KNOWN IN THIS AREA

- Recruitment and retention of general practitioners is a major concern in many European countries.
- Previous studies looking at motivation revealed a perception that general practice had an inferior clinical content but superior lifestyle than hospital medicine, with the choice of general practice as a career often based on negative judgements.

WHAT THIS WORK ADDS

- Current trainees and newly qualified GPs across seven European countries choose general practice for positive reasons such as 'compatibility with family life' and 'the challenging medically broad discipline'.
- Overall levels of career satisfaction are high.

SUGGESTIONS FOR FUTURE RESEARCH

- Differences between countries in motivation and satisfaction should be explored further with qualitative studies.

Keywords: career choice, general practice, general practice specialty training, motivation, recruitment

SUMMARY

Background

Recruitment to general practice is a major concern in many countries. Cross-national exploration of motivation for career choice and career satisfaction could help inform workforce planning.

Objectives

Our aim was to explore motivation for career choice and job satisfaction of GP trainees and newly qualified GPs (NQGP) across seven European countries.

Methods

We surveyed GP trainees and recently qualified GPs in the Czech Republic, Denmark, Germany, Italy, Norway, Portugal and the United Kingdom using a web-based questionnaire.

Results

The number of individuals who responded was 3722 (2533 GP trainees; 1189 NQGP). The most frequently cited reasons for choosing GP were 'compatibility with family life' (59.5%), 'challenging medically broad discipline' (58.9%), 'individual approach to people' (40.1%), 'holistic approach' (37.8%) and 'autonomy and independence' (30.4%). Despite differences in workload, work–life balance and earnings, overall job satisfaction was high, with over 80% saying that they would choose to be a doctor again; of these 78.4% would choose to be a GP again.

Conclusion

In our sample reasons for choosing general practice as a career were strongly positive, with compatibility with family life the most frequently cited reason overall. This has implications for workforce planning. Further qualitative studies are needed to explore issues raised in more detail.

INTRODUCTION

Across Europe there is considerable variation in the structure and financing of healthcare systems. Evidence suggests that countries with strong primary care infrastructures have healthier populations, reduced health inequalities and more cost-effective healthcare systems.[1–3] Many countries have policies to strengthen the role of primary care in their healthcare system. Nevertheless, there are currently two specialists for every GP in Europe, compared to 1.5 in 1990.[4] With the number of specialists increasing much more rapidly than generalists, many countries face an absolute or relative shortage of primary care physicians leading to repeated calls for action. In order to mitigate this, recruitment and retention of primary care physicians needs to be optimised.

In many countries, recruitment to general practice is difficult, with a shortfall in the numbers of medical students and newly qualified doctors aspiring to a career in general practice. In the UK, less than a third of newly qualified doctors want a career in general practice, despite the fact that around half of UK doctors are expected to become GPs.[5] Numbers choosing general practice as a career were similarly low amongst medical students in Germany (29.6%), France (20%) and Greece (4%).[6–9] Previous studies looking at motivation revealed a perception that general practice had an inferior clinical content but superior lifestyle than hospital medicine, with choice of general practice as a career often based on negative judgements rather than a professional aspiration.[10–12]

Job satisfaction is an important determinant of physician retention. In a survey of family physicians in 12 European countries, 43% of respondents scored high for emotional exhaustion or burnout,[13] and similar levels of burnout were seen among Canadian Family Physicians.[14] Despite this, recent surveys have shown relatively high levels of job satisfaction amongst GPs in Norway, Denmark, Germany and the UK.[15–18] Comparison of job satisfaction of trainees and newly qualified GPs across European countries has not previously been undertaken.

In 2005, the World Organization of National Colleges, Academies and Academic Associations of General Practitioners Europe (WONCA, www.woncaeurope.org) published the updated definition of general practice.[19] This core document reflects the identity of general practice and has helped to shape Europe-wide agendas for education, research and quality improvement. Although this document was adopted in 2005 by the European Academy of Teachers in General Practice (EURACT, www.euract.eu), it is implemented differentially in vocational training across Europe.[20]

The Vasco da Gama movement (VdGM, www.vdgm.eu) is the WONCA Europe working group for young and future GPs launched in 2005. The education theme group is one of its five constituent groups. Its members developed a questionnaire with the aim of exploring differences in motivation, workload and satisfaction amongst trainee and newly qualified GPs across the very different vocational training schemes of Europe.[21]

METHODS

Participants

GP trainees and newly qualified GPs (NQGPs) within five years of completion of postgraduate training in seven European countries (Czech Republic, Denmark, Germany, Italy, Norway, Portugal and the United Kingdom) were targeted using a web-based questionnaire.

Questionnaire design

The first brainstorming on the questionnaire was in 2006 at the WONCA Europe congress in Florence, where the members of the VdGM – education and training theme group collected questions and topics based on literature knowledge and own experiences of their training schemes in their home countries. The first draft on the questionnaire was discussed and modified in 2007 (at the WONCA congress in Paris)

with members of the European Academy of Teachers in General Practice (EURACT) and European General Practice Research Network (EGPRN). Afterwards, a panel-test was performed with 30 trainees and young GPs from five European countries (Czech Republic, Germany, Italy, Spain and The Netherlands) in spring 2008. Researchers from the Department of General Practice and Health Services Research, University Hospital Heidelberg, Germany, evaluated this panel-test and refined the questionnaire accordingly. In the same year a feasibility pilot of the web-based survey form was performed with 306 participants (203 GP trainees) from 14 European countries.[21] The final questionnaire was agreed after modification with feedback from the panel-test and the feasibility pilot. The questionnaire was in two parts: the first focused on questions regarding motivation and satisfaction with GP training. The second part looked at the satisfaction with and coverage of the EURACT educational agenda within the GP training scheme (results not shown in this article). Questionnaire materials are available from the authors.

Individual country leads were then recruited via the VdGM network, and translated the questionnaire using an adaptation of a guideline.[22] The minimum standard was translation by two separate people or groups, comparison of the two versions and production of a consensus final version. Back-translation was not made mandatory for reasons of feasibility. Seven web-based versions were produced between December 2009 and May 2010.

Sampling and recruitment

Recruitment was carried out between 2008 and 2010. The target population was GP trainees and NQGPs in participating European countries. In order to recruit, most countries used a multifaceted recruitment strategy (for example internet pages, emails, articles in relevant newsletters and journals, personal contact, conferences and GP trainee networks). Recruitment strategies were adapted to suit national circumstances. In some countries (e.g. the UK) an email list of all GP trainees and newly qualified GPs was available; in this case all individuals from the target population were contacted and response rates calculated.[18]

Ethical considerations

Data collection in each country was undertaken according to national regulations, including ethics approval if required. As there was no patient involvement and participation by GP trainees and NQGPs was voluntary this was not required in most cases. Participants were informed about the project guarantor, anonymity and data protection in the introduction to the survey.

Analysis

Anonymous data files from the seven national research teams were sent to researchers at the Department of General Practice and Health Services Research, Heidelberg University Hospital and the Competence Centre General Practice Baden-Wuerttemberg, Germany. Analysis was performed using SPSS 19.0 (IBM, Chicago, USA). All data are presented by frequencies and means, correlations are analysed with Spearman's rho, P values ≤ 0.05 defined as significant.

RESULTS

In total there were 3722 responses to the questionnaire (2533 GP trainees; 1189 NQGPs) from seven European countries (Czech Republic, Denmark, Germany, Italy, Norway, Portugal and the United Kingdom). The sample was 63% female with an average age of 33 years. Table 1 summarises the characteristics of the respondents in the participating countries.

Sample sizes differed significantly between countries. UK respondents represent 58.5% of the sample (n=2178), whereas Italy only represents 1.5% (n=55). There were no significant differences in distribution of gender (Mann-Whitney U-test 0.17) between countries. Gender varied from 55.1% females in Norway to 79.4% in Portugal. The distribution of trainees/NQGPs varied from 96.4%/3.6% in Norway to 42.2%/57.8% in Czech Republic. The youngest sample was from Portugal (mean age 29 years, SD 4.2) and the oldest from Germany (mean age 37 years, SD 4.0). One in ten participants worked part time (ranging from 3.1% in Denmark to 16.7% in Norway). Females worked part time significantly more often than males (P<0.01). Gross mean annual pre-tax income varied significantly between countries, with lowest mean income in Italy (10 218 €) and highest in Norway (118 582 €). Incomes were transformed into € and value adjusted using purchasing power parities. Significant differences (P<0.01) between gender and income as well as trainee/NQGPs and income was found. Females had lower earnings in comparison to their male colleagues even when adjusted for part-time working status (Spearman's rho: P<0.01). In Norway, Portugal and Italy, trainees had a higher income than NQGP.

Aspects of motivation

Respondents were asked 'why did you choose to specialise in general practice?' and were asked to pick the three most important reasons from a list of 16 options (including a free-text option). Results are shown in Table 2 broken down by gender and country. Across the seven countries, five aspects stood out: 'compatibility with family life' (chosen by

Table 1 Demographics of participants

		Total		Czech Republic		Germany		Denmark		Italy		Norway		Portugal		UK	
		n	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)
Total	Total	3722	(100)	90	(100)	663	(100)	360	(100)	55	(100)	138	(100)	238	(100)	2178	(100)
	Female	2351	(63.2)	61	(67.8)	391	(59.0)	245	(68.1)	36	(65.5)	76	(55.1)	189	(79.4)	1353	(62.1)
	Male	1371	(36.8)	29	(32.2)	272	(41.0)	115	(31.9)	19	(34.5)	62	(44.9)	49	(20.6)	825	(37.9)
		n	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)
Trainee	Total	2533	(68.1)	38	(42.2)	463	(69.9)	310	(86.1)	51	(92.7)	133	(96.4)	193	(81.1)	1345	(61.8)
	Female	1669	(44.8)	26	(28.9)	298	(45.0)	214	(59.4)	35	(63.6)	74	(53.6)	158	(66.4)	864	(39.7)
	Male	864	(23.2)	12	(13.3)	165	(24.9)	96	(26.7)	16	(29.1)	59	(42.8)	35	(14.7)	481	(22.1)
NQGP	Total	1189	(31.9)	52	(57.8)	200	(30.2)	50	(13.9)	4	(7.3)	5	(3.6)	45	(18.9)	833	(38.2)
	Female	682	(18.3)	35	(38.9)	93	(14.0)	31	(8.6)	1	(1.8)	2	(1.5)	31	(13.0)	489	(22.5)
	Male	507	(13.6)	17	(18.9)	107	(16.2)	19	(5.3)	3	(5.5)	3	(2.1)	14	(5.9)	344	(15.8)
		Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
Age	Years	33	(5.4)	32	(3.6)	37	(4.0)	36	(4.0)	31	(5.1)	35	(5.5)	29	(4.2)	32	(4.9)
	Female	32	(5.5)	32	(3.8)	37	(6.0)	35	(3.6)	31	(5.1)	35	(6.0)	29	(3.6)	31	(4.5)
	Male	34	(5.6)	31	(3.3)	37	(6.1)	36	(4.9)	31	(5.3)	36	(4.8)	31	(5.8)	33	(5.3)
		n	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)	*n*	(%)
Part-time	Total	393	(10.6)	12	(13.3)	90	(13.6)	11	(3.1)	8	(14.6)	23	(16.7)	35	(14.7)	214	(9.8)
working	Female	326	(8.8)	9	(10.0)	82	(12.3)	9	(2.5)	4	(7.3)	13	(9.4)	29	(12.2)	180	(8.3)
	Male	67	(1.8)	3	(3.3)	8	(1.3)	2	(0.6)	4	(7.3)	10	(7.3)	6	(2.5)	34	(1.5)
		mean	(SD)	mean	(SD)	mean	(SD)	mean	(SD)	mean	(SD)	mean	(SD)	mean	(SD)	mean	(SD)
Earnings*	in €	58.286	(70.118)	13.473	(12.620)	55.544	(85.048)	50.156	(40.371)	10.218	(3.189)	118.582	(90.128)	37.423	(173.188)	62.178	(41.312)
	Trainee	51.099	(67.037)	8.387	(8.061)	40.836	(22.511)	47.578	(37.636)	10.424	(2.928)	120.540	(91.290)	39.704	(194.276)	53.020	(40.619)
	NQGP	77.805	(74.491)	18.009	(14.236)	87.479	(142.913)	67.970	(52.912)	8.000	(5.354)	75.491	(44.483)	28.626	(14.011)	83.769	(34.335)

*Gross annual pre-tax income, value adjusted, calculated only for those in full time employment (*n* total=2258, CZ=70, D=574, DK=348, GB=1380, IT=47, NO=115, PT=204)

59.5% of the overall sample), 'challenging medically broad discipline' (58.9%), 'individual approach to people' (40.1%), 'holistic approach to the patient' (37.8%) and 'autonomy and independence' (30.4%). The most popular reason for career choice varied between countries with 'compatibility with family life' most strongly represented in the UK sample; 'challenging, medically broad discipline' most important in Norway, Portugal and Germany; 'autonomy and independence' in the Czech Republic; and 'holistic approach to the patient' in Italy. Some other options were over-represented in specific countries: 'strong representation of communicational aspects' (Italy), 'negative experiences in hospital' (Germany) and 'good salary' (Norway). Significant gender differences were found in six aspects; 'compatibility with family life', 'holistic approach to the patient', 'strong representation of communicational aspects' were chosen more often by female ($P<0.05$), whereas 'autonomy and independence', 'good salary' and 'role models' were more common among males ($P<0.05$).

Workload and satisfaction

Two out of three participants indicated a workload of less than 50 hours per week for work and training altogether (Table 3). In Germany, Norway and Portugal about 15% had a workload of more than 60 hours per week, whereas in Denmark only 1.1% had a workload of more than 60 hours per week.

Satisfaction in total among our participants is high. More than four out of five participants would choose to be a doctor again, of these 78.4% would choose GP again. The proportion that would choose GP again was highest in Italy (83.7%) and lowest in Norway (69.4%). Overall more than two-thirds rated themselves as satisfied (very satisfied – fairly satisfied) with 'time spent at work or training', 'the time left for private life' and 'the money they earned' (Table 3). Significant correlations (Spearman's rho, $P<0.05$) between workload (hours per week spent at work and training) and satisfaction with daily time at work and work–life balance were shown, with countries with a higher workload (Norway and Portugal) having lower satisfaction with 'daily time spend at work or training' and 'the time left for private life'. Similarly countries with lower mean income (Czech Republic and Italy) were less satisfied with income whereas Norwegians were highly satisfied with their income.

DISCUSSION

As far as we are aware this is the first cross-national survey of trainee and newly qualified GPs examining motivation for career choice and career satisfaction in Europe. Although there are differences between countries in workload, work–life balance and earnings, in general satisfaction was high.

The most popular reasons across the seven countries for choosing a career in general practice were:

- 'Compatibility with family life' (UK)
- 'Challenging medically broad discipline' (Norway, Portugal, Germany)
- 'Individual approach to people'
- 'Holistic approach' (Italy)
- 'Autonomy and independence' (Denmark, Czech Republic).

These were strongly represented across all seven countries, and reflect 'positive' motivators to a career choice in general practice. 'Negative' motivators such as 'it remained after I ruled out other options', 'non-availability of another specialty training' and 'did not get speciality training because of my grades' were chosen by a minority, challenging some of the previous literature which suggests choosing general practice as a career was often based on negative judgements.[10–12] Three of the most popular reasons: 'challenging medically broad discipline' (top choice of men), 'individual approach to people', and 'holistic approach' reflect three of the main characteristics of general practice as defined by WONCA.[19] The importance of 'compatibility with family life' is in line with surveys of career choice among medical students and graduates.[11,12,23,24] Interestingly gender differences were found across all countries, with women more likely to choose reasons like 'compatibility with family life', 'holistic approach to the patient' and 'strong representation of communicational aspects', whereas more men felt it was important to have 'autonomy and independence' and a 'good salary'. This information could be important for future national and cross-national recruitment strategies to maintain future GPs both at a national level within participating countries and cross-nationally. The importance of the main characteristics of general practice as defined by WONCA for motivating career choice support the use of this WONCA definition for the development of GP training and for future recruitment strategies. Given the increasing proportion of female medical students in many European countries, the importance of 'compatibility with family life' might be a second important thrust for recruitment.

Data on income and workload showed variation between countries, in line with previously reported data from across Europe.[25–28] Lower income and higher workload were associated with lower satisfaction with income and work–life balance. This is important as satisfaction and physician wellbeing have a major impact on recruitment and retention of physicians, workplace productivity and efficiency, and quality of patient care and patient safety.[29] Interestingly, results on satisfaction differ from large surveys in the US, in which only 50% of physicians stated they would choose medicine again, and less than 25% of primary care physicians would choose

Table 2 Reasons for career choice in general practice

Reasons for career choice	Total				Czech Republic		Germany		Denmark		Italy		Norway		Portugal		UK	
	Total	Female	Male	*P*	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Compatibility with family life	59.5	64.9	50.3	*	65.6	44.8	46.5	21.3	48.2	39.1	33.3	15.8	44.7	40.3	54.5	51.0	76.6	63.2
Challenging medically broad discipline	58.9	58.4	59.9		32.8	31.0	52.4	57.4	64.5	61.7	16.7	36.8	56.6	58.1	69.3	65.3	59.8	61.8
Individual approach to people	40.1	40.0	40.1		31.1	37.9	41.4	39.0	44.5	40.9	41.7	42.1	44.7	25.5	32.3	32.7	40.0	41.2
Holistic approach to the patient	37.8	41.8	31.0	*	44.3	48.3	44.8	34.6	25.3	13.9	47.2	52.6	39.5	30.6	59.3	49.0	41.4	30.1
Autonomy and independence	30.4	24.9	39.9	*	45.9	62.1	23.0	40.8	64.1	68.7	50.0	42.1	43.4	51.6	8.5	24.5	18.0	34.8
Strong representation of communicational aspects	17.1	19.8	12.3	*	6.6	3.4	12.0	9.6	22.9	17.4	47.2	47.4	9.2	11.3	29.6	10.2	20.6	12.2
Negative experiences in hospital	14.2	14.2	14.2		14.8	6.9	27.4	31.3	9.0	13.9	19.4	5.3	5.3	9.7	6.9	8.2	12.8	9.8
Good salary	9.4	6.6	14.2	*	14.8	27.6	0.0	3.7	8.2	25.2	0.0	5.3	26.3	37.1	0.0	0.0	7.8	14.9
Good chance to find work	6.3	5.6	7.6		3.8	8.3	8.7	8.5	4.2	4.2	14.3	12.5	8.1	6.8	7.8	7.8	4.3	7.5
It remained after I ruled out other options	5.9	6.0	5.8		0.0	0.0	8.4	4.8	3.7	6.3	2.9	0.0	4.1	5.1	7.0	17.1	6.0	5.5
Other reasons	5.2	4.9	5.9		3.8	0.0	6.4	4.8	3.3	4.2	0.0	0.0	4.1	5.1	1.3	5.7	6.2	7.9
Role models (e.g. parents)	4.9	1.0	6.1	*	19.2	25.0	9.1	14.5	1.4	1.0	5.7	12.5	1.4	0.0	1.9	2.9	3.4	3.4
Private reasons (e.g. pregnancy, unemployment)	3.8	4.4	2.7		0.0	0.0	11.7	3.0	0.5	0.0	0.0	0.0	9.5	1.7	2.5	2.9	2.3	3.8
Non-availability of another specialty training	2.5	2.2	3.1		0.0	0.0	1.7	2.4	0.0	0.0	17.1	6.3	2.7	1.7	6.3	5.7	1.2	4.5
Did not get specialty training because of my grade	1.5	1.7	1.2		0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9	14.3	0.2	0.7

Values are percentages. Reasons not shown is a free text option (6.3%). *P-value<0.05

Table 3 Aspects of satisfaction

Aspects of satisfaction			Total	CZ	DE	DK	IT	NO	PT	UK
			n=3722	*n*=90	*n*=663	*n*=360	*n*=55	*n*=138	*n*=238	*n*=2178
Category	Question		%	%	%	%	%	%	%	%
Workload	(How many hours per week do you spend at work and training altogether?)	<30 h/week	7.5	17.8	12.8	0.6	3.6	1.4	1.7	7.7
		<40 h/week	14.9	25.6	18.4	31.4	43.6	7.1	7.1	10.8
		<50 h/week	42.5	27.8	32.9	58.1	29.1	31.9	41.2	44.6
		<60 h/week	24.9	17.8	20.7	8.9	16.4	37.7	32.4	27.7
		<70 h/week	6.7	6.7	10.0	1.1	3.6	10.1	11.8	6.0
		>70 h/week	3.5	4.4	5.3	0.0	3.6	4.3	5.9	3.1
Satisfaction work/training	(Are you satisfied with the daily time you spend at work or training?)	Satisfied	83.7	86.7	77.6	92.5	76.4	58.0	79.4	86.6
		Unsatisfied	16.3	13.3	22.4	7.5	23.6	42.0	20.6	13.7
Satisfaction work–life balance	(Are you satisfied with the time left for private life?)	Satisfied	71.3	73.3	71.4	80.0	81.8	51.5	60.9	72.0
		Unsatisfied	28.7	26.7	28.6	20.0	18.2	48.5	39.1	28.0
Annual earnings	(Gross annual pre-tax income in euros?)	<20.000 €	10.4	80.5	6.2	27.9	100.0	3.6	18.5	3.4
		<40.000 €	15.9	13.4	34.1	1.7	0.0	0.0	70.6	8.3
		<60.000 €	37.7	6.1	37.3	27.6	0.0	4.3	10.5	46.8
		<80.000 €	17.3	0.0	10.4	31.2	0.0	13.8	0.0	20.4
		<100.000 €	9.7	0.0	5.1	7.5	0.0	20.3	0.0	12.5
		>100.000 €	8.9	0.0	6.9	4.2	0.0	58.0	0.4	8.6
Satisfaction earnings	(Are you satisfied with the money you earn?)	Satisfied	75.2	52.3	53.0	88.3	12.8	90.5	59.2	83.0
		Unsatisfied	24.8	47.7	47.0	11.7	87.2	9.5	40.8	17.0
Physician again	(Would you choose physician again?)	Yes	83.7	82.2	81.0	83.1	89.1	89.9	96.2	82.8
GP again	(Of those who answered yes to the above question: would you choose GP as a specialisation again?)	Yes	78.4	82.4	70.0	77.6	83.7	69.4	79.0	81.2

their specialty again.[30] In comparison we found high levels of job satisfaction, with more than two-thirds of those surveyed stating they would choose to be a physician and a GP again.

Limitations

The main limitation of this project was the difficulty of knowing how representative the sample was of the overall population of trainee and newly qualified doctors, and therefore how generalisable the results are. The successful recruitment in countries with a central database of trainees (such as the UK) demonstrates the advantages that this sort of central register can bring for researchers.[18] However, in most countries this was not available. A pragmatic approach was therefore necessary, using multiple methods (mailing lists, journals/newspapers, doctors' societies, etc.) to recruit as widely as possible.[17] As a result the UK participants represent almost 60% of the sample. Additionally, few countries provided a small proportion of the sample (Czech Republic and Italy), therefore the results can only be interpreted as exploratory for these countries. Finally the results of this survey are only a cross-section. It would be interesting for future research to explore changes in motivation and satisfaction with career choice over time.

CONCLUSION

This is the first example of the use of the VdGM network for cross-national research collaboration. We hope that the success of this project will encourage academically orientated young doctors to link up with colleagues from different European countries via the VdGM network, in order to explore important research questions. Given the current concerns about GP recruitment and retention across Europe, this cross-national survey is a timely exploration of the motivation and satisfaction levels amongst European GPs of the future. Further qualitative studies are likely to be required to explore the issues raised.

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