# **RESEARCH ARTICLE**



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# Physiotherapists' job satisfaction according to employment situation: Findings from an online survey in Austria

Markus Latzke<sup>1</sup> | Peter Putz<sup>2</sup> | Stefan Tino Kulnik<sup>3</sup> | Constance Schlegl<sup>4</sup> | Martina Sorge<sup>4</sup> | Silvia Mériaux-Kratochvila<sup>2</sup>

<sup>1</sup>Institute for Health Management, IMC University of Applied Sciences Krems, Krems, Austria

<sup>2</sup>Department Health Sciences, FH Campus Vienna—University of Applied Sciences, Vienna, Austria

<sup>3</sup>Faculty of Health, Social Care and Education, Kingston University and St George's University of London, London, UK

<sup>4</sup>Physio Austria, Vienna, Austria

#### Correspondence

Markus Latzke, Institute for Health Management, IMC University of Applied Sciences Krems, Krems, Austria. Email: markus.latzke@fh-krems.ac.at

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# **Abstract**

**Background and Purpose:** Physiotherapists are commonly working in self-employed, employed, or in combined employed and self-employed work arrangements. This study aimed at examining aspects of job satisfaction and predictors of physiotherapists' overall job satisfaction across those three types of work arrangements.

**Methods:** Austrian physiotherapists rated their overall job satisfaction as well as the importance and realisation of aspects of job satisfaction in a cross-sectional online survey. Multiple linear regression was used to identify predictors of overall job satisfaction, and (for employed therapists only) predictors for planning to change the employer.

**Results:** The sample consisted of 581 physiotherapists working in the public or private sector, of which, 342 were self-employed, 100 employed, and 139 both employed and self-employed. Physiotherapists generally indicated high job satisfaction with notable variations according to their work arrangements. Overall job satisfaction and the aspects of *recognition* and *autonomy* were higher in self-employed therapists, when compared to the other two groups. In contrast, self-employed therapists reported lower satisfaction with *mentoring and peer support*. Those who were both employed and self-employed reported the highest gap between the importance and realisation of their *work-life balance* (r = -0.50, p < 0.001). *Recognition* was identified as the most important predictor of *job satisfaction* ( $\beta = 0.52$ , p < 0.001) and *intention to leave* ( $\beta = -0.54$ , p < 0.001) in employed physiotherapists.

**Discussion:** The analysis of job satisfaction according to work arrangements suggests several approaches to increase or maintain a high level of job satisfaction, which may be addressed by employers and physiotherapy professional organisations. For employed physiotherapists, practices that increase their recognition and autonomy seem to be promising, whereas self-employed physiotherapists could benefit from enhanced opportunities for exchange and networking with colleagues.

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For those who are both employed and self-employed, more flexible work schedules may be helpful to integrate the demands of private patients and employer workloads.

#### **KEYWORDS**

management and professional issues, organisational behaviour, physiotherapy, survey, workforce

# 1 | INTRODUCTION

Physiotherapists fulfil unique and important roles in modern, multidisciplinary healthcare workforces, contributing to health economies in acute care and rehabilitation settings, in primary care, as well as in prevention and public health. Insights into career and job satisfaction of physiotherapists can be helpful to support the retention of qualified therapists in active practice and to inform workforce planning by regulators and professional bodies. Previous studies have investigated the attractiveness of physiotherapy as a career choice (Park et al., 2003) and the degree to which physiotherapists are prepared to successfully gain employment (Jones et al., 2010). Other research has focused on shared professional values of physiotherapists (Aguilar et al., 2013) and attitudes towards their chosen careers in different European countries (Gotlib et al., 2012).

Many studies of job satisfaction among physiotherapists have mainly focused on recent graduates (Bacopanos & Edgar, 2016; Mulcahy et al., 2010). Some authors examined factors that influence job satisfaction across different career stages and identified differences for new graduates, postgraduates and practice owners (Arkwright et al., 2018; Davies et al., 2016). Existing literature indicates that relevant aspects of job satisfaction in physiotherapy include autonomy (Chen et al., 2012), recognition, and appreciation of skills and experience (Mulcahy et al., 2010); mentoring and peer support (Arkwright et al., 2018); working hours (Brattig et al., 2014); and stress (Barzel et al., 2011).

The demand for an education as a physiotherapist in Austria exceeds the supply of available slots about 13:1, which leads to a strict selection of students who are principally suited for the profession. Physiotherapists are commonly working in self-employed, employed, or in combined employed and self-employed work arrangements (Rappold et al., 2020). Few studies have compared job satisfaction in these types of employment constellations, but some evidence is available, for example, suggesting that specific skills are needed to work in private practice (Atkinson & McElroy, 2016). One study found that self-employed physiotherapists were more satisfied and had higher self-efficacy, optimism and resilience compared to therapists employed by an organisation (Salles & d'Angelo, 2020). Another study indicated that those who are self-employed feel they have more autonomy and appreciation, whereas those employed by organisations are more satisfied with their working hours (Barzel et al., 2011).

Recent approaches in conceptualising and evaluating job and/or career satisfaction go beyond traditional aspects of earnings and happiness. The cross-cultural 5C study investigated the meaning of

career success in 11 countries in various professions, that is, managers, nurses and workers (Briscoe et al., 2012). The authors identified seven dimensions of career success, grouped in three different domains: material output, life design and growth (Mayrhofer et al., 2016). Material output differentiates between financial security (referring to making a living) and financial success (referring to steadily making more money and achieving wealth). Life design encompasses three aspects: work-life balance, that is, achieving a balance between work-and non-work activities; positive relationships with co-workers; and positive impact, referring to helping others. Growth includes the dimensions of learning and development, which covers formal as well as informal learning and entrepreneurship, that is, founding one's own enterprise and being able to pursue one's own projects in the career.

In this study, we aimed to add to the existing body of knowledge about physiotherapists' job satisfaction, by specifically focussing on three types of work arrangements: (i) self-employed, (ii) employed and (iii) both employed and self-employed; and by applying the recent conceptualisation of career success developed in the cross-cultural 5C research. We addressed three objectives: first, we investigated differences in the various aspects of job satisfaction across the three employment constellations. Second, we compared importance and realisation of the 5C dimensions of career success across respondent groups. Third, we examined which aspects exert most influence on overall job satisfaction for each of the three employment constellations.

#### 2 | METHODS

# 2.1 | Participants

This cross-sectional online survey recruited qualified physiotherapists in Austria from April to June 2019. A detailed description of the survey method is provided in Kulnik et al. (2020). In brief, the survey invitation was emailed to 4850 members of the Austrian physiotherapy professional association. In addition, all nine physiotherapy education institutions in Austria were asked to forward the survey invitation to physiotherapy teaching staff and alumni. Eligible were practising physiotherapists who were either employed, self-employed or both, in clinical, managerial and/or teaching roles. Self-employed therapists in Austria deliver physiotherapy services on the legal basis of a contractual arrangement directly with the patient and mostly work in lone or shared practice spaces or conduct patient visits at private residences and care facilities. Physiotherapists not currently

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working were excluded. The survey followed ethical research practice as outlined in the Declaration of Helsinki, that is, participation was voluntary and anonymous, and the survey invitation provided advance information of the study purpose and content (World Medical Association, 2018).

# 2.2 | Instrument

The online survey questionnaire was developed specifically for this study and comprised the following domains: personal characteristics, qualification(s) and professional profile, job satisfaction, attitudes towards physiotherapy research, personal research experience and barriers and facilitators to physiotherapy research. A detailed description of the questionnaire is given in Kulnik et al. (2020).

The data presented in this article relate to the job satisfaction domain, which included items drawn from job satisfaction questionnaires used in previous studies (Barzel et al., 2011; Mulcahy et al., 2010) and seven dimensions of career success described by Mayrhofer et al. (2016). Respondents rated six statements reflecting their job satisfaction on a 7-point Likert scale (e.g. 'I am satisfied with my current job situation'), with responses ranging from 'fully describes me' (1) to 'does not describe me at all' (7) as well as their intention to leave. Additionally, respondents rated seven aspects of career success (financial security, making a positive impact, financial success, etc.) on a 7-point Likert scale, with respect to subjective importance ('very important' [1] to 'unimportant' [7]) and current realisation ('fully realised' [1] to 'not at all realised' [7]). The questionnaire was designed in German language, distributed via a secure online survey platform (Online Surveys ©2019, Jisc), and underwent several stages of pilot-testing to ensure content validity, usability and acceptability (Kulnik et al., 2020).

#### 2.3 Data analysis

Responses were exported to Microsoft Excel and SPSS statistical software (IBM Corp., 2019) in its recent version. Data were analysed by Kolmogorov-Smirnov tests and inspections of quantile-quantile plots to assess normality of data at group level. Continuous outcomes were consequently reported as mean or median, with standard deviation (SD) or interquartile range (IQR) as measure of dispersion. Aspects of job satisfaction were compared between three groups of respondents (self-employed, employed, and both self-employed and employed) using analysis of variance (ANOVA). Effect size  $\omega^2$  was calculated and interpreted as 0.01, 0.06 and 0.14 representing small, medium and large effects, respectively (Ferguson, 2016). In case of violations on the assumption of homogeneity of variances (Levene's test p-value <0.05), within-group degrees of freedom, test statistic F, and overall p-value were derived from Welch's tests. No contrast or post-hoc tests were carried out. Differences between importance and realization of aspects of job satisfaction were analysed by Wilcoxon tests, with test statistic r interpreted as 0.1, 0.3 and 0.5 representing

small, medium and large effects, respectively (Cohen, 1988). Multiple linear regression was used to identify predictors of overall job satisfaction. In addition, predictors for planning to change the employer were identified for employed therapists only. Age, gender and 12 aspects of job satisfaction (selected based on previously evidenced relevance in the literature) were selected as independent variables, where the least useful predictors were removed by means of backward elimination. Durbin-Watson statistics were calculated to assess the absence of autocorrelation, where a value of 2 expresses the total absence of autocorrelation and values between 1.5 and 2.5 were defined as acceptable. Variance inflation factors (VIF) were calculated as a measure of collinearity inflation across the predictors. Linear regressions were reported as tables including details related to the constant, included predictors and overall model statistics. Alpha was set at 0.05. Exact p-values have been reported.

# 3 | RESULTS

# Characteristics of the sample

The total sample comprised 581 survey participants, of which 342 (59%) were self-employed, 100 (17%) were employed, and 139 (24%) were employed as well as self-employed. The share of female participants was similarly high across the three samples, ranging from 77% to 79%. Employed physiotherapists were more likely to be younger and without children when compared to self-employed physiotherapists. Median weekly working hours were the highest in employed physiotherapists (Table 1).

#### Differences in aspects of job satisfaction 3.2 between three types of employment

Self-employed physiotherapists scored higher in overall job satisfaction and in several other aspects of job satisfaction compared to respondents who were employed or employed and self-employed. Specifically, self-employed respondents were more satisfied with their autonomy and the recognition of skills and experience, but less satisfied with mentoring and peer support compared with the other two groups. Satisfaction with financial security and learning and development did not differ significantly between the three groups. Those who were both employed and self-employed expressed lower satisfaction with their work-life balance compared to the other two groups (Table 2).

# Importance and realisation of seven dimensions of career success according to type of employment

Gaps between importance and realisation in the seven dimensions of career success were of similar magnitude in all three employment

TABLE 1 Characteristics of the samples of self-employed (n = 342), employed (n = 100), and employed and self-employed (n = 139) physiotherapists

	Self-employed	Employed	Employed and self-employed	Total
Female, n (%)	270 of 341 (79.2%)	75 of 97 (77.3%)	107 of 138 (77.5%)	452 of 579 (78.1%)
Age under 36 years, n (%)	67 of 337 (19.9%)	32 of 91 (35.2%)	46 of 137 (33.6%)	149 of 569 (26.2%)
Having children, n (%)	236 of 335 (70.4%)	52 of 93 (55.9%)	86 of 133 (64.7%)	374 of 561 (66.7%)
Years since qualified as PT, median (IQR)	21 (13, 28)	17 (6, 26)	16 (8, 24)	19 (10, 27)
Weekly working hours, median (IQR)	30 (24, 35)	38.75 (30, 40)	35 (28, 41)	31 (25, 40)

Abbreviation: PT, physiotherapist.

TABLE 2 Aspects of job satisfaction in self-employed (n = 342), employed (n = 100) and employed and self-employed (n = 139) physiotherapists

physiotherapists								
	Self-employed (Mean, SD)	Employed (Mean, SD)	Employed and self- employed (Mean, SD)	Degrees of freedom (between, within)	F	р	$\omega^2$	Effect size interpretation
Overall job satisfaction	6.34 (0.92)	5.91 (1.19)	6.03 (1.04)	2, 578	9.378	<0.001	0.03	Small
Autonomy	6.58 (0.74)	5.86 (1.03)	5.99 (1.00)	2, 289 <sup>a</sup>	34.832 <sup>a</sup>	<0.001 <sup>a</sup>	0.12	Medium
Recognition of skills and experience	6.53 (0.81)	5.75 (1.49)	6.02 (1.09)	2, 191 <sup>a</sup>	22.316 <sup>a</sup>	<0.001 <sup>a</sup>	0.09	Medium
Mentoring and peer support	4.05 (2.07)	5.07 (1.87)	5.23 (1.63)	2, 245 <sup>a</sup>	25.394 <sup>a</sup>	<0.001 <sup>a</sup>	0.07	Medium
Working times satisfaction	6.25 (1.04)	5.83 (1.30)	5.88 (1.09)	2, 578	8.864	<0.001	0.03	Small
Stress	4.19 (1.77)	4.76 (1.71)	4.78 (1.41)	2, 240 <sup>a</sup>	8.958 <sup>a</sup>	<0.001 <sup>a</sup>	0.02	Small
Financial security— realisation	5.71 (1.29)	5.69 (1.11)	5.70 (1.21)	2, 578	0.009	0.991	0.00	Negligible
Financial success— realisation	5.42 (1.30)	4.86 (1.41)	5.05 (1.19)	2, 578	9.147	<0.001	0.03	Small
Work-life balance- realisation	5.66 (1.26)	5.63 (1.27)	5.17 (1.39)	2, 578	7.590	0.001	0.02	Small
Positive impact— realisation	6.17 (0.87)	5.70 (1.01)	5.75 (1.03)	2, 214 <sup>a</sup>	14.912 <sup>a</sup>	<0.001 <sup>a</sup>	0.05	Small
Positive relationships realisation	6.20 (1.14)	5.94 (1.21)	5.89 (1.11)	2, 578	4.637	0.010	0.01	Small
Learning and development— realisation	5.99 (1.04)	5.77 (1.22)	5.94 (1.07)	2, 578	1.618	0.199	0.00	Negligible
Entrepreneurship— realisation	6.73 (0.80)	4.27 (2.25)	5.96 (1.44)	2, 174 <sup>a</sup>	71.704 <sup>a</sup>	<0.001 <sup>a</sup>	0.32	Large

Notes: p-Values derived from overall analysis of variance (ANOVA) with effect sizes  $\omega^2$ —interpretation:  $\omega^2$  0.01, 0.06 and 0.14 represent small, medium and large effects, respectively (Ferguson, 2016). Variables self-rated on a 7-point Likert scale where 7 reflects the most positive outcome. <sup>a</sup>Violation on the assumption of homogeneity of variances (Levene's test p-value <0.05), and hence within-group degrees-of-freedom, test statistic F and overall p-value derived from Welch's test.

groups (Tables 3–5). The largest discrepancies were observed for work--life balance, positive impact, positive relationships, and learning and development. Physiotherapists who were both employed and self-employed reported the highest gap between importance and realisation of their work-life balance. Self-employed physiotherapists reported a smaller gap for positive relationships than the other two groups.

# 3.4 | Influencing factors on overall job satisfaction according to type of employment

Autonomy constituted a relevant influencing factor for overall job satisfaction across all three types of employment arrangements and was the strongest predictor for the self-employed and the employed and self-employed groups. Recognition of skills and

TABLE 3 Gap between importance and realisation in aspects of career success (Mayrhofer et al., 2016) in self-employed physiotherapists (n = 342)

	Importance (median, IQR)	Realisation (median, IQR)	z	р	r	Effect size interpretation
Financial security	6 (6,7)	5 (5,7)	-6.19	<0.001	-0.24	Small
Financial success	6 (5,6)	6 (5,6)	-3.18	0.001	-0.12	Small
Work-life balance	7 (6,7)	6 (5,7)	-11.45	<0.001	-0.44	Medium
Positive impact	7 (6,7)	6 (6,7)	-8.64	<0.001	-0.33	Medium
Positive relationships	7 (6,7)	7 (6,7)	-7.08	<0.001	-0.27	Small
Learning and development	7 (6,7)	6 (5,7)	-10.03	<0.001	-0.38	Medium
Entrepreneurship	7 (6,7)	7 (7,7)	-6.28	<0.001	-0.24	Small

Notes: p-Values derived from Wilcoxon tests with test statistic r calculated as z/sqrt(n), where n represents the number of observations-interpretation: r 0.1, 0.3 and 0.5 represent small, medium and large effects, respectively (Cohen, 1988). Variables self-rated on a 7-point Likert scale where 7 reflects the most positive outcome.

Abbreviation: IQR, interquartile range.

TABLE 4 Gap between importance and realisation in aspects of career success (Mayrhofer et al., 2016) in employed physiotherapists (n = 100)

	Importance (median, IQR)	Realisation (median, IQR)	z	р	r	Effect size interpretation
Financial security	7 (6,7)	6 (5,6)	-4.01	<0.001	-0.28	Small
Financial success	5.5 (5,6)	5 (4,6)	-2.54	0.011	-0.18	Small
Work-life balance	7 (6,7)	6 (5,7)	-6.46	<0.001	-0.46	Medium
Positive impact	7 (6,7)	6 (5,6)	-6.82	<0.001	-0.48	Medium
Positive relationships	7 (6,7)	6 (5,7)	-5.38	<0.001	-0.38	Medium
Learning and development	7 (6,7)	6 (5,7)	-6.12	<0.001	-0.43	Medium
Entrepreneurship	4 (2.25, 6)	4 (2,7)	-0.78	0.437	-0.06	Negligible

Notes: p-Values derived from Wilcoxon-tests with test statistic r calculated as z/sqrt(n), where n represents the number of observations-interpretation: r 0.1, 0.3 and 0.5 represent small, medium and large effects, respectively (Cohen, 1988). Variables self-rated on a 7-point Likert scale where 7 reflects the most positive outcome.

Abbreviation: IQR, interquartile range.

TABLE 5 Gap between importance and realisation in aspects of career success (Mayrhofer et al., 2016) in employed and self-employed physiotherapists (n = 139)

	Importance (median, IQR)	Realisation (median, IQR)	Z	р	r	Effect size interpretation
Financial security	7 (6,7)	6 (5,7)	-4.51	<0.001	-0.27	Small
Financial success	6 (5,6)	5 (4,6)	-3.80	<0.001	-0.23	Small
Work-life balance	7 (6,7)	5 (5,6)	-8.28	<0.001	-0.50	Large
Positive impact	7 (6,7)	6 (5,6)	-6.91	<0.001	-0.41	Medium
Positive relationships	7 (6,7)	6 (5,7)	-6.73	<0.001	-0.40	Medium
Learning and development	7 (6,7)	6 (5,7)	-6.50	<0.001	-0.39	Medium
Entrepreneurship	6 (5,7)	7 (5,7)	-2.71	0.007	-0.16	Small

Notes: p-Values derived from Wilcoxon tests with test statistic r calculated as z/sqrt(n), where n represents the number of observations-interpretation: r 0.1, 0.3 and 0.5 represent small, medium and large effects, respectively (Cohen, 1988). Variables self-rated on a 7-point Likert scale where 7 reflects the most positive outcome.

Abbreviation: IQR, interquartile range.

experience contributed most strongly to overall job satisfaction of employed physiotherapists. Gender was identified as a predictor of overall job satisfaction in employed physiotherapists only, whereby female gender negatively influenced job satisfaction. Age did not predict *overall job satisfaction* in any of the three groups. The included predictors described 42%–57% of the variance in these

TABLE 6 Predictors of overall job satisfaction in self-employed physiotherapists (n = 342)

	b	SE b	β	Effect size interpretation	VIF	р
Constant	-0.30	0.41				0.461
Autonomy	0.36	0.06	0.29	Medium	1.59	<0.001
Working times satisfaction	0.21	0.05	0.24	Medium	1.52	<0.001
Recognition of skills and experience	0.21	0.06	0.19	Small	1.48	<0.001
Positive impact - realisation	0.16	0.05	0.15	Small	1.56	0.004
Financial success - realisation	0.07	0.03	0.09	Negligible	1.27	0.047
Work-life balance - realisation	-0.07	0.04	-0.09	Negligible	1.40	0.064
Mentoring and peer support	0.04	0.02	0.08	Negligible	1.07	0.050
Learning and development - realisation	0.07	0.04	0.08	Negligible	1.27	0.068

Notes: Corr.  $R^2 = 0.45$ , p < 0.001, Durbin-Watson: 1.89. Multiple linear regression with stepwise removal of least useful predictors by means of backward elimination, and arranged by descending  $\beta$ . Dependent and independent variables self-rated on a 7-point Likert scale where 7 reflects the most positive outcome. Interpretation  $\beta$ : 0.1, 0.3 and 0.5 represents small, medium and large effects, respectively (Cohen, 1988).

Abbreviations: b, regression coefficient; SE, standard error;  $\beta$ , standardised regression coefficient; VIF, variance inflation factor.

**TABLE 7** Predictors of job satisfaction in employed physiotherapists (n = 100)

	b	SE b	β	Effect size interpretation	VIF	р
Constant	0.64	0.63				0.311
Recognition of skills and experience	0.42	0.06	0.52	Large	1.36	<0.001
Autonomy	0.33	0.09	0.28	Small	1.23	<0.001
Gender	-0.45	0.18	-0.17	Small	1.01	0.016
Positive relationships—realisation	0.13	0.07	0.14	Small	1.20	0.064
Financial success—realisation	0.10	0.06	0.12	Small	1.07	0.091

Notes: Corr.  $R^2 = 0.57$ , p < 0.001, Durbin-Watson: 1.99. Multiple linear regression with stepwise removal of least useful predictors by means of backward elimination, and arranged by descending  $\beta$ . Dependent and independent variables self-rated on a 7-point Likert scale where 7 reflects the most positive outcome, except for gender (0 male, 1 female). Interpretation  $\beta$ : 0.1, 0.3 and 0.5 represents small, medium and large effects, respectively (Cohen, 1988)

 $Abbreviations: \textit{b}, \textit{regression coefficient}; \textit{SE}, \textit{standard error}; \textit{\beta}, \textit{standardised regression coefficient}; \textit{VIF}, \textit{variance inflation factor}.$ 

TABLE 8 Predictors of overall job satisfaction in employed and self-employed physiotherapists (n = 139)

	b	SE b	β	Effect size interpretation	VIF	р
Constant	0.50	0.57				0.385
Autonomy	0.32	0.07	0.32	Medium	1.15	<0.001
Recognition of skills and experience	0.25	0.07	0.26	Small	1.19	<0.001
Mentoring and peer support	0.13	0.04	0.21	Small	1.16	0.003
Financial success—realisation	0.13	0.06	0.16	Small	1.06	0.020
Learning and development—realisation	0.13	0.06	0.14	Small	1.12	0.040

Notes: Corr.  $R^2 = 0.42$ , p < 0.001, Durbin-Watson: 2.01. Multiple linear regression with stepwise removal of least useful predictors by means of backward elimination, and arranged by descending  $\beta$ . Dependent and independent variables self-rated on a 7-point Likert scale where 7 reflects the most positive outcome. Interpretation  $\beta$ : 0.1, 0.3 and 0.5 represents small, medium and large effects, respectively (Cohen, 1988). Abbreviations: b, regression coefficient; SE, standard error;  $\beta$ , standardised regression coefficient; VIF, variance inflation factor.

models with overall job satisfaction as the dependent variable (Tables 6-8).

For the group of employed physiotherapists, our results showed that those with higher recognition of skills and experience and those

who were older indicated they were less likely to leave their current employer. *Recognition of skills and experience* and *age* described 36% of the variance in this model with *planning to change employer* as the dependent variable (Table 9).

TABLE 9 Predictors of 'planning to change employer' in employed physiotherapists (n = 100)

	b	SE b	β	Effect size interpretation	VIF	р
Constant	7.16	0.69				<0.001
Recognition of skills and experience	-0.73	0.11	-0.54	Large	1.01	<0.001
Age	-0.39	0.14	-0.23	Small	1.01	0.006

Notes: Corr.  $R^2 = 0.36$ , p = <0.001, Durbin-Watson: 1.81. Multiple linear regression with stepwise removal of least useful predictors by means of backward elimination, and arranged by descending  $\beta$ . Dependent and independent variables self-rated on a 7-point Likert scale where 7 reflects the most positive outcome, except for age (grouped into categories of 10 years). Interpretation  $\beta$ : 0.1, 0.3 and 0.5 represents small, medium and large effects, respectively (Cohen, 1988).

Abbreviations: b, regression coefficient; SE, standard error; β, standardised regression coefficient; VIF, variance inflation factor.

# 4 | DISCUSSION

Our survey data demonstrate that physiotherapists in this sample were generally very satisfied with their job and evaluated various aspects in a positive manner. This aligns with previous findings, which furthermore indicate that physiotherapists have a higher job satisfaction than other health professions such as diagnostic professions or nursing (Dieterich et al., 2019; Ulrich et al., 2019). Nevertheless, close examination reveals that within this high range of job satisfaction, there are variations according to the employment status. We discuss the following three relevant aspects identified in our data: lower recognition and autonomy for employed physiotherapists; limited mentoring and peer support for self-employed therapists; and work-life imbalance in those with both employed and self-employed status.

Overall job satisfaction of self-employed physiotherapists was higher than for the employed or employed and self-employed groups. These findings correspond with a study encompassing various sectors and jobs in 15 European Union states, which compared job satisfaction of self-employed and salaried employees and found that the effect is especially pronounced for those with a university education (Millán et al., 2013). Prior studies in physiotherapy similarly point to higher job satisfaction of self-employed compared to employed therapists (Barzel et al., 2011; Salles & d'Angelo, 2020). Our survey clearly identifies two relevant contributing factors in this regard: recognition and autonomy.

Our analysis shows that recognition is not only the most important predictor for job satisfaction of employed physiotherapists, but it is also strongly related to their intention to leave. Besides recognition, only age predicted the intention to leave, whereby older PTs were less likely to leave their organisation, as is corroborated by other research (Kattenbach et al., 2014). Several studies indicate that physiotherapists seek greater recognition of their profession (Brattig et al., 2014), feel insufficiently appreciated by other medical professions (Gotlib et al., 2012) and often highlight a lack of recognition as an area for improvement (Mulcahy et al., 2010). Also in line with our results, lack of recognition of skills and experience leads to shorter career intentions (Bacopanos & Edgar, 2016). Moreover, we found that employed physiotherapists reported lower recognition of their skills and experience than those with combined self-employed and employed status, while self-employed respondents felt most

recognised. This mirrors the findings from a previous study, in which self-employed therapists felt more appreciated than employed therapists (Barzel et al., 2011). One of the reasons might be the source of feedback, which is displayed in more direct feedback from patients for self-employed therapists, compared to a perceived lack of recognition by supervisors for employed physiotherapists.

Autonomy is the second relevant aspect in this context, as studies have demonstrated that a higher degree of autonomy increases job satisfaction of physiotherapists (Chen et al., 2012), and self-employed physiotherapists are more satisfied with respect to their autonomy compared to the other two groups (Barzel et al., 2011). This trend is also found in studies of various professions, which indicate that autonomy and independence in self-employment lead to higher overall job satisfaction (Lange, 2012). A study of 2000 professionals indicated that salaried employees are as satisfied as self-employed individuals if their job is characterised by autonomy, variety and task significance (Hytti et al., 2013). In line with this literature, our survey results suggest that recognition and autonomy are aspects that explain the higher job satisfaction observed in selfemployed physiotherapists. Accordingly, employing organisations may implement Human Resource Management (HRM) initiatives with a focus on recognition and autonomy to influence overall job satisfaction of employed physiotherapists, to raise this closer to the levels of satisfaction in self-employed therapists. Such HRM practices include, for example, developmental appraisals, providing sincere positive feedback that acknowledges initiative, factual nonjudgemental feedback about challenges and active listening to recognise employees' perspectives (Stone et al., 2009). Moreover, HRM training for team leaders and members of (interprofessional) teams is important, to refine roles and responsibilities, create mutual understandings, and foster appreciative collaborations (Freund et al., 2015).

While, in our survey, the group of self-employed physiotherapists had higher satisfaction with recognition and autonomy, they reported lesser satisfaction with mentoring and peer support. The literature on mentoring and peer support in developmental networks shows beneficial effects for careers (Bozionelos, 2020): by providing career-related and socio-emotional support-also across organizational boundaries-income and especially career satisfaction increase. Studies within the profession of physiotherapy likewise have shown that mentoring and peer support are important factors for job

satisfaction (Mulcahy et al., 2010), especially in the early stages of professional careers (Arkwright et al., 2018; Davies et al., 2016). Networks and opportunities for mutual exchange are relevant for self-employed physiotherapists. One path for peer support is the use of social networking sites, which facilitates efficient communication, interactions and connections among practitioners of the same health professionals (Chan & Leung, 2018). In Austria, the Federal Association of Physiotherapists offers regional networks via state associations and professional exchange in organised professional networks. Interprofessional exchange is also promoted through specific events and continuing professional development training courses as well as so-called 'quality circles' to support professional development in smaller groups and also in rural areas. Multi-disciplinary case conferences in private practices are increasingly seen as billing items for social security agencies, and technical developments are increasing data-secure telecommunication, which can also be used for professional exchange in the health sector.

In addition to physiotherapists with employed and self-employed status, our survey also offers insights into a third, relatively common work arrangement among therapists in Austria, that is, both employed and self-employed. Often these are therapists in part-time employment, for example, at a hospital, rehabilitation centre or education institution, who outside of their employment treat patients in a self-employed capacity. In most survey aspects, this group of respondents ranged between the employed and self-employed but reported the highest gap between importance and realisation of worklife balance. Whereas cross-cultural studies in 26 European countries have demonstrated inferior work-life balance in self-employed individuals (Nordenmark et al., 2012), in our study, the most pronounced effect was seen for those working in a combined employed and self-employed constellation. It seems that the benefits of being self-employed, such as more freedom and personally convenient arrangements and time schedules (Craig et al., 2012), are counteracted by an employment contract at the same time. Challenges in integrating fixed employment schedules with flexibility needs of private patients may offer a possible explanation, and a potential implication for employer organisations to offer physiotherapists more flexible work arrangements.

# **5** | LIMITATIONS

The survey recruited a self-selected convenience sample, which may have resulted in a group of respondents who show greater engagement in work-related matters and potentially greater job satisfaction than the overall population of physiotherapists in Austria. Gender distribution in the survey sample was representative of the overall gender distribution (75% women) among all physiotherapists in Austria (Rappold et al., 2020). The distribution of work arrangements in our sample differs somewhat from national statistics, which was 59% self-employed and 17% employed in our sample, as opposed to 39% self-employed and 36% employed in

recent national professional registry data (Rappold et al., 2020); however, due to our large sample size and our approach to analyse within groups, this does not affect the validity of our findings. The response rate (number of completed surveys in relation to survey views) was 47.8%, representing a fair survey response similar to the reported average response rate of approximately 50% in surveys of health professionals and in organisational surveys (Baruch & Holtom, 2008; Cho et al., 2013) Although the survey sample in absolute terms represented about 4% of 14,615 state-registered physiotherapists in Austria in 2019 (Rappold et al., 2020), this was sufficient to allow for statistically valid analyses of questionnaire items on job satisfaction.

# 6 | CONCLUSION AND PRACTICAL IMPLICATIONS

This paper adds to the ongoing research on job satisfaction of healthcare professionals by investigating three prevalent types of work arrangements. We show similarities and differences regarding the level of job satisfaction and factors that influence overall job satisfaction for physiotherapists who work in self-employed, employed, or combined employed and self-employed work arrangements. In addition to autonomy, which is valued highly by all three groups, we have identified specific core aspects, which could be addressed to enhance job satisfaction for each group: mentoring and peer support for self-employed physiotherapists; recognition of skills and experiences for employed therapists; and work-life balance for those with combined employed and self-employed status. Employer organisations and professional associations may draw on these findings to positively influence job satisfaction of physiotherapists, to support the retention and productivity of this highly skilled and essential healthcare workforce.

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#### **CONFLICT OF INTEREST**

The authors declare no conflict of interest.

#### **AUTHOR CONTRIBUTIONS**

Markus Latzke contributed to the concept and design, analysis and interpretation of data and prepared the first draft of the manuscript. Stefan Tino Kulnik and Peter Putz contributed to the concept and design, analysis and interpretation of data and critically revised the intellectual content. Constance Schlegl, Martina Sorge and Silvia Mériaux-Kratochvila contributed to the concept and interpretation of data and critically revised the intellectual content. All authors approved the final version of the manuscript to be published.

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#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request

#### ORCID

Markus Latzke https://orcid.org/0000-0002-2289-1698 Peter Putz https://orcid.org/0000-0003-2314-3293 Stefan Tino Kulnik https://orcid.org/0000-0001-5419-6713

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