

“Day to Day, Town to Town, Sing My Songs, Travel on”? Examining Aspects of Precarious Employment for Work Psychologists in Austria

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Abstract. Work psychologists play a crucial role in today’s work systems, where psychological stressors are on the rise. However, the occupational profile of work psychologists is not clearly defined by Austrian law and atypical employment might be common among Austrian work psychologists. In our study, we identified aspects of an undefined and insecure occupational profile and hypothesized a positive association with role ambiguity, which in turn was supposed to affect psychological wellbeing negatively. Finally, we hypothesized that well-functioning cooperation with occupational physicians would buffer experiences of role ambiguity in work psychologists. 31 experts were interviewed and salient topics served as a base for an Austria-wide online survey study with $N = 122$ participating work psychologists. Regression analyses supported the assumed effects. The results highlight the importance of a more clearly defined occupational profile for work psychologists. We discuss viable approaches to improve working conditions for work psychologists in Austria.

Keywords: Precarious employment · Work psychologists · Occupational profile · Role ambiguity · Psychological wellbeing

1 Introduction

Since the emergence of mega trends such as globalization, flexibilization, and new forms of communication and information technology, the character of work has shifted significantly from physical to mental work. Psychological stressors accompany this shift, confirmed by the considerable increase of work-related stress and associated disorders [1].

The European Union enacted a policy in 1989 [2] that pledged all member states to establish uniform minimum standards of workplace safety and health in national legislation. In Austria, the respective act is the “Worker Protection Act” [ArbeitnehmerInnenschutzgesetz]. In its last major amendment in 2013, the increase of psychological stressors has been accounted for explicitly by clarifying that the evaluation of work-related psychological stressors is an obligatory part of workplace safety and health activities.

Although the analysis and evaluation of work-related psychological stressors is a key competence of work psychologists, the profession lacks a clear statutory basis in Austria when compared to occupational physicians and safety engineers. What's more, Austrian law remains somewhat vague in defining both the occupational profile of work psychologists and the practice of the evaluation of work-related psychological stressors, respectively. Consequently, employers in Austria are not obliged to engage work psychologists for prevention in contrast to occupational physicians and safety engineers. Although the competencies and qualifications of work psychologists encompass far more than the evaluation of psychological stressors, this in fact is the gateway for many work psychologists to receive an initial assignment and hopefully the first step for a longer-term mandate in organizations.

The fact that Austrian law does not protect the job title "work psychologist" is another aspect of legal insecurity. This impedes the establishment of clear quality standards because any psychologist may refer to him- or herself as work psychologist without having to provide evidence for a specific qualification. In summary, as work psychologists only slowly gain ground in occupational health and safety and do not yet experience appropriate consideration by the law, the definition of their occupational role is still insufficient.

2 Theoretical Background

2.1 Precarious Employment for Work Psychologists in Austria

Due to the underlying conditions summed up above, work psychologists are facing difficulties to compete in the labor market. Atypical employment is the rule since the majority of work psychologists are own account workers [3]. In absence of scientific studies examining working conditions of occupational health and safety professionals in general and work psychologists in particular, it remains unknown to what extent atypical employment relates to risks of precarity for work psychologists in Austria.

While various concepts of precarity or precarious employment have been proposed [4, 5], there currently exists no universally accepted definition. According to Keller and Seifert [6], precarious employment is characterized by the absence of one of the following four criteria: household income that ensures the livelihood, employment stability, employment ability, and integration in the social benefit system. These criteria are less likely to find in atypical employments. For example, the salary of part-time workers may not ensure livelihood or own-account workers may neglect private unemployment or pension insurance. Atypical employment may therefore promote precarity.

In this paper, we will examine how precarious employment manifests in the work life of work psychologists in Austria and how it impacts their wellbeing. In doing so, we will first describe several aspects of an undefined and insecure occupational profile for work psychologists. From a psychological point of view, we will then investigate the process of precarity as it affects human behavior and experience.

2.2 Working Conditions and Psychological Wellbeing

Working conditions are important determinants for mental health and wellbeing [7, 8]. A series of work-related psychological factors have been shown to affect psychological wellbeing [9]. In particular, job insecurity is likely to exert a detrimental influence on physical and mental health as well as psychological wellbeing [7, 10–12]. Job insecurity may refer to uncertainty regarding either the job’s consistent existence (quantitative aspect) or the continuance of subjectively important job characteristics (qualitative aspect) [13]. The perception of an undefined and insecure occupational profile for work psychologists primarily relates to quantitative job insecurity, because in competing in the labor market, the continuance of the job itself is at stake.

2.3 Organizational Role Theory and Social Support

Role theory refers to specific forms of organizational behavior that are associated with a given professional position [14]. All members of an organization develop ideas and attitudes of what is appropriate and inappropriate for a certain occupational role. Therefore, the role owner faces various expectations from other organizational members (e.g., employer, colleagues) and tries to meet these expectations. Undefined role expectations (e.g., ambiguous assignments) lead to uncertainty about goals. This, in turn, will trigger regulation uncertainty, since the sequence of actions from a present state to a desired end state cannot be known if the end state is vague. It is from such goal and regulation uncertainties that role stress—i.e., role ambiguity and role conflict—arises [15].

As suggested by various (psychological) work design models [16, 17], social support is a significant work-related resource. Moreover, social support may buffer the negative consequences of role stressors on stress-related reactions [18, 19]. Interdisciplinary cooperation is an essential aspect that contributes to the success and sustainability of preventive activities. What’s more, cooperation with other professionals is a valuable resource in daily work, related to both the accomplishment of tasks and the cultivation of social contacts. Hence, a positive collaboration climate among different professional groups provides social support in organizations.

2.4 Hypotheses

As explained above, we assume that work psychologists in Austria perceive their work situation in ways that are indicative of an undefined and insecure occupational profile. Drawing upon research on quantitative job insecurity [12], we expect an undefined and insecure occupational profile to be associated with reduced psychological wellbeing.

Hypothesis 1. Perceptions of an undefined and insecure occupational profile correlate negatively with psychological wellbeing.

In addition, a (legally) undefined and insecure occupational profile may lead to uncertainties pertaining to the professional role and, consequently, give rise to role

stress. Since the occupational profile of work psychologists is still relatively undifferentiated and clear competencies have not been established, uncertainties and insecurities about adequate role behavior may emerge. In line with this reasoning, we suppose that the perception of an undefined and insecure occupational profile is related to increased role ambiguity. Scientific evidence suggests that more role ambiguity relates to less psychological wellbeing [8]. We therefore assume that role ambiguity mediates the relationship between an undefined and insecure occupational profile and psychological wellbeing.

Hypothesis 2. The negative effect of an undefined and insecure occupational profile on psychological wellbeing is mediated by role ambiguity.

According to research, a lack of social support affects psychological wellbeing [7, 8]. Conversely, supportive forms of cooperation lead to positive consequences, as outlined above. Occupational physicians are a well-established group and the proximity of occupational medicine and occupational psychology qualifies occupational physicians as an important role model for work psychologists. Well-functioning collaboration of occupational physicians and work psychologists is consequently supposed to act as a moderating resource capable of preventing the emergence of role ambiguity. We therefore assume a buffering effect on the positive association of an undefined and insecure occupational profile with role ambiguity.

Hypothesis 3. Well-functioning cooperation with occupational physicians buffers the detrimental effect of an undefined and insecure occupational profile on role ambiguity among work psychologists.

3 Method

The present study is the result of a project that evaluated the working situation of occupational physicians, safety engineers, and work psychologists in Austria [20]. In a first step, we interviewed 31 experts (practitioners, representatives of professional groups, social partners, policy makers). The interview data were then subjected to qualitative content analysis in order to identify relevant topics of the working situation. Salient topics served as a base for an Austria-wide online survey study across all three professional groups. This article focuses on the data of work psychologists who participated in the online survey study.

3.1 Sample

Data were gathered from $N = 122$ Austrian work psychologists. Participants were recruited by email with help of two associations of the professional group of Austrian psychologists. Respondents had a mean age of 42.01 years ($SD = 8.86$, range: 25–66) and were predominantly female (71%). The majority were own-account workers (57%), whereas employed work psychologists mostly had permanent contracts (88%). 68% of the participants reported work psychology as their main profession, the remaining 32%

referred to work psychology as their secondary profession. Mean job tenure was 9.14 years ($SD = 7.10$, range = 1–35).

3.2 Measures

Since the survey study required the generation of items customized to the specific working situation of work psychologists in Austria, only few established scales could be employed. The self-generated items were subjected to exploratory factor analysis to identify patterns of interrelated variables. These patterns were then labeled *undefined and insecure occupational profile* and *cooperation with occupational physicians*, respectively, and aggregated to form unweighted additive indices [21].

Undefined and Insecure Occupational Profile. The index comprised eleven self-generated items that were to be rated on a five-point response scale (from 1 = *no, not at all* to 5 = *yes, definitely*). Complete item wordings are given in the Appendix (Table 5). Internal consistency was good (Cronbach’s alpha [α] = .82).

Psychological Wellbeing. The WHO-5 Well-Being Index [22] was used. Apart from measuring psychological wellbeing, this instrument is also appropriate to screen depression [23]. The five items (example item: “during the last two weeks, I have felt calm and relaxed”) had to be rated on a six-point response scale (from 1 = *at no time* to 6 = *all of the time*). Internal consistency proved to be good to excellent ($\alpha = .87$).

Role Ambiguity. Role ambiguity was measured with three items (example “I know exactly what is expected of me”) of a well-established role stress questionnaire [24]. Items were to be rated on a five-point response scale (from 1 = *no, not at all* to 5 = *yes, definitely*). Item scores were reversed prior to the analysis. Internal consistency of the scale was acceptable to good ($\alpha = .78$).

Cooperation with Occupational Physicians. This index consisted of four items that had to be answered along a five-point response scale (from 1 = *no, not at all* to 5 = *yes, definitely*). High values on the scale represent work psychologists’ appraisal of the cooperation with occupational physicians as useful and well-functioning. Complete item wordings are given in the Appendix (Table 6). Internal consistency ($\alpha = .67$) of the index was only approaching acceptable regions.

3.3 Data Analyses

Pearson’s product-moment correlation coefficient was used to test the correlation hypothesis. Mediation and moderation analyses were conducted with standardized variables in SPSS 21 with the PROCESS software [25]. To test for significance of indirect effects, bootstrapping confidence intervals were used. Because of the high proportion of women as well as the high range of participants’ age, the mediation and moderation analyses were controlled for sex, age, and, additionally, job tenure.

4 Results

As indicated by means and standard deviations of the items subsumed in the index “undefined and insecure occupational profile” (Table 5 in the Appendix), among the most salient topics was the necessity for legal amendments (stronger legal foundation for work psychologists in general, more prevention time for the evaluation of work-related psychological stressors). Furthermore, people in general and employers in particular were regarded as unaware of the competencies of work psychologists.

Respondents generally confirmed that the cooperation with occupational physicians is reasonable to them and that a more intense cooperation would be welcome (Table 6 in the Appendix). However, a considerable proportion of the respondents also confirmed cooperation problems.

Table 1 gives means, standard deviations, and correlations of the variables under investigation. While respondents exhibited rather low levels of role ambiguity, psychological wellbeing was high. Both indices (undefined and insecure occupational profile and cooperation with occupational physicians) showed moderate positive levels.

Table 1. Descriptive statistics.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Sex	–	–						
2. Age (years)	42.0	8.9	.23*					
3. Job tenure (years)	9.1	7.1	.34**	.60**				
4. Undefined & insecure occupational profile	3.3	0.6	.01	–.18	–.20*			
5. Role ambiguity	1.9	0.7	–.10	–.27**	–.27**	.47**		
6. Psychological wellbeing	4.4	0.9	.11	.21*	.26**	–.36**	–.45**	
7. Cooperation with occupational physicians	3.5	0.7	–.07	.09	.05	–.37**	–.25**	.20*

Note. $N = 118\text{--}122$. * $p < .05$ ** $p < .01$

4.1 Correlates of an Undefined and Insecure Occupational Profile

All bivariate correlations were in line with expectations (Table 1). An undefined and insecure occupational profile correlated positively with role ambiguity ($r = .47$, $p < .01$), negatively with psychological wellbeing ($r = -.36$, $p < .01$, confirming Hypothesis 1), and negatively with cooperation with occupational physicians ($r = -.37$, $p < .01$). Additionally, the correlation between role ambiguity and psychological wellbeing was negative ($r = -.45$, $p < .01$) as was the relationship between role ambiguity and cooperation with occupational physicians ($r = -.25$, $p < .01$). Psychological wellbeing and cooperation with occupational physicians was positively correlated ($r = .20$, $p < .05$).

Table 2. Mediating effect of role ambiguity for the relationship between an undefined and insecure occupational profile (occup. profile) and psychological wellbeing.

Step	Variable	Path	β	SE	p	95% CI	
						LL	UL
1 (X → Y)	Occup. profile → wellbeing	c	-.33	0.09	<.01	-.51	-.15
2 (X → M)	Occup. profile → role ambiguity	a	.44	0.09	<.01	.27	.61
3 (X + M→Y)	Occup. profile → wellbeing	c'	-.19	0.10	.05	-.38	.00
	Role ambiguity → wellbeing	b	-.32	0.10	<.01	-.51	-.13
Indirect effect (X → M→Y)	Occup. profile → role ambiguity → wellbeing	a * b	-.14	0.06 ^a		-.29 ^b	-.04 ^b

Note. N = 112. c = total effect, a * b = indirect effect, c' = direct effect.

^aBootstrapping standard error.

^bBootstrapping confidence interval.

Table 3. Moderating effects of cooperation with occupational physicians (cooperation) for the relationship between an undefined and insecure occupational profile (occupational profile) and role ambiguity.

Predictor	β	SE	p	95% CI	
				LL	UL
Sex	-.19	0.20	.35	-.58	.21
Age	-.11	0.10	.29	-.31	.10
Job tenure	-.07	0.11	.50	-.29	.14
Occupational profile	.42	0.09	<.01	.24	.60
Cooperation	-.06	0.09	.51	-.23	.12
Occupational profile × cooperation	-.17	0.08	.03	-.33	-.01
R ²	.29				
F	7.20		<.01		
ΔR^2	.03				
ΔF	4.68		.03		

Note. N = 112.

4.2 Mediating Effect of Role Ambiguity

We found a partially mediating effect of role ambiguity on the association between an undefined and insecure occupational profile and psychological wellbeing ($\beta = -.14$, 95% CI [-.29, -.04]). Hypothesis 2 was therefore confirmed (Table 2).

4.3 Moderating Effect of Cooperation with Occupational Physicians

Cooperation with occupational physicians exerted a buffering influence on the positive effect of an undefined and insecure occupational profile on role ambiguity ($\beta = -.17$, $p = .03$; Table 3).

Hypothesis 3 could thus be confirmed. In addition, by combining the results of the mediation and the moderation analysis, a *moderated mediation* could be established. Conditional indirect effects of an undefined and insecure occupational profile via increased role ambiguity on reduced wellbeing at three different values of the moderator (cooperation with occupational physicians; sample mean $\pm 1 SD$) are given in Table 4. As respondents rated cooperation with occupational physicians more favorably, the negative conditional indirect effect fell in magnitude. For moderator levels of one SD above the sample mean, the effect was no longer statistically significant ($\beta = -.06$, $p > .05$).

Table 4. Conditional indirect effect at different values of the moderator.

Value of the moderator	Conditional indirect effect	95% CI ^a	
		LL	UL
$M - 1 SD$	-.22	-.46	-.01
M	-.13	-.26	-.04
$M + 1 SD$	-.06	-.18	.01

Note. $N = 112$.

^aBootstrapping confidence intervals.

5 Discussion

The aim of this study was to examine aspects of precarious employment of work psychologists in Austria that were derived from interviews and a subsequently conducted survey study. We considered the bivariate relationships between an undefined and insecure occupational profile and role ambiguity, and, in further consequence, the respective effects on psychological well-being. Moreover, we examined a buffering effect of a well-functioning cooperation with occupational physicians on the relationship between an undefined and insecure occupational profile and role ambiguity.

Bivariate associations revealed an undefined and insecure occupational profile to correlate positively with role ambiguity and negatively with psychological wellbeing (Hypothesis 1). Hence, work psychologists who perceived an undefined and insecure occupational profile experienced more role ambiguity and less psychological wellbeing compared to work psychologists who perceived a well-defined and more secure occupational profile.

The postulated mediation effect of role ambiguity on the relationship between an undefined and insecure occupational profile and psychological wellbeing (Hypothesis 2) was also confirmed. Detrimental effects of an undefined and insecure occupational profile on psychological wellbeing were partially mediated by role ambiguity. The result suggests that work psychologists who perceived an undefined and insecure

occupational profile found it difficult to identify a clear professional role, leading them to experience role ambiguity and, in consequence, less psychological wellbeing. As the mediation was partial, experiences of an undefined and insecure occupational profile still impaired wellbeing directly after controlling for the mediating influence of role ambiguity. This hints at other influences not accounted for by this study.

Lastly, the proposed buffer effect of cooperation with occupational physicians on the mediation (Hypothesis 3) was confirmed as well. The moderation analysis confirmed the helpful character of a well-functioning cooperation with occupational physicians. In particular, a well-functioning and supportive cooperation between work psychologists and occupational physicians is suitable to mitigate the emergence of role ambiguity as a consequence of a perceived undefined and insecure occupational profile. The fact that this cooperation already exerts its influence in the first stage of the mediation, thereby impeding the genesis of role ambiguity, is particularly remarkable. Therefore, cooperation with occupational physicians should be considered a vital resource for work psychologists in their professional life. Since item means hinted at certain signs of cooperation problems between work psychologists and occupational physicians, this finding becomes all the more important.

It is worth of mention that these effects were found in spite of the fact that participants reported rather low levels of role ambiguity and only moderate levels of an undefined and insecure occupational profile. A mean job tenure of nine years may partly explain these results, suggesting that a substantial portion of the sample consisted of experienced work psychologists. Hence, it is plausible to assume that the magnitude of both main and moderation effects will increase in magnitude as respondents report higher levels of an undefined and insecure occupational profile and role ambiguity, respectively—which could be expected for job entrants, for example.

5.1 Limitations

Due to the nature of the study, a compromise concerning measurement had to be made between practice-orientation (i.e., utilizing few items, generating items customized to relevant topics) and scientific standards (i.e., employing reliable and valid scales). Consequently, measurement suffered a number of shortcomings. First, we could only employ a subset of items of the original role ambiguity scale, which may have limited content validity. Second, the indices “undefined and insecure occupational profile” and “cooperation with occupational physicians” consisted of self-generated items. Since indices were composed according to qualitative results of interviews with experts in the field, they should not be expected to represent unidimensional, theoretically grounded constructs [26].

It is unclear whether the index “undefined and insecure occupational profile” and the role ambiguity scale represent two distinct constructs. Conceptually, the index comprises specific conditions unique to the work situation of work psychologists, whereas the scale abstracts from concrete work situations. A series of confirmatory factor analyses, conducted in spite of the small sample size, rather supported the notion of a two-factor solution, although fit parameters generally were unacceptable.

Causal pathways other than those proposed in this study may exist. Longitudinal data on the dynamics of the work situation and the occupational profile of work psychologists would not only help shed light on causal relationships but also capture antecedents and consequences of a developing professional profile and identity of work psychologists.

6 Conclusion

Work psychologists perceive a blurry occupational profile as an impediment to the development of their profession that elicits role ambiguity, which in turn impairs wellbeing. Cooperation with occupational physicians buffers such negative effects. Well-functioning interdisciplinary cooperation is a key factor that ensures effective interventions and is a source of social support among the professionals involved. Austrian law should more clearly define the professional role of work psychologists.

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Appendix: Item Wordings of Indices

Table 5. Items of the index *undefined and insecure occupational profile*.

Item wording	<i>M (SD)</i>
Form today's perspective, I would probably choose a different profession	1.91 (0.91)
Work psychologists have not established themselves on the market	3.64 (1.06)
It is difficult to develop a professional career as a work psychologist	3.58 (1.10)
A stronger legal foundation is necessary to make a living as work psychologist	4.43 (0.82)
The amount of time defined by law that may be allocated to work psychologists is insufficient for the evaluation of work-related psychological stressors	4.15 (1.02)
In order to ensure the quality of my work, I often invest additional, unpaid time	3.12 (1.31)
Most people don't know what work psychologists do	4.10 (0.91)
Most employers are not aware of the competencies of work psychologists	4.08 (0.94)
I find it difficult to explain to others what work psychologists do	1.86 (0.91)
A self-confident appearance as work psychologist would facilitate my work	2.85 (1.35)
The occupational profile of work psychologists is so vague that sometimes, I am uncertain about my own competencies	2.33 (1.10)

Note. Five-point response scale: 1 (*no, not at all*) to 5 (*yes, definitely*).

Table 6. Items of the index *cooperation with occupational physicians*.

Item wording	<i>M (SD)</i>
Cooperating with occupational physicians is reasonable to me	4.20 (0.82)
In my personal experience, cooperation with occupational physicians becomes difficult on a regular basis ^a	2.89 (1.11)
I would like to strengthen the cooperation with occupational physicians	3.66 (0.97)
I have the feeling that occupational physicians are not interested in a well-functioning cooperation ^a	2.94 (1.16)

Note. Five-point response scale: 1 (*no, not at all*) to 5 (*yes, definitely*).

^aReversed items.

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