Knowledge Workers' Identities at the Beginning of their Professional Development: Evidence from the Medical Profession

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Abstract

The identities of knowledge workers are shaped by organizational-level factors and by attributes of their occupation. Therefore, we distinguish between professional workers' organizational and professional identification. Organizational identification is considered as a powerful construct having the potential to influence organizational behaviour. This concept was examined both in profit and non-profit organizations and proven to be a powerful predictor of various job-related attitudes and outcomes. Although the professional workforce and knowledge-based workers are becoming more important in the global knowledge economy, the concept of professional identification has been understudied in social identification literature. Given that the identification is a dynamic process, especially intriguing is the question of how organizational and professional identities interact at different stages in a professional workers' career. The purpose of this paper is to examine the organizational and professional identities of knowledge workers at the beginning of their professional development. Organizational and professional identification have been relatively understudied in the university context and this paper tends to fill the literature gap by examining individual and group-level antecedents to identification with the university and medical profession. Several important findings emerged from our analysis. Consistent with the previous studies, our results indicate that levels of organizational and professional identification are correlated. Furthermore, our results show that knowledge workers experience a stronger sense of belonging to their profession at the beginning of their professional development. Finally, we provide insightful findings on the individual and group-level identification antecedents.

Keywords: knowledge workers, medical profession, organizational identification, professional identification

1. Introduction

Individuals hold multiple identities within the organizational environment [17], [22]. The identities of knowledge workers are shaped by organizational-level factors and by attributes of their occupation.

Therefore, we distinguish between professional workers' organizational and professional identification. Organizational identification is considered to be a powerful construct having the potential to influence organizational behaviour. This concept was examined both in profit and non-profit organizations and proven to be a powerful predictor of various job-related attitudes and outcomes [17]. Although the professional workforce and knowledge-based workers are becoming more important in the global knowledge economy, the concept of professional identification has been understudied in social identification literature. This remains the case despite professional identification was confirmed as an antecedent to outcomes such as organizational commitment and job satisfaction [15].

Given that the identification is a dynamic process, especially intriguing is the question of how organizational and professional identities interact at different stages in a professional workers' career.

Medical doctors are considered to be highly professional occupations and therefore represent a particularly insightful area for gaining a deeper understanding of this subject. This paper aims to contribute to the literature on organizational identification by providing empirical evidence on the antecedents and the relationship between organizational and professional identification of medical students. Our main assumption is that both forms of identification are fostered by the organization (university) and individual level antecedents, as well as that students relate differently to their university and the profession.

The structure of the paper is as follows. First, we provide a theoretical background on the concepts of organizational and professional identification, particularly focusing on the interdependent nature of their relationship, as noted in the previous studies. Then we present findings of an empirical study using a sample of medical students of the largest and oldest medical school in Croatia. We then outline the potential limitations of our study and propose an agenda for further research. In the final section, the implications for higher education institutions are discussed.

2. Theoretical Background and Research Problem

Organizational identification has long been in the focus of organizational behaviour scholars and among the firsts to define this concept were Ashforth & Mael in 1989. Drawing on the social identity theory, organizational identification is defined as the perception of oneness with or belongingness to a group [1]. Social identity theory remains one of the most dominant approaches to the study of organizational identification, represented among some of the most influential studies in the field [5], [17], [25]. Organizational identification represents the underlying bond between an individual and his organization as it was demonstrated to be related to numerous important organizational outcomes such as job involvement, employee performance and turnover rates [8], [16], [13]. In the context of non-profit organizations, organizational identification proved to be related to leadership practices [3], perceived organizational image [21], loyalty [2] and philanthropic behaviour [19].

A growing body of literature points to the existence of multiple identification foci in an organizational environment such as team and workgroup level factors, organization-level factors and profession or occupation related factors [14], [10], [20]. Somewhat the understudied form of identification is professional identification which refers to the extent to which a person experiences a sense of belongingness to his profession and recognizes themselves in their professional values [7].

Even though professional identification has been less examined compared to other identification profiles, it is considered to be an important construct having the potential to influence knowledge workers' job-related behaviours [15]. For example, Garcia-Falières & Herrbach [7] shown that auditors who are highly identified with their profession more frequently experience negative emotions in their work environment. Further, highly professional occupations such as lawyers, engineers, and medical doctors differ from less professionalized occupations in terms of their specialized education practices and society perceives them as individuals with a unique and valuable set of skills. Such professionals are expected to sense a stronger sense of belonging to their profession than members of other professions [15].

Previous studies confirmed that organizational and professional identifications are correlated [7], [24]. Examining employees of a daily newspaper company, Russo [23] demonstrated that journalists identify more with their profession than with the companies they work for. However, her results further demonstrated that organizational identification is a better predictor of job satisfaction. Further, levels of professional and organizational identification are confirmed to be a predictor of the adaptation of new work behaviours, namely medical doctors are found to be willing to adopt new work behaviour when they are weakly identified with their profession and strongly identified with their employing organization [9]. Johnson et al., [11] demonstrated that veterinarians identify differently with their profession, organization, and workgroups, as well as that the level of identification, depends on veterinarians' employment status. Their results suggest that veterinarians employed in non-veterinary organizations identify more with their profession and workgroup.

Studies on organizational and professional identification are usually set within the corporate environment and only a small proportion of authors examined identification among the university students. Identification is not a fixed construct but a dynamic psychological state that evolves and changes over time and it has proven to exist even among potential students without formal university membership that had no previous interaction with universities they plan to attend [26]. Identification with profession occurs long before the professionals join their employing companies [23]. For most professionals, feeling of belongingness to their profession is expected to emerge in schools when they are first familiarized with the profession's norms and attributes and it is expected to evolve through different career stages [15].

Given that identification in the early stages of professional development has been understudied in previous literature this paper aims to examine which factors contribute to a strong identification with university and profession among medical students, as well as whether there are differences between these two forms of identification. Our first assumption is that the level of professional identification among medical students is higher than the level of organizational identification. We support this claim by the fact that higher levels of professional identification have been confirmed within professionals in advanced career stages as well. In line with the call for a further investigation of identification antecedents in different organizational settings [22], we examined two sets of identification antecedents: (1) organization-level antecedents and (2) individual-level antecedents. As s strong organization level antecedent, we propose student satisfaction with the university (school). We assume that the level of satisfaction with the university has the potential to influence the intensity of both organizational and professional identification, namely that level of satisfaction is positively related to both forms of identification. We further propose a set of different individual-level antecedents comprising: (1) student's demographic characteristics, (2) university tenure, (3) academic success, (4) time spent at university facilities, (5) learning efforts, (6) membership in student associations, (7) investing time in professional development, (8) having a close family member who studied at the same university and (9) having a parent who is a medical doctor.

3. Methods and Sample

Data was collected through online questionnaires developed at the TypeForm online platform.

Questionnaires were distributed to students of the largest Croatian public medicine school – Zagreb school of Medicine, University of Zagreb, and data collection took place during December 2018. Organizational and professional identification (OID & PID) were measured on Mael & Ashforth's [17] 6-item instrument on a 5-point Likert scale (1-strongly disagree; 5-strongly agree). Item examples are: "*When someone criticizes my profession, it feels like a personal insult*" and "*When someone criticizes my school, it feels like a personal insult*". Student satisfaction (SAT) was measured on modified Douglas, Douglas & Barnes [4] instrument containing 5 items on a 5-point Likert scale (1-strongly disagree; 5-strongly agree). Students expressed their level of satisfaction with the following attributes: (1) teaching staff friendliness, (2) teaching stuff approachability, (3) teaching staff competencies, (4) overall friendliness of the school's environment, and (5) quality of school's classrooms and equipment. Grade point average (GPA) was used as a measure of a student's academic success. The effort was measured as the average time student spends learning per day, and to assess whether students invest their time in professional development, we asked them about participation in conferences and workshops outside the school's curriculum. Data analysis was carried using the SPSS statistical software package.

We chose not to study freshmen students but students with longer university tenure. The final sample for our study was composed of 279 students, 64,9% of them being females and 35,1% males.

The average age of our respondents was 22,3 years and the majority was in their fifth year of study (26,9%). The majority of our respondents were born in the city where the medical school is located (51,3%), and 16,49% of all respondents lived in a dormitory. A large proportion of respondents had a close family member studying the same medical school (20,1%), and 15,4% of them had a parent

who is a medical doctor. Most of the respondents had a GPA ranging from 3,6 to 4,0 (26,2%). On average, the respondents spent 24,4 hours per week studying while 32,3% of them regularly studied in the school's library. In the past academic year, 68,82% of our respondents attended at least one workshop, lecture or conference outside the school's curriculum, and 70,3% of them were regularly engaged in some kind of physical activity in their spare time. The majority of the respondents from the sample (63,8%) spend 4-6 hours in school facilities per day, and 69,2% volunteered in student associations or worked as student assistants. In total, 65,23% of our respondents considered themselves to be successful above the average.

4. Results

Table 1 presents the descriptive for the key variables in the analysis.

Table 1. Descriptive

	N	Mean	Std. Deviation
OID	279	2,897252	,8860964
PID	279	3,258659	,9706433
SAT	279	2,954004	,7253636

The results indicated to higher intensity of professional compared to organizational identification. Further, we looked at the correlation between the observed variables.

Table 2. Correlations

		OID	PID	SAT
OID	Pearson Correlation	1	,692**	,273**
	Sig. (2-tailed)		,000	,000
	N	279	279	279
PID	Pearson Correlation	,692**	1	,155**
	Sig. (2-tailed)	,000		,009
	N	279	279	279
SAT	Pearson Correlation	,273**	,155**	1
	Sig. (2-tailed)	,000	,009	
	N	279	279	279
**. Correlation is significant at the 0.01 level (2-tailed).				

The Pearson correlation coefficient indicated a moderate correlation between organizational and professional identification (r=,273; p<0,01). The results also showed that student satisfaction is weakly correlated to both organizational and (r=,273; p<0,01) professional identification (r=,155; p<0,01).

Further, a dependent (paired) samples *t*-test was performed to examine whether there are significant differences between two forms of identification.

Table 3. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	OID-PID	-,3614068	,7327222	,0438669	-,4477604	-,2750533	-8,239	278	,000

Test results (t(278)=-8,239, p=0.000) provided evidence to statistically significant difference in identification with organization (M=2,897, SD=,886) and profession (M=3,259, SD=,9706), t(278)= -8,239, p=0.000.

Next, Analysis of Variance (ANOVA) was used to examine the individual-level identification predictors. The results showed that there were no differences in the intensity of organizational and professional identification considering respondents' demographic characteristics (age and gender), university tenure, academic success, time spent at university facilities, learning efforts, and membership in student associations. Having a close family member who studied at the same university and having a parent who is a medical doctor also didn't prove as significant identification antecedents. Investing time in professional development proved to be the only statistically significant identification predictor. Table 4 shows the identification scores for the groups of the respondents concerning their professional development activities.

Table 4. Professional development activities descriptive

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
OID	yes	192	2,928820	,9036616	,0652162	2,800183	3,057456	1,0000	4,8333
	no	87	2,827585	,8469600	,0908036	2,647073	3,008097	1,0000	4,5000
	Total	279	2,897252	,8860964	,0530492	2,792823	3,001681	1,0000	4,8333
PID	yes	192	3,348954	,9324423	,0672932	3,216220	3,481687	1,0000	5,0000
	no	87	3,059387	1,0277118	,1101823	2,840352	3,278422	1,0000	5,0000
	Total	279	3,258659	,9706433	,0581109	3,144266	3,373052	1,0000	5,0000

Table 5. ANOVA (Professional development activities)

		Sum of Squares	df	Mean Square	F	Sig.
OID	Between Groups	,614	1	,614	,781	,378
	Within Groups	217,663	277	,786		
	Total	218,276	278			
PID	Between Groups	5,020	1	5,020	5,413	,021
	Within Groups	256,897	277	,927		
	Total	261,917	278			

Our results showed that there is a statistically significant difference in professional identification among students who have invested their time in professional development activities (M=3,349; SD=,932) and those who didn't (M=3,059; SD=1,028). However, the same was not the case for organizational identification.

5. Discussion

Several important implications emerged from our findings. First of all, consistent with previous studies [12]; [7], our research indicates that the level of identification with the organization (school) and the medical profession are correlated. Such a relationship can be explained by the fact that, in highly specialized occupations, identification with the organization stems from the extent to which the organization can provide members with the opportunity to develop professionally [12].

Furthermore, the results indicate that medical students identify more with the medical profession than with the medical school which leads to the conclusion that knowledge workers feel a strong commitment to their profession even before they start their professional careers.

Furthermore, the research provides insightful findings on the individual and group-level identification predictors. The results indicate that student satisfaction was shown to be correlated to both forms of identification. The results are consistent with earlier work of Mael & Ashforth [17] who demonstrated that alumni identify more strongly with the university when they are more satisfied with how their study expectations were met. Further, Myres, Davis, Schreuder, and Seibold [18] showed that the same applies to undergraduate students as well.

Contrary to expected, most of the proposed individual-level antecedents didn't significantly influence identification levels. Investing time in professional development was shown to be an important identification predictor and students who participated in activities intended for additional

education and training such as workshops, conferences, and lecturers were more identified with their profession.

There are several limitations to our study. Firstly, the study was conducted among students of only one school (one profession) and that is why the generalization of our results is to some extent limited.

Further, levels of organizational and professional identification were obtained based on the cross-sectional data and therefore we were not able to capture the dynamic nature of these constructs. The potential limitation is also the nature of obtained data which is all self-reported and as such opens the question of respondents' objectivity. Aiming to gain a deeper understanding of the relationship between organizational and professional identification, we left some questions unanswered but also generated several new ones to be considered. First, to overcome some of the encountered limitations we call for future researchers to use longitudinal studies and more diverse samples (e.g., different professions). Also, a more complete understanding of the observed phenomenon could be achieved by applying adequate qualitative research methods. Furthermore, our results suggest that future research should focus on a more detailed examination of individual-level predictors such as student motivation and career aspirations.

Regardless of the aforementioned limitations, this study adds to the literature on organizational and professional identification in several ways. Firstly, the study provides empirical evidence on the relationship between organizational & professional identification of collage students which was neglected in previous studies. Our results indicate that educational institutions play an important role in professional workers' identity formation. Further, following calls for examining a new set of identification predictors in different organizational environments, we have shown that factors such as students' desire to develop professionally and improve their skills are an important indicator of a professional identity. This is an important finding that contributes to a better understanding of the university-student relationship. Universities likely have the potential to influence students' identities allowing them to grow professionally by providing a range of extracurricular activities in their capacities.

6. Conclusion

The current study advances our understanding of organizational and professional identification of knowledge workers. The major findings of this study are that the intensity of organizational and professional identification differs significantly among medical professionals at the beginning of their professional development. Furthermore, this study demonstrated that student satisfaction is a significant predictor of both forms of identification. Our findings further imply that universities can shape the identities of their students through their extracurricular activities. Thus, our study contributes to a better understanding of the relationship between universities and students. To conclude, we believe that results are beneficial for academic policymakers as they indicate that universities have the power to strengthen their bond with their students and create long-lasting mutually beneficial relationships.

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