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How long are newcomers new in different occupations?

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Abstract

Purpose – This study aims to examine the effects of occupational characteristics on the length of time required to socialize newcomers. The authors examine task mastery, role clarity and social acceptance as indicators of socialization.

Design/methodology/approach – To test the hypotheses, the authors used occupational data from the Bureau of Labor Statistics and survey data of subject matter experts in 35 occupations.

Findings – Findings show that occupational differences account for a significant variance in the time needed to socialize newcomers. Across occupations, it takes longer to achieve task mastery than role clarity or social acceptance. Occupational complexity increases the time it takes for newcomers to attain task mastery, role clarity and social acceptance. Additionally, unstructured work and decision-making freedom increase the time it takes for newcomers to attain role clarity.

Originality/value – This study provides both theoretical and empirical guidance on the duration of the organizational socialization period. The study also provides empirical support for prior propositions that different types of newcomer learning occur at different rates.

Keywords Organizational socialization, Newcomers, Duration, Occupation, Onboarding

Paper type Research paper

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The time period when an employee begins working in a new organization is particularly relevant to organizational socialization, defined as the "process by which an individual acquires the social knowledge and skills necessary to assume an organizational role" (Van Maanen & Schein, 1979). The process of organizational socialization occurs *within* the individual and thus includes efforts on the part of both the organization (e.g. company onboarding) and the individual newcomer (e.g. proactive information-seeking) (Chao, 2012). Research to date demonstrates that what organizations and individuals do during the organizational socialization process significantly influences a wide range of important outcomes such as employee satisfaction, retention, performance and commitment (Wanberg, 2012).

Organizational socialization research depends on understanding the duration of newcomer adjustment process from beginning to end. Yet, the duration of any socialization process is a matter of socially constructed, rather than objective time (Zaheer et al., 1999). This makes pinpointing the time frame even more challenging.

Despite calls for greater attention to time in organizational research (Shipp & Fried, 2014), there are many challenges that scholars face in designing research studies, beginning with the seemingly simple question of "How long are newcomers new?" In this paper, we present the findings from a survey of professional association board members across 35 occupations regarding the definition of the newcomer period. We focus on occupations because organizational socialization scholars have called for greater attention to occupational differences (Ashforth, 2012) and occupation is an important contextual factor in organizational research.

This research contributes to organizational socialization scholarship in several ways. First, we discuss the theoretical foundations explaining the duration of the newcomer period, a discussion that should be helpful to both organizational socialization scholars and practitioners. Second, we offer new data regarding occupation-specific newcomer periods to the organizational socialization community that would help guide methodological decisions in future studies.

Implications of time in organizational socialization research

One of the central concepts in the study of time is *duration*, "the extent of the temporal interval that characterizes some event" (Kelly & McGrath, 1988, p. 132). McGrath and Kelly (1986) warn of potentially serious interpretive errors if the duration of time is incorrectly specified. If the interval is too short, the cause may not have had enough time to produce the hypothesized effect. If the interval is too long, the effects may have come and gone, and sometimes the effect is "wearing off" (McGrath & Kelly, 1986). Despite guidance from time scholars, the majority of empirical studies on organizational socialization provide little or no justification for the duration of newcomer periods (Capitano, Mishra, & Selvarathinam, 2019).

Organizational socialization researchers face related challenges in attempting to follow the recommendations of time scholars. There is little guiding theory as well as data published on the duration of organizational socialization. It is crucial that we understand the job characteristics requiring more or less socialization time for two reasons. First, practitioners need to design onboarding processes tailored to their particular employee groups. Second, scholars need contextual information to design studies that will result in valid inferences. The purpose of our study is to respond to these needs by providing evidence regarding the length of time various occupations take to socialize newcomers, as well as demonstrate the relationships between common job characteristics and the time required to be socialized.

Theoretical framework

We organize our theoretical development around three key indicators of newcomer adjustment: task mastery, role clarity and social acceptance (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007).

Task mastery

Task mastery is defined as "learning the tasks of the new job, and also gaining self-confidence and attaining consistently positive performance levels" (Feldman, 1981, p. 310). Mastering tasks, e.g. of a new job, results in perceptions of competence (Harackiewicz *et al.*, 1992). Competence is a universal psychological need and a basic human motivating behavior according to self-determination theory (Ryan & Deci, 2000). Thus, we expect all newcomers are motivated to master the tasks of their new jobs to feel competent.

However, Ashforth (2012, p. 169) suggests that the context of work affects the socialization process, proposing job complexity as the primary factor because hard-to-master knowledge, skills and abilities (KSAs) "require a more protracted and intense socialization process." To explicate why mastering the tasks of the job takes longer in certain occupations than others, we ground our hypotheses in cognitive load theory (Sweller, 1988). Cognitive load theory proposes that because humans have enormous long-term memory, but a limited working memory, the role of learning is to shift KSAs of a content area to long-term memory to make working memory available. Furthermore, the ease of learning content varies, based on both the instructional design (exogenous cognitive load) as well as the inherent difficulty of the content itself (intrinsic cognitive load). The primary determinant of intrinsic cognitive load is element interactivity – if the number of interacting elements in a content area is high, the intrinsic cognitive load will be high. High element interactivity occurs when a task cannot be learned without simultaneously learning the connections among a large number of elements (Sweller, 1994).

Therefore, occupations involving higher intrinsic cognitive load in terms of the number of KSAs required to perform the job should require more time to master the tasks of the job.

H1. According to subject matter experts (SMEs), occupations characterized by greater complexity in terms of the variety of KSAs required will be associated with longer organizational socialization, specifically task mastery.

Role clarity

Role clarity is the extent to which employees clearly understand what is expected of them at work (Chen & Bliese, 2002). These expectations are socially constructed, requiring the newcomer to come to agreement with the work group regarding job tasks to be performed along with task priorities and time allocation (Bauer *et al.*, 2007). This process is more challenging for newcomers, who are just beginning to interact with co-workers. Early interactions between newcomers and organizational incumbents contain a high degree of uncertainty, which according to uncertainty reduction theory is unpleasant and stressful, motivating the newcomer to reduce the level of uncertainty through information seeking (Berger & Calabrese, 1975). Uncertainty reduction theory further posits that as communication between the newcomer and organizational incumbents increases, the level of uncertainty decreases. Thus, we expect that all newcomers are motivated to reduce uncertainty by actively seeking information.

In occupations characterized by clearly defined procedures and policies, there is greater role clarity and therefore less uncertainty. Indeed, studies of role ambiguity (lack of role

clarity) find that formalization is negatively associated with role ambiguity (Pearce, 1981). This finding is in line with Ashforth's (2012) suggestion that role ambiguity slows the rate of adjustment.

Furthermore, Tubre and Collins (2000) propose that ambiguity is associated with decision-making authority – as decision-making authority increases, greater role ambiguity (and less role clarity) should be expected. Thus, we propose that occupations involving less formalization and greater decision-making freedom are more ambiguous, particularly for newcomers.

H2. According to SMEs, occupations characterized by (a) less structure and (b) more decision-making freedom are associated with longer organizational socialization, specifically role clarity.

Social acceptance

Social acceptance is coming "to feel liked and accepted" by work group members (Bauer *et al.*, 2007, p. 708). Although social acceptance has been emphasized less than task mastery or role clarity in the socialization literature, it likely matters at least as much as the other two (Ashforth, 2012). Similar to social acceptance is the concept of relatedness, the strength and quality of one's connection to others in a particular context (e.g. work group) (Ryan, Deci, & Grolnick, 1995). Self-determination theory posits that relatedness is an innate need, motivating human behavior (Ryan & Deci, 2000). Thus, we expect that all newcomers strive for a sense of belonging, of feeling like "one of the gang" (Chao, O'Leary-Kelly, Wolf, Klein, & Gardner, 1994).

According to Baumeister and Leary (1995), experiencing a sense of belonging requires two elements:

(1) frequent, pleasant interactions with a few other people; and

(2) the occurrence of these interactions in the context of an enduring framework of mutual concern.

A newcomer may work side by side with other workers on a daily basis, but if the newcomer anticipates constant change in the makeup of the group, he/she would be less likely to invest in the relationships. Conversely, even if a newcomer anticipates that his/her group of co-workers will remain stable, it would be difficult to achieve a sense of belonging if he/she rarely interacted with them. Therefore, we propose the social acceptance indicator of organizational socialization is accelerated by the frequency of interactions with co-workers as well as membership in work groups:

H3. According to SMEs, occupations characterized by (a) infrequent co-worker interaction and (b) independent (as opposed to team) work are associated with longer organizational socialization, specifically, social acceptance.

Relative rates of change

Underlying this research is the premise that organizational socialization is a process of learning (Ostroff & Kozlowski, 1992). Notably, research suggests that learning may occur at different rates (Fisher, 1986). This raises the question of whether indicators of organizational socialization (e.g. task mastery, role clarity and social acceptance) will become evident at different times. Because no guiding theory proposes how quickly these indicators occur relative to one another, we examine this in an exploratory fashion:

RQ. Do newcomers attain the three indicators of organizational socialization – task mastery, role clarity and social acceptance – in the same amount of time, or does attaining each of the indicators require different amounts of time?

Methods

We organized our data collection on the Bureau of Labor Statistics (BLS) 2018 Standard Occupational Classification (SOC) system, which is used by federal agencies to classify workers into occupational categories. Workers are classified into 1 of 867 detailed occupations that are combined to form 459 broad occupations, 98 minor groups and 22 major (non-military) groups.

Our goal was to collect data representative of a large portion of the US workforce. Therefore, within each of the 22 groups, we selected 2 of the 4 most populous occupations. We collected data on these 44 occupations from primary sources (SMEs) and secondary sources (government published data). Approximately 23 million Americans were employed in the occupations sampled in this study. Further, average annual wages for these occupations varied across the following categories: below $30,000 (6 occupations), $30,000+ to $60,000 (15 occupations), $60,000+ to $90,000 (8 occupations) and above $90,000+ (9 occupations).

Participants

Organizational socialization scholars have called for improvements to newcomer self-reporting in research by more objective measures assessed *by others* (Chao *et al.*, 1994). A key limitation to self-report data in organizational socialization is invalid measurement, i.e. poor construct validity. "We know from training literature that self-reports are notoriously inaccurate, usually in the positive direction," i.e. people think they are better than they are (Vancouver & Warren, 2012, p. 192).

Thus, we designed this study using validated measures assessed by individuals other than newcomers themselves. We identified professional associations for each of the 44 occupations from Web-based searches. We surveyed professional association board members as SMEs (Bellarosa & Chen, 1997) because they generally have many years of experience in a particular occupation and have observed many newcomers begin working within their own organizations. Additionally, observers of newcomers often have a wider perspective on what *typical* newcomer behavior is in comparison with newcomers themselves (Arnold & Davey, 1992).

For each occupation, we collected data from three to ten SMEs, omitting data for occupations with fewer than three SME responses. The final list of 35 occupations included in the analyses with demographic information by occupation is reported in Table 1. The list of professional associations is available from the authors.

Measures

To assess our dependent variables, SMEs within each occupation assessed newcomer socialization – length of time to achieve task mastery, role clarity and social acceptance. To assess our independent variables, we used O*Net and the BLS for occupational data on occupational complexity, structure, decision-making, co-worker interaction and independent (cf. team) work. Just as companies may conduct job analysis and develop competency models to characterize jobs, the BLS developed and maintains O*Net as a public source of information about hundreds of occupations.

Occupation	SOC code	N	Male (%)	White* (%)	Mean age	Working full time (%)	Working part time (%)	Retired (%)	Occupational tenure 9+ years (%)
Financial manager	113030	4	0	100	42	100	0	0	50
Public school admin.	119030	10	50	70	47	80	10	10	90
Management consultant	131110	7	57	86	54	86	14	0	100
Auditor/accountant	132010	4	50	50	46	100	0	0	100
Computer/IT analyst	151120	4	100	100	67	50	0	50	100
Systems administrator	151140	5	0	100	53	80	20	0	100
Civil engineer	172050	5	40	40	37	100	0	0	80
Mechanical engineer	172140	3	50	67	**	67	0	0	100
Environmental geologist	192040	3	0	100	67	67	0	33	100
Psychologist	193030	4	25	0	55	100	0	0	75
Counselor	211010	5	40	100	58	40	60	0	80
Social worker	211020	3	67	67	46	100	0	0	100
Lawyer	231010	3	0	100	71	33	67	0	100
Paralegal	232010	6	17	100	50	100	0	0	83
Middle school teacher	252020	6	83	83	43	100	0	0	83
Teacher assistant	259040	4	25	100	45	75	25	0	75
Designer	271020	8	25	0	47	88	13	0	88
Public relations	273030	8	63	75	52	88	13	0	100
Registered nurse	291140	4	50	75	62	50	25	0	100
Certified nursing assistant	292050	3	100	100	45	100	0	0	100
Physical therapist	312020	3	67	100	54	67	0	33	100
Correctional officer	333010	8	63	63	51	88	0	0	88
Security guard	339030	3	67	100	63	100	0	0	100
Cook	352010	5	60	60	46	100	0	0	80
Server/wait staff	353030	3	33	100	51	100	0	0	100
Pest control worker	372020	7	100	86	51	100	0	0	71
Grounds maintenance	373010	3	100	100	63	100	0	0	100
Childcare worker	399010	3	100	100	49	100	0	0	100
Sales professional	411010	4	25	75	58	100	0	0	100
Customer service rep.	433050	3	67	67	61	67	33	0	100
Administrative assistant	436010	6	83	50	55	100	0	0	100
Logger	454020	4	50	0	57	100	0	0	75
Automotive technician	493020	3	67	0	54	100	0	0	100
Steel fabricator	512090	4	75	0	55	100	0	0	100
Bus driver	533020	3	33	0	52	100	0	0	67
Total	161		52	68	51	87	8	3	90

Notes: *We asked participants to identify race. For brevity, here we report the percentage of white participants. Please contact the authors for more detail about the full racial composition of the SMEs. ** All three mechanical engineers left the age question blank

Table 1.
SMEs' demographic information

We assessed the time it typically takes newcomers to become socialized with six items. The stem for all items was "Based on your experience, how long does it typically take new [occupation] professionals to. . ."

Task mastery

We adapted two items from the performance proficiency factor by Chao *et al.* (1994) to assess task mastery: "[. . .] master the required tasks of the job?" and "[. . .] efficiently perform the required tasks of the job?"

Role clarity

We adapted two items from Rizzo, House and Lirtzman (1970) to assess role clarity: "[. . .] know their task responsibilities?" and "[. . .] feel certain about how much authority they have?"

Social acceptance

We adapted two items from the people factor by Chao *et al.* (1994) to assess social acceptance: "[. . .] be easily identified as 'one of the gang'" and "[. . .] consider co-workers as friends?"

Because we used two-item measures, we report Spearman–Brown reliabilities (Eisinga, Te Grotenhuis, & Pelzer, 2013) of task mastery (r_{kk} = 0.46), role clarity (r_{kk} = 0.87) and social acceptance (r_{kk} = 0.55). The means for task mastery, role clarity and social acceptance by occupation are reported in Table 2.

Occupational complexity

O*Net provides the level of importance, on a 0–100 scale, for each occupation, for 33 knowledge items, 35 skill items and 52 abilities items. For instance, one knowledge item is mathematics. Math-intensive occupations are assigned higher scores (e.g. 71 for accountant vs 24 for massage therapist). O*Net considers KSAs at or above a score of 50 to be important. To assess the complexity of each occupation, we took the sum of the number of important (score of 50+) KSAs. Within our list, civil engineer had the highest important KSA sum (58), and grounds maintenance worker had the lowest important KSA sum (15).

Structure, decision-making, coworker interaction and independent work

Consistent with Glomb, Kammeyer-Mueller and Rotundo (2004), we extracted work-related characteristics from O*Net's work context data. Within the 57 work context items, we identified items that conceptually overlap our variables. Task structure was assessed with the O*Net item: "To what extent is this job structured for the worker, rather than allowing the worker to determine tasks, priorities, and goals?" Decision-making freedom was assessed with the item: "How much decision-making freedom, without supervision, does the job offer?" Co-worker interaction was assessed with the item: "How often do you have to have face-to-face discussions with individuals or teams in this job?" Finally independent (cf. team) work was assessed with the item: "How important is it to work with others in a group or team in this job?"

Results

We tested agreement using intraclass correlation (ICC)-1, the percentage of variance because of occupation, and ICC-*k*, the reliability of the group level means (Table 3). Results of the ICC-1 suggest that occupation is a significant source of variance for the time it takes newcomers to reach task mastery and social acceptance, and a marginally significant source

Occupation	N	Task mastery Mean	SD	Role clarity Mean	SD	Social acceptance Mean	SD
Financial manager	4	16.13	17.67	8.38	10.47	5.50	2.42
Public school admin.	10	36.00	11.49	12.5	11.59	14.76	10.00
Management consultant	7	32.31	15.67	7.23	5.51	6.18	3.60
Auditor/accountant	4	25.13	12.93	14.33	11.93	5.67	5.58
Computer/IT analyst	4	30.00	28.04	6.25	7.93	6.06	6.19
Systems administrator	5	24.55	14.75	12.65	16.87	24.7	17.46
Civil engineer	5	52.65	37.9	11.70	4.18	9.25	4.78
Mechanical engineer	3	6.06	5.34	1.89	1.83	4.75	1.77
Environmental geologist	3	25.67	11.59	7.75	1.56	2.02	1.71
Psychologist	4	26.50	14.73	13.88	8.78	12.75	4.50
Counselor	5	14.75	7.89	7.13	4.09	5.75	2.02
Social worker	3	19.00	10.54	11.00	6.93	4.33	1.53
Lawyer	3	29.00	8.66	6.00	5.41	4.25	4.12
Paralegal	6	23.75	21.73	63.90	123.9	6.10	3.65
Middle school teacher	6	29.00	13.77	9.08	3.57	7.38	5.61
Teacher assistant	4	10.38	7.97	3.60	2.58	2.30	0.92
Designer	8	18.25	19.22	6.21	5.04	8.25	6.69
Public relations	8	18.00	9.12	4.55	3.04	6.22	2.32
Registered nurse	4	13.19	7.49	13.31	19.15	4.75	4.44
Certified nursing assistant	3	37.50	48.25	5.56	5.83	1.25	0.35
Physical therapist	3	10.42	3.13	5.73	4.44	5.21	5.93
Correctional officer	8	28.50	20.02	12.09	8.68	8.72	4.48
Security guard	3	4.03	1.71	3.20	0.27	3.33	2.31
Cook	5	20.69	24.92	3.64	5.95	3.10	3.12
Server/wait staff	3	4.08	0.73	0.79	0.83	1.45	1.34
Pest control worker	7	11.57	6.23	2.20	1.76	8.29	4.53
Grounds maintenance	3	10.67	9.09	3.08	2.88	3.31	2.07
Childcare worker	3	29.50	26.42	2.11	2.15	13.67	19.35
Sales professional	4	15.75	21.55	3.21	4.16	5.00	3.12
Customer service rep.	3	4.62	3.95	1.02	0.85	5.33	4.04
Administrative assistant	6	12.88	4.71	4.69	1.57	4.40	1.95
Logger	4	19.50	6.36	3.50	3.54	5.75	1.77
Automotive technician	3	50.50	41.9	4.79	6.30	1.42	0.63
Steel fabricator	4	41.00	28.83	10.06	8.07	3.25	1.94
Bus driver	3	5.33	3.21	3.17	1.26	5.25	0.75

Note: *N* = Number of SMEs surveyed in each occupation

Table 2.
Time (in months) to become socialized by occupation

	ICC-1	ICC-*k*	*p*-value
Task mastery	0.19	0.65	0.00
Role clarity	0.05	0.29	0.08
Social acceptance	0.27	0.74	0.00

Table 3.
Variance because of an agreement within occupation

of variance for the time it takes newcomers to reach role clarity. From the ICC-*k*, it is apparent that reliability levels vary for the three indicators. Specifically, within occupation, SMEs were more likely to agree on the time it takes for newcomers to reach task mastery and social acceptance than they did for role clarity.

To answer the research question, we examined whether the three indicators of organizational socialization – task mastery, role clarity and social acceptance – would have similar or different timelines as Fisher (1986) suggests. Using analysis of covariance, we found there were significant differences in the average amount of time it took to achieve each of the three indicators [$F(2, 369) = 78.56$, $p < 0.001$]. Further, Tukey's honest significant difference test revealed that it took about 14.55 months longer, on average, to achieve task mastery than it did role clarity ($p < 0.01$). We also found that it took about 14.65 months longer, on average, to achieve task mastery than it did social acceptance ($p < 0.01$). The average amount of time it took to achieve role clarity and social acceptance did not differ significantly.

Study hypotheses were tested using a series of simple regressions with occupation as a random effect. Supporting *H1*, complexity was positively associated to the length of time it takes a newcomer to reach task mastery ($\beta = 0.46$, $p = 0.01$). Supporting *H2a*, the relationship between unstructured work and time to achieve role clarity was significant ($\beta = 0.61$, $p = 0.048$). Supporting *H2b*, decision-making freedom was significantly related to time to achieve role clarity ($\beta = 0.65$, $p = 0.02$). There was no significant relationship between co-worker interaction and time to achieve social acceptance ($\beta = 0.85$, $p = 0.06$). Further, no significant relationship between the level of independence and time to achieve social acceptance ($\beta = 0.37$, $p = 0.21$) was observed. Thus, *H3a* and *H3b* were not supported.

Post hoc analysis of the relationship between predictor variables (occupational complexity, context and ambiguity) with the organizational socialization indicators that were not included in our hypotheses revealed that occupational complexity, in addition to its relationship with task mastery, was also significantly related with role clarity ($\beta = 0.20$, $p < 0.01$) and marginally related to social acceptance ($\beta = 0.20$, $p = 0.056$).

Discussion

Two challenges facing researchers designing newcomer studies are the following: there is scant published theory describing the duration of the three socialization indicators – task mastery, role clarity and social acceptance; and there is little published data on the duration of employee's status as a newcomer. We sought to begin rectifying these challenges by testing theoretically grounded hypotheses with a survey of SMEs.

Theoretical implications

We contribute to organizational socialization literature in three ways: we highlight the important role of occupational complexity in socialization, demonstrate the relationship between occupational ambiguity and role clarity; and show evidence that frequency of co-worker interaction and team membership may not have the impact on social acceptance that was previously thought.

Our analyses found occupational complexity is associated with longer time to reach task mastery, role clarity and social acceptance. We hypothesized that complexity would be associated with task mastery based on the notion that the greater the number of interacting elements to be learned, the greater the intrinsic cognitive load. The finding that more things to learn takes longer to learn (i.e. mastery of tasks) seems intuitive. The finding that complexity is also associated with longer time to reach role clarity and social acceptance was unexpected. We speculate that occupations with greater variety of KSAs may also be more ambiguous, thus

requiring more time to achieve role clarity. Similarly, it is plausible that greater complexity in an occupation is associated with the need to learn from a greater number of organizational insiders. This may mean that newcomers in more complex occupations need to learn from (i.e. interact with) a greater number of people than newcomers in less complex occupations. It is plausible that feeling welcomed and accepted may take longer when the newcomer needs to interact with more people. Indeed, relationship building inside and outside one's department is associated with social acceptance (Menguc, Han & Auh, 2007).

We also found that ambiguity in a new job – operationalized as unstructured work and decision-making freedom – is associated with longer time for newcomers to reach role clarity. This finding supports Ashforth's (2012) assertion that role ambiguity slows the rate of adjustment.

We found no support for our predictions that face-to-face interactions with co-workers and teamwork accelerate social acceptance. Perhaps team structures do not necessarily require that team members engage in the type of interactions that promote relationship-building. Additionally, there may be a low frequency of face-to-face interaction required for social acceptance. This possibility raises interesting questions about organizational socialization in fully distributed organizations in which all employees work remotely. This is a global organizational trend (Gajendran & Harrison, 2007) which has been accelerated by the COVID-19 pandemic. Given the importance of feeling socially accepted to positive newcomer outcomes (Ashforth, 2012), future research should examine other possible factors influencing the time it takes to achieve social acceptance. Another avenue for future research would be to examine the O*Net occupation value called "social." It is plausible that people drawn to occupations with high social value would be more motivated both to socially accept newcomers and to seek social acceptance as newcomers.

An early theoretical proposition of organizational socialization scholars is that learning progresses at different rates (Fisher, 1986). However, few studies identify the time it takes to achieve two or more indicators of organizational socialization (Feldman, 1977). Our findings suggest task mastery takes significantly longer to achieve than role clarity and/or social acceptance across occupations. Future research may explore whether role clarity and/or social acceptance mediate the relationships between socialization tactics and task mastery.

We also learned that role clarity is a difficult concept for SMEs to agree on. Within occupations, the time it takes newcomers to reach role clarity had relatively low agreement among SMEs. We propose two possible explanations. First, it could be that the time it takes to achieve role clarity varies widely among newcomers and/or organizations. Second, it could be that role clarity as a construct is ambiguous, and raters had different interpretations. This second possibility could point to an opportunity to refine the measures used to assess role clarity.

The SME data should prove useful to scholars considering samples using the same (or similar) occupations. For task mastery, we found it interesting that certain occupations seem to align with the traditionally used time markers of 6 months (e.g. bus drivers) or 12 months (e.g. pest control workers). However, newcomers in other occupations achieve task mastery quicker (e.g. security guards) or slower (e.g. lawyers). Thus, a study of security guards with less than 12-months tenure could be combining "true" newcomers with insiders, whereas a study of lawyers with less than 12-months tenure could be omitting other newcomer lawyers from the sample.

Practical implications

There are several implications for practitioners. Onboarding processes should be customized to the job, such that jobs with more complexity, unstructured work and decision-making freedom require longer onboarding periods. Similarly, practitioners could use their organization's competency model to customize onboarding activities. Furthermore, to encourage new employees, managers might also provide early positive feedback on social acclimation and understanding of the overall organization, knowing that for most newcomers, mastering the job tasks will take longer.

Our findings have implications for human resources beyond newcomer onboarding. Job analysis relies on job incumbents to document the KSAs needed to perform their own roles (Landy & Vasey, 1991). Because job analysis is often the foundation for recruiting, selecting, training and evaluation processes (Schneider & Konz, 1989), knowing the tenure required to achieve task mastery for a particular job is critical if human resource managers are to select appropriate job incumbents for the job-analysis process.

Limitations and future research

Our study should be viewed in light of its limitations. First, to increase survey completion rates, we used two-item measures in the SME survey, and this approach has been challenged for reliability concerns (Eisinga *et al.*, 2013). However, it is not uncommon in newcomer research to use two-item measures (Chen, 2005). Second, by including only occupations for which we had at least three SME responses, we omitted several occupations. Future research can fill this gap.

Our findings raise the question of how the duration of *new employee* status is shaped by other (non-occupational) aspects of context such as nationality. It is plausible that in countries with high turnover, new employees would need to get "up to speed" quickly, as they become the senior employees in a high-turnover group very quickly. In contrast, in countries with low turnover, a new employee with several years of tenure may still be considered the "rookie" if everyone else in the group has been with the organization longer. Future research could explore such cross-national differences. Additionally, the duration of *new* status may vary by organization. Even for the same occupation, some employers may have a culture that demands swift socialization (Ashforth, 2012) whereas other employers may value a slower approach to new employee socialization. Finally, as noted by several SMEs in their comments, new employees with prior experience in the field are often more quickly socialized than peers without prior experience.

Notably, even though social acceptance required the overall shortest time for newcomers across occupations, the difference between the shortest (nursing assistants at roughly 1 week) and longest (systems administrator at roughly 25 weeks) length of time is striking. Future research can look at types of people drawn to occupations to explain temporal differences in social acceptance.

This study also raises the question of whether "how long newcomers are new" differs by vantage point of the newcomers themselves, co-workers and managers. Research in other areas has demonstrated that employees, peers and supervisors frequently differ in their ratings of employee performance (Harris & Schaubroeck, 1988). It would be useful for future research to study newcomer–manager dyads to understand the similarities or differences in perspective regarding the newcomer's speed of adjustment into the organization.

Conclusion

This research integrated two relevant issues in organizational socialization research: time and occupation. Time scholars have called for greater understanding of organizational

processes' duration, such as socialization. Meanwhile, organizational socialization scholars have called for greater understanding of contextual factors, including occupation, on predicting how quickly socialization occurs. Answering these calls, we surveyed SMEs from 35 occupations, demonstrating occupation significantly impacts the duration of organizational socialization, occupational characteristics are related to duration of the process and three commonly studied indicators of organizational socialization – task mastery, role clarity and social acceptance – each take different amounts of time to occur.

Our findings regarding occupational differences in newcomer duration should encourage organizational socialization scholars to consider using easily accessible occupational characteristics data to supplement their own search for sample-specific information regarding organizational socialization duration. Likewise, these findings provide relevant information to inform practitioner designs of new employee onboarding programs.

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