Injunctive and Descriptive Logics during Newcomer Socialization: The impact on Organizational Identification, Trustworthiness, and Self-Efficacy

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Abstract

Failure to adjust to a new organization has major personal, team and organizational costs. Yet, we know little about how newcomers’ pre-entry institutional assumptions influence and shape their subsequent socialisation. To address this issue, we propose and test a model examining whether the discrepancy between newcomers’ injunctive logics (pre-entry beliefs about what institutional practices ought to be) and their descriptive logics (actual experience of these institutional practices) influences the development of organizational identification, perceived organizational trustworthiness, and self-efficacy. We examined the impact of discrepant logics in a healthcare context by surveying new staff on their first day of employment, and then again six weeks later (N=264). We found that when there was a negative discrepancy between injunctive and descriptive logics (that is, when the prevailing logics did not match what newcomers thought they ought to be) organizational identification and perceived organizational trustworthiness decreased over time, and consequently so did self-efficacy. The results highlight the important role of institutional logics in shaping socialization processes and outcomes soon after organizational entry. We conclude that histories and personal and professional moral codes provide a background against which newcomers evaluate their new institutional, social and work context.

Keywords: Organizational identification, trust, newcomer socialization, self-efficacy, institutional logics
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To understand how employees make a successful transition to a new workplace, theorists have traditionally focused on the practical tactics that organizations use to promote the socialization of employees into their new roles (Ashforth & Saks, 1996; Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007). While important, this focus neglects the social-psychological processes that affect newcomers’ transitions from one workplace to another. To this end, scholars have independently suggested that institutional logics, and the development of organizational identification and trust, play critical roles in successful socialization (Schaubroeck, Peng, & Hannah, 2013; Smith, Amiot, Smith, Callan, & Terry, 2013; van der Werff & Buckley, in press; Taris, Feij, & Capel, 2006). In this study, we combine these insights and processes to propose that any explanation of socialization should indicate how organizational identification and perceived organizational trustworthiness (POT) develop with reference to newcomers’ idiosyncratic pre-existing beliefs about the institutional, moral, social and organizational context. While past research offers a variety of mechanisms by which organizational identification and POT can form, this prior research seldom acknowledges that these processes are influenced by beliefs formed prior to organizational entry.

To take into account the fact that people with a variety of backgrounds and agendas join new organizations, we test the impact of pre-entry beliefs about institutional logics on newcomer socialization. According to Battilana and Dorado (2010; p. 1420), institutional logics are “taken-for-granted social prescriptions that represent shared understandings of what constitutes legitimate goals and how they may be pursued (Scott, 1994).” Thus, they can be understood as, “Broad belief systems that shape cognition and guide decision making in a
field,” (Battliana & Dorado, 2010; p. 1420). In the current study, we demarcate two different kinds of institutional logics: descriptive institutional logics, and injunctive institutional logics. We propose that newcomers’ beliefs about the institutional logics that should operate at their new organization are the ‘injunctive logics’, and the reality of logics actually used in practice within the organization are the ‘descriptive logics’ (cf. Cialdini, Reno, & Kallgren, 1990; Smith, Thomas & McGarty, 2015). The concept of injunctive logics captures the fact that newcomers use a moral map, informed by their past experiences and beliefs, to evaluate the procedures and practices of their new organization. Importantly, injunctive and descriptive logics will have different origins, meanings, motivations and consequences (cf. Deutsch & Gerard, 1955). We propose that discrepancies between injunctive and descriptive logics will affect how a newcomer feels about the organization, and their ability to act appropriately and competently within it.

Through assessing the impact of discrepant injunctive-descriptive institutional logics on individual socialization processes, the current study addresses calls for more cross-level research that integrates concepts from institutional theory with more micro-level concepts and processes (see for example, Battliana & Dorado, 2010). This is important because ultimately, it is organizational actors (i.e., individual employees) who must enact and deal with institutional logics. As ‘taken-for-granted social prescriptions’, institutional logics are macro-level belief systems that shape the cognition and decision making of individuals operating in a field. Thus, while the logics exist at the macro level, they influence and are created and re-created at the individual level.

We examine how logics discrepancies impact on changes in identification and POT over time. Further, we investigate how, in turn, these changes in identification and POT impact on a key socialization outcome: the development of newcomers’ self-efficacy. In this way, we use the institutional logics approach as a metatheory (Thornton & Ocasio, 2008) to
provide a framework for understanding where the development of identification and POT lie in relation to newcomers’ broader understanding of their professions and organizational field.

**Institutional Logics and Socialization**

Organizational socialization is the process by which newcomers acquire the attitudes, behaviors, knowledge and skills required to participate and function effectively as a member of the organization (Van Maanen & Schein, 1979). Part of effective organizational socialization is developing an understanding of how prevailing institutional logics are enacted within the organisation. This is necessary because institutional logics are the lenses through which newcomers can understand and evaluate the legitimacy and meaning of organizational forms and managerial practices (Greenwood, Diaz, Li, & Lorente, 2010). Logics “pose the problems, provide the language for explaining and understanding them, and determine their solutions” (Ford & Ford, 1994, p. 757).

In the current research, we examined institutional logics among newcomers in the healthcare sector. In this highly bureaucratic sector, two broad sets of institutional logics exist – a professional clinical logic that serves to maximise patient outcomes and care (Dunn & Jones, 2010); and a managerial logic that aims to increase efficiency and cost-effectiveness (Kitchener, 2002; Reay & Hinings, 2005). Traditionally, the clinical logic has dominated healthcare systems with its patient-centred philosophy prompting an ethical responsibility to ensure the best possible outcomes for an individual patient. However, with the drive for increased efficiency and effectiveness in large healthcare systems, clinicians are increasingly required to create, manage and deliver more innovative and cost effective forms of integrated health services (Zismer, 2013). Integrated care aims to combine these logics to bring together, “the organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money,” (WHO, 2008, p. 1). This integration of logics can produce ‘hybrid
organizational identities’ (Battilana & Dorado, 2010), and turn hospitals into ‘integrated identity organizations’ (Jäger & Schröer, 2014, p. 1285), where both managerial and clinical logics affect organizational practices and procedures. Importantly, newcomers will enter the healthcare context with injunctive beliefs about both managerial and clinical logics, and then encounter the realities of the descriptive managerial and clinical logics when they start work.

**Injunctive and Descriptive Logics**

Injunctive logics motivate and guide newcomers’ behaviour, understanding and evaluation of organizational processes because they refer to what newcomers believe is morally correct and legitimate organizational conduct. The content of these logics is partly derived from what Louis (1980) described as newcomers’ “cultural assumptions brought from previous settings [that are used] as operating guides in the new setting” (p. 238). Therefore, a newcomer’s understanding of and embodiment of institutional logics is influenced and shaped by their prior education, training and organizational experiences (March & Olsen, 1976). By extension, the injunctive logics that newcomers have when they enter an organization will vary according to idiosyncratic social and personal characteristics.

Descriptive logics will motivate and guide newcomers’ attitudes and behaviour in a different way, because they refer to the way things are actually done in practice. During socialization, newcomers may accept the descriptive logic and try to ‘fit in’, or perhaps question this logic, depending on the extent to which there is a discrepancy between their injunctive and descriptive logics. Here, we tested the hypothesis that an antagonistic discrepancy between injunctive and descriptive logics affects development of identification and POT, and through these processes, the development of self-efficacy.

A logics discrepancy can be conceptualized as a linear continuum from ‘positive discrepancy’ to ‘no discrepancy’ to ‘negative discrepancy’. Drawing on the literature on Person-Organization Fit (PO Fit; e.g., Kristof-Brown & Guay, 2011), expectancy violation
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theory (EVT, Burgoon, 1993), psychological contract breach (e.g., Robinson, 1996), and unmet expectations (Taris et al., 2006; Wanous et al., 1992), we suggest that discrepant injunctive-descriptive logics may hamper socialization when they fall on the negative side of the continuum. This is because workers use these discrepancies to evaluate the organization (Buckley, Fedor, Veres, Wiese, & Carraher, 1998) and infer their feelings, beliefs, and attitudes about the workplace. Negative discrepant logics will affect not only important outcomes such as turnover, commitment, and job satisfaction (Wanous et al., 1992), but also intrapersonal changes indicative of effective socialization, such as development of POT and identification, and through these, changes in self-efficacy (Taris et al., 2006).

Whilst our approach builds upon the literatures we refer to above, we diverge from these literatures in several ways. Most importantly, we suggest that injunctive logics provide a moral compass, and as such are not simply expected, assumed or anticipated logics. Neither do they form part of a psychological contract; and nor are they simply a characteristic of an individual employee. Rather, injunctive logics reflect the newcomers’ values and moral and professional code of conduct, and relate to institutional characteristics. Injunctive logics are the logics that the newcomer feels ought to be the case, rather than the logics that the newcomer expects to be the case. The former term expresses the fact that the newcomer believes the organization has a moral imperative to act in a certain way. That is, injunctive logics express newcomers’ beliefs about ‘the way things should be done’ as opposed to their perceptions of ‘the way things are done’ (the descriptive logic) or ‘the way I expect things to be done’ (expected logic). Thus, the concept of a negative discrepancy between ‘the way things should be done’ and ‘the way things are done’ can capture the extent to which each newcomer is morally affronted by the descriptive logics of the organization. We hypothesize that this negative discrepancy can motivate dis-identification and decrease the perceived trustworthiness of the organization.
Guiding Conceptual Model

Drawing on social psychological and organizational behavior literatures, we provide and test a preliminary conceptual framework founded on the proposition that discrepancies between injunctive and descriptive logics are a critical determinant of newcomer socialization. This model, illustrated in Figure 1, focuses on the impact of logic discrepancies on newcomer self-efficacy, through changes in organizational identification and perceptions of organizational trustworthiness. In the model, all variables indicate change over time to represent the dynamic and changing socialization process. The model proposes that: (1) newcomers enter an organization with pre-existing beliefs about institutional logics; (2) those newcomers develop an understanding of the realities of the institutional logics early in the socialization process; (3) logics discrepancies will be associated with changes in organizational identification and perceived trustworthiness; and (4) changes in organizational identification and perceived trustworthiness will be related to changes in self-efficacy.

In the current model, we conceptualize organizational identity as a type of social identity (cf. Tajfel & Turner, 1979; as per Amiot et al., 2007, Amiot et al., 2015; Haslam, 2001). While the term, organizational identity describes the nature of an organization, including its culture and norms; organizational identification refers to a feeling of psychological attachment to the organization, together with the value and the emotional significance attached to the organization (see Cornelissen, Haslam, & Balmer, 2007). This feeling of identification derives from the extent to which an employee has internalized the organizational identity so that it contributes to his or her sense of self. Once an employee develops organizational identification, organizational norms (as part of the content of
organizational identity) will be key drivers for their workplace behavior (see Turner, 1991).

*Perceived organizational trustworthiness* (or *POT*), which is the focal trust construct in this paper, refers to the set of confident, positive expectations employees have about the intentions and likely future actions of their employer (Lewicki, McAllister, & Bies, 1998). Newcomers form initial perceptions of the organization’s trustworthiness prior to starting their role based on their *pre-entry experience* with the organization (e.g. the fairness of selection processes; Celani, Deutsch-Salamon & Singh, 2008; Montes & Irving, 2008; Searle et al., 2011) and through a range of impersonal, *presumptive trustworthiness cues* (see Kramer, 2009; Kramer & Lewicki, 2010; McKnight, Cummings & Chervany, 1998). These cues include newcomers understanding of the rules and roles governing organizational conduct, which provide ‘structural assurance’ that certain expectations are likely to be met (e.g. employment arrangements, policies and responsibilities as documented in the employment contract; McKnight et al., 1998), as well as shared group membership (e.g. ‘we belong to the same organization’) which facilitates a generalized expectation of trustworthy conduct by other organizational members (Kramer & Lewicki, 2010). After organizational entry, POT continues to develop through direct interaction and experience with the organization (see Kramer, 2009).

Trustworthiness is commonly understood to have three dimensions (Mayer, et al., 1995) which have been adapted to an organizational referent (see Gillespie & Dietz, 2009, p. 128): 1) ability, which refers to the organization’s collective competencies and characteristics that enable it to function reliably and effectively to meet its goals and responsibilities; (2) benevolence, which refers to organizational actions indicating genuine care and concern for the well-being of stakeholders; and (3) integrity, which is revealed by organizational actions that consistently adhere to moral principles and a code of conduct acceptable to employees (e.g., honesty and fairness).
During the first few weeks at a new organization, newcomers’ sense of organizational identification and trustworthiness are malleable as they are not yet anchored to actual organizational experiences. Due to their short tenure, it is very likely that they have not witnessed sufficient behaviors and interactions to test and validate attitudes about the organization (Kramer & Lewicki, 2010). Therefore, as part of the socialization process, newcomers need to integrate the reality of the organizational behavior they encounter with the injunctive logics that they had on entry. The institutional logics will provide a framework for understanding the assumptions and rationale underlying this normative organizational behavior. In this way, as “taken for granted social prescriptions”, institutional logics provide a basis for evaluating the legitimacy and trustworthiness of an organization’s actions and practices. This raises significant questions about how incongruence between the descriptive logics and newcomers’ injunctive logics impact on newcomers’ organizational identification and the perceived trustworthiness of the organization.

**Impact of discrepant logics on identification and POT development.** As we explain above, injunctive logics include a moral or ethical component that the employee has developed through a lifetime of socialization, social learning and professional training (Dunn & Jones, 2010). Upon organizational entry, a newcomer may experience a sense of shock as their injunctive understandings of what constitutes appropriate behaviour are challenged (Kammeyer-Mueller, Simon, & Rich, 2012). Such incongruence between what employees believe should be prioritized over what actually is prioritized in the organization is likely to lead to negative perceptions of the organization’s trustworthiness. Prior research has shown that value congruence and consensus predicts employee trust (Edwards & Cable, 2009; Jehn & Mannix, 2001; Kristof-Brown, Zimmerman & Johnson, 2005), whereas incongruence inhibits trust development.

Similarly, if newcomers develop an awareness that the prevailing descriptive logics
are congruent with or exceed their injunctive logics, they should develop positive attitudes towards the organization, including organizational identification (Amiot et al., 2007; Smith et al., 2013). However, the experience of a negative logics discrepancy may coincide with the experience of an ethical discrepancy (cf. Kammeyer-Mueller et al., 2012). For example, a senior doctor may ask a newcomer to act in a way that requires them to prioritize cost-effective treatments over optimal patient care. Being asked to engage in actions that are counter to one’s injunctive logics will produce an unpleasant state of cognitive dissonance (cf. Festinger, 1957) and identity discrepancy (cf. Harter, 1999) that will impact negatively on developing identification (see also divestiture socialization, Kammeyer-Mueller et al., 2012). Following this reasoning, we hypothesized:

Hypothesis 1: Negative discrepancies between injunctive and descriptive clinical logics will be related to decreases in newcomer’s identification with the organization over time (H1a) and negative discrepancies between injunctive and descriptive managerial logics will be related to decreases in newcomer’s identification with the organization over time (H1b).

Hypothesis 2: Negative discrepancies between injunctive and descriptive clinical logics will be related to decreases in newcomer’s perceptions of the organization’s trustworthiness over time (H2a) and negative discrepancies between injunctive and descriptive managerial logics will be related to decreases in newcomer’s perceptions of the organization’s trustworthiness over time (H2b).

The indirect impact of discrepant logics on self-efficacy. Through decreasing organizational identification and trustworthiness, we expect negative discrepancies between injunctive and descriptive logics to have negative effects on the development of self-efficacy (SE)². SE has been defined as “people’s judgements of their capabilities to organize and execute courses of action required to attain designated types of performances,” (Bandura,
1986, p. 391). In other words, just as socialization is about learning how to act effectively in an organization, SE is about feeling that one can act effectively. Therefore, the development of SE is an important individual outcome of newcomer socialization (Bauer et al., 2007; Feldman, 1981).

Prior to organizational entry, newcomers do not have any experience with the specific new job and therefore will necessarily draw upon their generalized sense of SE to make judgements about how they will perform in their new role. Generalized SE is traditionally conceptualised as a stable trait, with early work suggesting that newcomers’ perceptions of generalized SE (pre-entry) are independently related to socialization outcomes irrespective of socialization tactics (Ashforth & Saks, 1996; Morrison, 1993a, 1993b; Ostroff & Kozlowski, 1992; Saks, 1995). However, recent evidence suggests that generalized SE may actually change with specific work experiences (Judge, Hurst, & Simon, 2009; Wu & Griffin, 2012). This recent work underscores the importance of taking into account newcomers’ generalized SE at organizational entry when modelling the impact of post-entry factors on the development of job-specific self-efficacy.

Job-specific SE reflects employees’ nuanced beliefs about their capabilities to effectively perform their specific job in the organizational context. These beliefs develop after organizational entry, based on job-specific experience. Job-specific SE positively relates to outcomes such as task mastery, social integration, person-organization fit, job satisfaction, and commitment (Gruman, Saks, & Zweig, 2006) and proactive engagement with the environment (Kammeyer-Mueller, Wanberg, Rubenstein, & Song, 2013). Given its relationship with this broad range of established indicators of effective socialisation, job-specific SE development can be used as a global proxy for the effectiveness of newcomer socialization and adjustment. Importantly, perceptions of job-specific SE can be impacted by interventions (McNatt & Judge, 2008) and therefore can be operationalized as an outcome
that is dependent on socialization processes. In line with this research, we adopted SE as our focal indicator of effective socialisation, and used post-entry job-specific self-efficacy perceptions relative to pre-entry (baseline) generalized SE as an index of the development of newcomers’ perceptions of their ability to perform their roles and act effectively in the new work environment.

We propose that the relationship between discrepant logics and the development of job-specific SE can be explained, at least in part, through the development of organizational identification and perceptions of organizational trustworthiness. With regards to identification, we argue that newcomers’ developing perceptions of their self-efficacy in the new job are closely tied to their developing social identity as an organizational ingroup member (insider) for three key reasons. First, when a person’s social identity as an organizational ingroup member becomes salient with the development of organizational identification, so will perceptions of homogeneity between themselves and other organizational ingroup members (employees). This provides the basis for increased cooperation and coordinated action between employees. Second, perceptions of shared identification allow newcomers to draw on other employees as a valued source of information and support (cf. Reynolds, Turner, Haslam, Ryan, Bizumic, & Subasic, 2007). Third, when an organizational identity is embedded in an understanding and acceptance of descriptive logics that provide a rationale for organizational norms, identification can be leveraged to improve perceptions of self-efficacy (e.g., ‘I accept the logics of this context, I identify with this context, and therefore I know what to do here and why I should do it that way. I am efficacious’). Combined, the effects of increased identification should lend themselves to increased perceptions of self-efficacy. We draw on this logic to propose that negative logics discrepancies will reduce self-efficacy by reducing organizational identification. That is, by decreasing newcomer’s feelings that the descriptive logics of the organization are valid and
acceptable, and that they understand and are defined by the organization’s rules, norms and practices; and by decreasing the perceived homogeneity between employees and therefore reduced psychological capacity for cooperation and support.

With regards to the relationship between POT and the development of job-related SE, when employees perceive their organization as trustworthy, they are able to allocate their energy and focus to the task at hand and exchange resources in ways that effectively and efficiently contribute to achieving work goals (Dirks, 1999), and hence their self-efficacy over time. In contrast, a lack of perceived organizational trustworthiness caused by discrepant logics can result in employees losing focus on work goals and to instead engage in defensive actions aimed at protecting themselves against possible harm. This consumes valuable cognitive and attentional resources that could otherwise be spent on work goal attainment (Mayer & Gavin, 2005), resulting in a lower sense of self-efficacy over time. Through these processes, a negative logics discrepancy may reduce self-efficacy indirectly through a reduced feeling of identification and perceived organizational trustworthiness. In contrast, a positive logic discrepancy will increase newcomers’ confidence that they can use their initiative and undertake specific actions without fear of redress. Hence, we hypothesized:

Hypothesis 3: The relationship between discrepant injunctive and descriptive logics and changes in self-efficacy will be mediated by changes in newcomers’ organizational identification (H3a) and perceptions of the organization’s trustworthiness (H3b).

The Present Study

The Organizational Context

This research was conducted in a large publicly funded hospital in Australia. The organization had approximately 7,000 employees at the time of study. The hospital is a 986 bed general, tertiary and quaternary referral teaching hospital with a number of specialities including medicine, surgery, obstetrics, burns, oncology and orthopaedics.
hospital fulfils significant teaching and research roles with links to major tertiary institutions. It faces the challenge of balancing increasing demand for health services and consumer expectations with limited human and financial resources. In 2011-2012, 84,705 patients were admitted, with 22,198 surgical patients; 4,732 babies born; 72,321 patients treated in the emergency department and 649,247 out-patient appointments.

We examined the experiences of new staff who entered the organization between January 2012 and February 2014. During this time, a series of budgetary contractions triggered by a change in government affected the organization. The need for greater efficiency was a common theme and narrative in media reports. Requests for voluntary redundancies were made in January 2013 and politicians called for cutbacks to publicly funded health services. Given the fluctuating political and economic context, we controlled for newcomers’ month of entry to the organization when testing our conceptual model.

**Method**

**Participants and Recruitment**

Participants were asked to complete the first survey after the executive address at the new staff orientation. These orientations took place on the newcomers’ first day of employment, before they had any experience working within the organization (Time 1; T1). Six weeks later, we invited participants to complete a second survey by internal mail (Time 2; T2). At T1, according to the Amiot et al. (2007) model of identity development, newcomers were in the anticipatory categorization phase, whereby they had foreseen and anticipated their entry into the organization (see also Dutton, Roberts, & Bednar, 2010). This anticipation should trigger cognitions such as injunctive logics. Six weeks later, at T2, newcomers had some initial experience of the organization and were still in the honeymoon phase (Solinger, van Olffen, Roe, & Hofmans, 2013). Over those 6 weeks, the newcomers were confronted with the realities of their new roles and the workplace. Discrepancies emerge at this stage as
discrepancies between injunctive beliefs and the realities become more concrete and salient. Our longitudinal design enabled comparisons between these pre-entry beliefs and their actual experiences. Thus, we modeled variance in participants’ scores over the first 6 weeks of employment and hence capture critical intrapersonal changes during this period. In doing so, we captured employees’ organizational identification, POT, and self-efficacy at a time when these processes were still under development rather than fully complete (Amiot et al., 2007).

Overall, the T1 questionnaire was completed by 857 new employees, and 264 of these employees also completed the T2 questionnaire (31% retention; see Results section for analysis of sample differences). Data were collected across all levels of seniority and all divisions of the organization (not all newcomers to the organisation were newcomers to their profession, and thus entered the organization at various levels of seniority). The final sample of 264 participants were aged 20 to 60 years and included 85% females. The modal age group was 20-25 years (38% of the sample) followed by 26-30 years (22%) and 31-35 years (12%). This final sample included clinical staff (77%), such as medical doctors, nurses, physiotherapists; and non-clinical staff such as administrators and operations staff (23%). These occupational differences may mean that the newcomers in each professional group had been socialized in their specializations prior to organizational entry to develop different injunctive logics. That is, clinical staff may place more value on the clinical injunctive logic, and administrative staff may be relatively more oriented to the managerial injunctive logic. To acknowledge and account for these differences, we included occupational group (clinical versus non-clinical) in our analyses.

Fifty per cent of the newcomers had less than 12 months experience working in a hospital. Of the remainder, 21% had 1-3 years’ experience, 9% had 4-6 years’ experience, 8% had 7-10 years’ experience, 7% had 11-15 years’ experience, 2% had 16-20 years’ experience, and 3% had 21 years’ experience or more. To help understand the impact of these
additional personal and social variables on injunctive logics, we included age, sex, and number of years’ hospital experience in our analyses.

Measures

The four key variables of perceived organizational trustworthiness, organizational identification, clinical and managerial logics, and self-efficacy were measured at both time points. See Table 1 for means, correlations and alpha coefficients.

Organizational identification. A 12-item scale adapted from Leach et al. (2008) measured four components of organizational identification. Solidarity was measured with the items (Time 1 α = .89; Time 2 α = .88): ‘I feel attached to [the organization]; ‘I feel solidarity with [the organization]; and, ‘I feel committed to [the organization]. The subscale for satisfaction used the following 4 items (Time 1 α = .93; Time 2 α = .94): ‘I am glad to be an employee at [the organization]’; ‘I think that [the organization] has a lot to be proud of’; ‘It is pleasant to be an employee at [the organization]; and ‘Being an employee at [the organization] gives me a good feeling’. The subscale centrality was measured with the following 3 items (Time 1 α = .94; Time 2 α = .95): ‘I often think about the fact that I am an employee at [the organization]’; ‘The fact that I am an employee at [the organization] is an important part of my identity’; and ‘Being an employee at [the organization] is an important part of how I see myself’. Finally, the subscale for individual self-stereotyping (Time 1 \( r(236) = .91 \); Time 2 \( r(263) = .86 \)) was measured via 2 items, ‘I have a lot in common with other [name of organization] employees’; and ‘I am similar to other [name of organization] employees’. Participants responded to all items on a scale of 1 (“Strongly disagree”) to 7 (“Strongly agree”).

Perceived organizational trustworthiness. The perceived trustworthiness of the organization scale was adapted from Mayer and Davis (1999). The 12 items measured 3 sub-components of perceived organizational trustworthiness: ability, benevolence and integrity,
respectively, which have been extensively validated. Four items assessed each sub-scale, respectively. Items for the ability subscale included: ‘This organization is very capable of meeting its responsibilities’; ‘Work is performed to a high standard at [the organization]’; ‘There is much knowledge at [the organization] about the work that needs to be done’; and ‘[The organization] is a highly competent organization’ (Time 1 $\alpha = .75$; Time 2 $\alpha = .89$).

Items for the benevolence subscale were: ‘Employee welfare is very important at [the organization]’; ‘[The organization] goes out of its way to help employees’; ‘[The organization] would not knowingly do anything to hurt employees’; ‘[The organization] would never deliberately take advantage of its employees’ (Time 1 $\alpha = .91$; Time 2 $\alpha = .88$).

Finally, the integrity subscale included the items, ‘[The organization] tries hard to be fair in its dealings with others’; ‘Sound moral principles underlie the way that things are done at [the organization]’; ‘There is a lot of consistency between what is said and what is done at [the organization]’, and ‘I never have to wonder whether [the organization] will follow through on its commitments’ (Time 1 $\alpha = .90$; Time 2 $\alpha = .90$).

Insert Table 1 about here

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**Self-efficacy.** At both time points, we used a 6-item shortened version of the general self-efficacy scale by Chen, Gully and Eden (2001) with a five point response scale (1 = strongly disagree, 5 = strongly agree). At Time 1, ($\alpha = .88$) we asked participants to indicate their agreement or disagreement with the following items: ‘I am able to achieve most of the goals which I set for myself’; ‘When facing difficult tasks I am certain that I will accomplish them’; ‘I am confident that I can perform effectively on many different tasks’; ‘Even when things are tough I can perform well’; ‘I am able to successfully overcome many challenges’; and ‘I believe I can succeed in most endeavours to which I put my mind’. At T2 ($\alpha = .92$), the
introduction to the scale prompted participants to respond in relation to their specific current role. We used the same six items but adapted three of these items to be job-relevant rather than generalized. The adapted items were, (prefaced with ‘In my current role…’): ‘I am able to achieve the goals which are set for me’; I am confident that I can perform effectively on the different tasks expected of me”; ‘I am confident that I can successfully perform my role’. Changing the referent of this scale from T1 to T2 enabled us to capture newcomers’ changes in perceptions of self-efficacy from a critical juncture in the socialization process: organizational entry. By measuring T1 self-efficacy as generalized on the first day of the job, prior to any organizational experience, and T2 efficacy as job-specific, we were able to capture the development of job-specific efficacy – a crucial socialization outcome – relative to newcomers’ baseline feelings of self-efficacy.

Logics. Prior research on logics has used qualitative methods such as historical analysis, interviews and/or documentary analysis to identify key logics (see for example, Greenwood & Suddaby, 2006; Lok, 2010; Reay & Hinings, 2009). To our knowledge based on a review of the existing logics literature, no existing survey scales of logics relevant to a healthcare setting are available. Therefore, to capture the organizational logics relevant to our hospital setting, we developed a new survey measure by adopting the following process. First, we conducted an extensive review of the healthcare literature to identify and define the logics typically operating in hospital settings. Next, we conducted 20 interviews and four focus groups with staff members (including senior management, department and ward leaders, and newcomers), as well as an analysis of a range of hospital documents (e.g., mission and value statements, training and induction materials, annual reports) to identify the specific logics relevant to the hospital under study. From these qualitative insights, we developed a survey measure of 24 items and pilot tested it on twelve staff. This pilot version included the option to add any missing items a respondent thought should be included. After
deleting poor performing, unclear and redundant items, the final scale used in the current study included 15 items tapping two dimensions to capture clinical and managerial logics.

At Time 1, instructions to participants for this measure read: “Based on your personal values and beliefs, what priority SHOULD BE placed on the following factors in daily decision making and work within your [name of organization] department or ward?” Participants then rated each item using a 7-point response scale where 1 = ‘Lowest priority’ and 7 = ‘Highest priority’. The Time 1 measure aimed to assess the injunctive logic, before participants had any experience working within the organization.

We conducted an exploratory factor analysis used principal axis factoring and direct oblimin rotation which resulted in two factors with loading across a final set of 12 items (please see the Appendix for full details of the items and factor loadings). Based upon the content of the items, the two factors captured the ‘clinical logic’ and the ‘managerial logic’ (eigenvalues were $\lambda = 5.17$ and $\lambda = 1.73$ respectively, explaining 57% of the variance).

We asked participants to rate the same items at Time 2, prefaced by the following instructions to measure the logics actually in use: “In any workplace, there are factors that have an influence on daily decision-making. Based on your recent experiences, please rate each of the following factors in the daily decisions being made in your [name of organization] department or ward by circling your response”. Participants rated each item using the same response scale as above where 1 = ‘Lowest priority’ and 7 = ‘Highest priority’. This Time 2 measure aimed to assess the descriptive logics after participants had 6 weeks experience working within the organization. Factor analysis indicated that the same two factors as above were an appropriate fit for the data (eigenvalues were $\lambda = 5.44$ and $\lambda = 1.78$ respectively, explaining 60% of the variance). Both logics scales were reliable at each time point (the clinical logic Time 1 $\alpha = .86$, Time 2 $\alpha = .90$; the managerial logic Time 1 $\alpha = .83$, Time 2 $\alpha = .82$).
Analytic Strategy

**Preliminary analyses.** Preliminary analyses assessed the percentages of participants who exhibited change on the variables from Time 1 to Time 2 using the reliable change index (RCI; Christensen & Mendoza, 1986). The RCI statistic, not used in later modeling analyses, provides descriptive information about the proportion of participants who exhibited significant increases or decreases in their scores for each variable over time (e.g., perceptions of organizational trustworthiness from Time 1 to Time 2). The RCI provides a useful estimation of the percentages of participants who exhibited reliable change over time, and therefore provided information about the variance in change in our sample.

Next, to directly capture the dynamic change processes that took place during the initial socialization period, we employed Latent Change Score (LCS) mediation modeling (see McArdle & Grimm, 2010) using the structural equation modeling framework in Mplus version 5.1 (Muthén & Muthén, 2007). LCS models capture how intra-individual change in one variable *per se* is associated with the change in another. LCS mediation models explicitly represent the direction and magnitude of the individual differences in change that exist in the targeted variables measured at Time 1 and Time 2 (Roberts, Caspi, & Moffitt, 2001; Selig & Preacher, 2009). We used LCS modeling to examine whether discrepancies between T1 injunctive and T2 descriptive clinical and managerial logics predicted changes in organizational identification, perceived organizational trustworthiness and self-efficacy respectively from Time 1 to Time 2 (see Figure 1). Therefore, in a similar way to latent growth modelling, these analyses tested how longitudinal intra-individual changes in each of the antecedent and process variables over time predict longitudinal intra-individual changes in the outcome variable of the model.

In the LCS models, the change in variables from Time 1 to Time 2 were latent variables embedded into the structural model. Latent change modelling is similar to
polynomial regression analyses, in that they both, “retain the conceptual integrity of the components and [treat] difference scores as statements of hypotheses to be tested empirically,” (see Edwards, 2001; p. 265). We included each construct measured at both Time 1 and Time 2, thus resulting in a total of 5 latent change factors. The absolute scores at each time point were also latent variables each constructed from parcels of observed items (see below). Thus, the LDS model treats the indicators exactly like structural equation modeling (SEM) does. It removes the error and leaves the true score in the latent variable. The residual variance is considered measurement error. In addition, we correlated the residual variances for each identical scale at each time point (e.g., the residual variance of parcel 1 of organizational identification at T1 was correlated with the residual variance of parcel 1 of organizational identification at T2). This strategy ensured that any systematic measurement error in a particular scale was accounted for between time points. In the model, we controlled for the participants’ month of entry to the organization to partial out the effects of political, economic and contextual changes during the period of data collection on participants’ perceptions and responses, and the number of years’ experience working in a hospital, occupational group (clinical versus non-clinical), sex, and age.

Within this Mplus model, we estimated and replaced missing values using multiple imputation with a Bayesian estimator (Muthén & Muthén, 2007). Parameter estimates were averaged over the set of 20 analyses and standard errors were computed using the average of the standard errors over the set of analyses and the between analysis parameter estimate variation. Reported results are “the mean for each parameter estimate over the analyses of multiple data sets as well as the total variance estimate, which includes variance within imputations and between imputations – a measure of the true uncertainty in the data set caused by missing data,” (Tabachnik & Fidel, 2007; p. 69).

In Figure 2, the constructs ‘ΔClinicalL, ‘ΔManagL, ‘ΔOT’ ‘ΔOI’ and ‘ΔSelf-efficacy’
represent the latent factors for discrepancies in clinical and managerial logics, change in organizational trustworthiness and identification, and change in self-efficacy from Time 1 to Time 2, respectively. Each LCS model included the latent variables for each construct at Time 1 and Time 2 (each created via parcels of observed variables) to create latent change factors for those variables. These are not represented in Figure 2 to simplify the figure.

The models’ goodness of fit was tested by using the chi-square ratio, the comparative fit index (CFI; Bentler, 1990), and the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993). To test for the mediating roles of changes in trustworthiness and identification in the associations between the two logics discrepancies and change in self-efficacy, we calculated the 95% bias-corrected bootstrap confidence intervals in Mplus using the unbiased estimates of mediation effects provided by the LCS modeling.

**Parceling of Items.** Scale items were aggregated into parcels for each Time 1 and Time 2 variable (i.e., each Time 1 and Time 2 latent variable had observed indicators) as per Little, Rhemtulla, Gibson and Schoemann (2013). This technique avoided under-identification of the model and created more parsimonious models with less various sources of systematic measurement or sampling error (Little, Cunningham, Shahar, & Widaman, 2002). For organizational identification and perceived trustworthiness, we created parcels using the established and validated subscales. To construct the parcels for the logics and self-efficacy, we used an internal consistency approach (Kishton & Widaman, 1994). This process involved conducting an exploratory factor analysis on each scale to identify whether the scale was uni- or multidimensional, then parceling the items to ensure that each parcel had a Cronbach’s alpha score > .50 and items within the parcel loaded onto only one factor. Therefore, each parcel was reliable and unidimensional.

**Results**

**Preliminary Analyses**
Tables 1 and 2 present the correlations among the variables included in the LCS models. High correlations between changes in organizational identification and perceived trustworthiness suggested that these variables may be multicollinear. To investigate this issue, we ran two regression analyses that included collinearity diagnostics as per recommendations by Tabachnick and Fidell (2007). The first analysis predicted T1 self-efficacy from T1 organizational identification and T1 perceived organizational trustworthiness, and the second predicted T2 self-efficacy from T2 organizational identification and T2 perceived organizational trustworthiness. The diagnostics for the T1 model indicated that the condition indexes of the dimensions were 1.00, 12.92 and 18.96, respectively. The dimension that had the greatest conditioning index was coupled with a variance proportion of .98 for T1 organizational trustworthiness and .63 for T1 organizational identification. The diagnostics for the T2 model indicated that the condition indexes of the dimensions were 1.00, 11.91 and 16.95, respectively. The dimension that had the greatest conditioning index was coupled with a variance proportion of .98 for T2 organizational trustworthiness but only .58 for T2 organizational identification. Therefore, organizational trustworthiness contributed strongly to the variance in this dimension but organizational identification did not. This means that these variables did not meet the criteria for multicollinearity as suggested by Belsley, Kuh and Welsch (1980). Accordingly, we judged it appropriate to include both constructs in the same model in our analyses.

**Intra-individual change.** We used the RCI to identify the proportions of participants from our sample who significantly increased, significantly decreased, or showed no reliable change in each of the variables over time (Christensen & Mendoza, 1986; Roberts et al., 2001). For the clinical logic, 22.4% of participants reported that the T2 descriptive logic was higher than their T1 injunctive logic, 13.9% of participants’ believed they were the same, and for 63.7% of participants felt that the T2 descriptive logic was lower than their T1 injunctive
clinical logic over time. The percentage of newcomers for whom the clinical logic was significantly different at Time 1 and Time 2 differed significantly from the percentage expected by chance, $\chi^2 (1) = 201.00, p < .001$. These results clearly indicate that for the large majority of newcomers, their beliefs about the priority that should be placed on clinical logics when making decisions were not being realized in practice. Put differently, the majority of newcomers observed that in the day to day decision making in their unit, clinical considerations were not given the priority that they felt they should.

We observed that 29.2% of participants perceived that the T2 descriptive managerial logic was higher than their T1 injunctive logic, whereas 60.9% of newcomers experienced a lower descriptive managerial logic, and 9.9% felt that the injunctive and descriptive logics were the same, again representing a significant intra-individual discrepancy, $\chi^2 (1) = 202.00, p < .001$. A little under a third of newcomers observed that managerial considerations were given too much priority in daily decision making, whereas the majority observed that managerial considerations were not given the priority they should be in daily decision making. For organizational identification, 37.5% of participants reported that they perceived an increase, 12.1% perceived that it stayed the same, and 50.4% reported a decrease; $\chi^2 (1) = 248.00, p < .001$. For perceived organizational trustworthiness, 26.7% of participants reported increased scores, 15.8% of scores remained the same, and 57.5% of scores decreased over time; $\chi^2 (1) = 247.00, p < .001$. For self-efficacy, 95% of participants perceived an increase over time, 1.1% perceived that it stayed the same, and 3.8% perceived a decrease, $\chi^2 (1) = 261.00, p < .001$. The fact that a large majority of newcomers experienced an increase in self-efficacy suggests that overall, socialization was effective.

Taken together, these results suggest that the majority of participants experienced significant logics discrepancies, and significant proportions of participants displayed reliable intrapersonal changes over time on each subsequent variable. Means, standard deviations and
correlations between Time 1 and 2 variables are displayed in Table 1. In Table 2, we report the correlations between the latent change factors.

Insert Table 2 about here

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**Latent Change Score Modeling**

We used LCS modeling with multiple imputation to test the hypothesized model shown in Figure 1. Fit indices for the model were: $\chi^2 (388) = 746.24, p < 0.001; \text{RMSEA} = 0.06$ (90% confidence interval: 0.05, 0.07; suggesting reasonable error of approximation, Browne & Cudeck, 1993); CFI was .91, indicating reasonably good fit (Hu & Bentler, 1999). Figure 2 presents the regression coefficients for the paths between latent change variables. The model includes correlations between the T1 logics, the T2 logics, organizational identification and organizational trustworthiness at T1 and T2 respectively.

Insert Figure 2 about here

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A significant positive relationship existed for discrepancies in the managerial logic and change in organizational identification, $\beta = .28, p < .001$. Based on the distribution of RCI scores, as the scores for the managerial logic decreased over time (i.e., if there was a negative discrepancy from T1 to T2), identification also tended to decrease. There was also a significant positive relationship between discrepancies in the clinical logic and change in organizational identification, $\beta = .23, p < .001$. Again, based on the distribution of RCI scores, negative discrepancies between the injunctive and descriptive clinical logic were related to reduced identification. We found a positive relationship between discrepancies in the managerial logic and change in perceived organizational trustworthiness. As the
managerial logic decreased over time, so did perceived trustworthiness, $\beta = .25, p < .001$. A similar positive relationship between discrepancies in the clinical logic and change in trustworthiness was also significant, $\beta = .18, p < .001$. Change in perceived trustworthiness, $\beta = .15, p = .001$, and change in organizational identification, $\beta = .09, p = .01$, were both positively related to change in self-efficacy$^4$.

**Control variables.** In the LCS model, we controlled for month of organizational entry, and the impact of age, sex, number of years hospital experience and occupational group (clinical versus non-clinical) on the Time 1 variables$^5$. Occupational group was significantly related to the clinical injunctive logic, $\beta = .20, p = .03$, whereby clinical staff endorsed the clinical injunctive logic more than non-clinical staff. There was no effect of occupational group on the managerial injunctive logic$^6$, $\beta = -.17, p = .16$. There was a significant relationship between sex and the injunctive managerial logic, whereby women were likely more to endorse the logic than men, $\beta = .28, p = .05$. None of the other control variables were significantly related to the injunctive logics. None of the control variables were related to T1 organizational identification, T1 perceived organizational trustworthiness or T1 self-efficacy.

**Tests of Indirect Effects.** To test for the indirect effects and obtain bias-corrected bootstrap confidence intervals, we ran an LCS mediation model with 1000 samples. Table 3 shows the results for the tests of indirect effects. Scores on the latent change variables fall on a continuum that includes both positive and negative change (increases and decreases from T1 to T2), therefore capturing variance in both directions. The indirect effects should be interpreted in light of the distribution of the RCI results, which indicated that the majority of participants experienced negative logics discrepancies. For these participants, the results of the tests of indirect effects can be interpreted as follows: the negative managerial logics discrepancy had a significant indirect effect on decreases in self-efficacy through decreases in
perceived organizational trustworthiness over time (H3b), but not through decreases in organizational identification (H3a). Similarly, a negative clinical logic discrepancy had a significant indirect effect on decreases in self-efficacy through decreases in organizational trustworthiness (H3b) but not through decreases in organizational identification (H3a). For the minority of participants who experienced positive logics discrepancies, these discrepancies were indirectly related to increases in self-efficacy through increases in trustworthiness.

Sample Differences. The attrition of participants from Time 1 to Time 2 may have introduced systematic biases in the data due to sampling. Therefore, we tested for differences between samples of participants in line with the methodology adopted by Matthews, Winkel, and Wayne (2014). Of the total number of respondents who completed the T1 survey ($N = 857$), we tested for differences between our sample of respondents who completed the survey at both time points (matched at Time 1 and Time 2, $N = 264$) and those that only completed the Time 1 survey ($N = 593$). There were no significant differences between the two groups in terms of demographic characteristics, occupational group, years of experience or Time 1 constructs. These results suggest that there were no systematic biases in how they responded to the Time 1 measures. Results of these analyses are available from the first author.

Discussion

In this study, we found that the majority of participants experienced negative injunctive-descriptive logic discrepancies for both the clinical logic and the managerial logic, and these discrepancies were related to decreases in organizational identification and perceived trustworthiness (supporting H1a,b and H2a,b). This means that the descriptive
Implications for Theory

Our conceptual model attempts to extend and integrate the socialization, identity, trust, logics and self-efficacy literatures in several ways. First, regarding the socialization literature, we introduce the concepts of injunctive logics and injunctive-descriptive logics discrepancies. The concept of injunctive institutional logics is very different to that of ‘job expectations’. Injunctive logics explain that newcomers use a moral map to evaluate the procedures and practices of their new organization in relation to the institutional field and their own personal professional moral code. The institutional logics approach therefore provides a metatheory (Thornton & Ocasio, 2008) for understanding where the development of identification and POT lie in relation to newcomers’ broader understanding of their professions and organizational field.

Through the concept of injunctive logics, our results highlight the need to account for newcomers’ idiosyncratic social and work histories to understand their organizational socialization. We show that POT and identification development are important and related social-psychological processes that occur during socialization and can be affected by injunctive logics and logics discrepancies. These findings fit the key premise of PO Fit theory (see Edwards, 2008): that perceived compatibility between people and their organizations affects key organizational outcomes (although here we test the impact of perceived
compatibility between injunctive and descriptive organizational (rather than employee) characteristics). Unlike in this research, the PO Fit literature does not relate the consequences of (in)compatibility to the social-psychological processes of POT and identity development that occur during socialization. The current study explains how perceived compatibility can change over the socialization period because of logics discrepancies which then influence identity and perceived trustworthiness development.

Regarding the identity literature, our results support the view of logics theorists who purport that identity processes are embedded within an understanding of logics (Lok, 2010; Thornton & Ocasio, 2008). We contribute to this literature by showing how macro-level ‘logics’ connect to intrapersonal-level identity formation processes through an understanding of the rationale underlying norms for workplace behavior. Given that we found a difference between clinical and non-clinical staff on the injunctive logic, it may be that clinical and non-clinical groups place different value on particular logics or combinations thereof during socialization. This opens the future possibility of studying the impact of ‘identity-central logics’ discrepancies, which may affect identification and trustworthiness more than ‘identity-peripheral’ logics.

In contrast to previous theorizing which views identity as the bridging mechanism between logics and employee outcomes (Lok, 2010; Thornton & Ocasio, 2008), our findings instead provide support for the indirect effects of logic discrepancies on self-efficacy through perceived organizational trustworthiness. This suggests that the development of beliefs about the organization’s trustworthiness acts as the bridge between logics and behavior rather than the development of identification per se (cf. Lok, 2010).

Our study contributes to the trust literature in three main ways. First, it examines the development of POT over time from the initiation of the employment relationship; a topic that has received much theorizing but limited empirical examination (Lewicki et al., 2006;
van der Werff & Buckley, in press). Second, it informs understanding of POT by showing that newcomers’ perceptions of the trustworthiness of the organization can significantly decline during the early socialization period, suggesting that the first few months in a new job can be far from a ‘honeymoon’ phase for many employees, and rather resemble a ‘hangover’ phase (see Boswell, Boudreau & Tichy, 2005). Third, the findings highlight a novel antecedent (logics discrepancies) and consequence (self-efficacy) of POT. Furthermore, we suggest a novel mechanism to link institutional logics with self-efficacy – put simply, congruent injunctive-descriptive logics enhance POT, and development of POT enables individuals to allocate their energy and exchange resources in ways that contribute to achieving work goals, thus enhancing self-efficacy.

We have also contributed to the logics literature in three key ways. First, we introduced the concept of injunctive logics, and developed the concept of an injunctive-descriptive logics discrepancy. These conceptual tools enabled us to quantify the impact of newcomer pre-existing beliefs about institutional logics on the socialization process in light of organizational realities. Second, by demonstrating the direct and indirect impact of discrepant logics on changes in self-efficacy, we relate the function of institutional logics (a relatively macro-level process) to micro-level personal changes that enable individuals to better function in an organization. Third, we developed a new survey-based tool to measure employee perceptions of logics in the healthcare sector. To our knowledge, no other standardized scale exists to measure such institutional logics.

**Implications for Practice**

The literatures on managing expectations and psychological contracts provide multiple ways in which organizations can manage newcomer expectations to reduce the impact of unrealistic expectations on socialization processes (Eilam-Shamir & Yaakobi, 2014). Particular emphasis is placed upon aligning employee expectations with the realities
of the work environment (Bradt, 2010). Our findings suggest that accounting for and addressing newcomers’ injunctive beliefs about institutional logics upon entry and within the first few weeks of employment is an important additional step during on-boarding. This finding is particularly salient where the institution is undergoing challenges to traditional logics. In this instance, the traditional logic of patient centred care was being challenged by models of integrated health care, where a greater emphasis is placed upon value for money. Messages in the media and emanating from Government regarding the current challenge of funding and efficiency in health care provision were clearly directed at the hospital (Jabour, 2013), and well known to hospital staff and those in the general community. More broadly, in OECD countries (i.e., members of the Organisation for Economic Co-operation and Development) health care expenditure as a percentage of GDP is expected to rise from 9.9% in 2010 to 14.4% in 2020 (PwC, 2010, p. 9). The new public management rhetoric surrounding the need to transform traditional models of public health in order to ensure sustainability of services into the future is therefore not limited to Australia, but rather it is part of a growing global phenomenon (Acerete, Stafford & Stapleton, 2012).

As Graybil and her colleagues (2013) note, best practice in orientation of newcomers should include discussions surrounding job expectations and evaluation criteria. Individuals responsible for the delivery of onboarding programs, including the newcomer’s line manager/s, need to be aware of the injunctive logics of incoming employees in order to clearly address these against the descriptive logics of the organization. These descriptive logics are often expressed in terms of job expectations and particularly evaluation criteria (Bradt, 2010). Ideally, these logics need to be explicitly addressed in the recruitment and selection process, allowing the potential newcomer to make a considered choice when accepting or declining the position (Bradt, 2010). However, they should also be revisited throughout the entire onboarding process to reduce mistrust and turnover intentions and to
increase identification, job satisfaction and commitment (Chaudhry, Wayne & Schalk, 2009). The negative impacts of a disparity between injunctive and descriptive logics could be mitigated or even eliminated where the employee attributes the differences to forces outside the employers’ control or where the two logics can be integrated so that the employee sees the descriptive logic as a ‘fair’ interpretation of the injunctive logic (see Zhao, Wayne, Glibkowski & Bravo, 2009, p. 650). As an example, such a situation may be created during the onboarding period by management effectively demonstrating that cost efficiencies actually serve to deliver better patient outcomes.

**Limitations and Future Research Directions**

When interpreting this research, a number of limitations must be taken into account. Each of these highlight opportunities for further research. First, despite the advantages of longitudinal research in allowing us to examine dynamic processes, this type of research design has some inherent weaknesses, such as attrition. Our analysis is based on those participants who completed both phases of the study and hence remained at the organization during the study period. The organization had between 5%, and 9% annual turnover during the period of data collection (for all job categories). Therefore, a small percentage of our attrition may have been due to employee-initiated turnover. However, to mitigate this possibility, where possible we removed the T1 data for participants who did not receive a T2 survey because they had left the organization. However, this factor limits the generalizability of our findings. The impact of attrition due to turnover is an empirical question that should be assessed in future research.

Second, our results are based on the study of a large healthcare organization. As such, the institutional logics were relevant to this type of organization, and are not necessarily generalizable beyond the healthcare sector. That said, we examined two important logics in this sector and provide an example of the impact of injunctive-descriptive logics
discrepancies. It is important to replicate the impact of logics discrepancies in other sectors to enhance the generalizability of our conceptual model.

In integrated healthcare organizations, the clinical and managerial logics are not necessarily mutually exclusive or in competition: cost-effectiveness should enable a hospital to provide more and better care as efficient resource usage releases additional resources that can be allocated to better clinical use. Future research is needed to examine the relationship between the clinical and managerial logics and the impact of this on perceived injunctive-descriptive logic discrepancies and socialization outcomes.

Third, in this study we focused on newcomers’ perceptions and experiences. However, injunctive-descriptive logics discrepancies are also relevant for old timers in organizations. Future research is required to investigate whether our results for newcomers generalize to employees with longer tenure, and also whether employees’ injunctive logics and logic discrepancies change over time with organizational experience.

In studying logics discrepancies, we are in no way suggesting that newcomers are passive ‘recipients’ of socialization, without agency; quite the opposite in fact. Due to logics discrepancies, newcomers may play a role in innovation and change (Greenwood & Suddaby, 2006). Newcomers are agents with the ability to influence organizational norms, culture and logics (see Thornton & Ocasio, 2008). We therefore suggest that future research investigates how newcomers respond to logics discrepancies with ideas and actions for organizational change. In other words, a pertinent research question is, can logics discrepancies turn newcomers into change agents? In the social psychological literature, normative discrepancies have been framed in terms of motivating social change (Smith, et al., 2015). It is therefore likely that for some newcomers – perhaps those with high initial trust and identification in the organization (Lok, 2010; Packer, 2008; Thornton & Ocasio, 2008) – a logics discrepancy will motivate them to speak out about the undesirable descriptive logic,
and how it should be changed. Relatedly, our study focused on job-specific self-efficacy as the central indicator of effective socialization. While this construct has been related to a broad set of effective socialization indicators, we recommend that future research extends the examination of the impact of logics discrepancies to other newcomer adjustment variables, such as organizational commitment, social integration and role clarity.

Finally, whilst the latent change analyses we used enabled exploration of the dynamic psychological experiences of newcomers, they cannot provide evidence for the causal ordering of variables, such as the development of trustworthiness and identification. Our findings – in particular, the significant positive correlation between changes in trustworthiness and changes in identification – indicate that during the first 6-8 weeks of socialization, changes in identification and POT are closely connected. While some research suggests identification is an antecedent of interpersonal trust (Colquitt, LePine, Zapata, & Wine, 2011), given that the antecedents and consequences of trust have been shown to vary for different referents (Fulmer & Gelfand, 2012), the causal ordering of perceptions of organizational trustworthiness and organizational identification for newcomers remains an open question and one worthy of future research. Indeed, it may be that the relationships between perceived organizational trustworthiness and organizational identification are reciprocal (Lewicki, et al., 2006; Tanis & Postmes, 2005; Schaubroeck, et al., 2013).

Conclusion

This study represents a first empirical examination of the concept of injunctive-descriptive logics discrepancies, and their impact on identification, POT, and self-efficacy. In addressing the relationship between these processes, we not only contribute to the literatures on logics, trust, identity, self-efficacy and socialization, but establish important links between them. Moreover, by departing from the traditional frameworks of socialization and institutional logics, we have been able to provide a new preliminary framework for
understanding the psychological experiences of newcomers in the initial socialization phase. Our findings highlight that it is important to view the early socialization phase as a time of multiple psychological changes and challenges. Newcomers’ pre-existing beliefs about their professions and organizational field have a significant impact on the success with which they can integrate new experiences into a sense of organizational identification, and develop a sense that their organization is trustworthy; and this has repercussions on their perceived ability to act effectively in the workplace.
Notes

1 Our approach relates to but diverges from three established literatures, expectancy violation theory (EVT, Burgoon, 1993), Psychological contract breach and Person-Organization Fit. EVT is specifically focused on interpersonal communication and relationships. As Burgoon (2016, p. 1) states, “Expectancy violation theory is an interpersonal communication theory that makes the counterintuitive claim that violations of expectations are sometimes preferable to confirmations of expectations”. While the general proposition of EVT that “positive violations can produce desirable results” has relevance to our paper and findings, the focus of EVT research on what people expect in interpersonal interactions makes it difficult to translate to our research context.

The psychological contract literature focuses on expectations about the future relationship between the employee and the employer, developed through an interactive exchange with the organization’s representative. That is, psychological contracts are formed through interactions with the employer. Robinson (1996) argues that only those expectations that are explicitly or implicitly promised by the employer will form part of the contract. In contrast, institutional logics are taken-for-granted assumptions that are not (necessarily) discussed with representatives of the organization prior to entry.

Finally, research on person-organization (PO) fit addresses the compatibility between individual and organizational characteristics (see Kristof-Brown, Zimmerman, & Johnson, 2005). In contrast, logics discrepancies capture the differences between the characteristics an individual believes the organization ought to have, and the characteristics the organization actually has.

2 We note that reverse causation could also be proposed, in that changes in self-efficacy could predict changes in POT and identification or these three constructs could co-develop over time. Indeed, we acknowledge that it is likely that there is a degree of
reciprocity in the processes under study. However, based on prior work indicating that the development of organizational identification and POT are critical aspects of the newcomer socialization process (Schaubroeck, Peng, & Hannah, 2013; Smith, Amiot, Smith, Callan, & Terry, 2013; van der Werff & Buckley, in press), and that the development of job-specific self-efficacy is a key socialization outcome, in our dynamic model we position the development of POT and identification as socialization processes that influence the development of self-efficacy.

3 This unequal sex division partly reflected the substantial proportion of participants (88%) who were nursing officers, allied health practitioners, and administrative staff. Eight-eight per cent of participants in these three job categories were female.

4 To address potential concerns regarding the change from the generalized self-efficacy measure at T1 to job-specific self-efficacy at T2, we re-ran the model in Figure 2 using only T2 job-specific self-efficacy as the dependent variable (and controlling for T1 self-efficacy) instead of the T1-T2 change in self-efficacy. There were no substantive differences in the nature or significance of the paths, and the support for the hypotheses remained the same. The full results of these analyses are available from the first author on request.

5 The LCS model results were substantively the same with and without the control variables, however model fit was improved with the inclusion of the controls. Fit indices for the model that did not control for sex, age, years hospital experience, or month of entry, were: \( \chi^2 (417) = 933.09, p < 0.001; \) RMSEA = 0.07 (90% confidence interval: 0.06, 0.07; CFI = .87. This alternative model controlled only for the impact of occupational group (clinical vs. non-clinical) on the logics. Full results are available from the first author on request.

6 There was no impact of occupational group on logics discrepancies. We found no significant interaction effects. Full results are available from the first author on request.
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Table 1

Correlations between Observed Variables at Time 1 and Time 2 (N=264)

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<th>M</th>
<th>SD</th>
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<tbody>
<tr>
<td>1.</td>
<td>T1 Clinical logic</td>
<td>6.6</td>
<td>0.53</td>
<td>.08</td>
<td>.63**</td>
<td>.19*</td>
<td>(.84)</td>
<td></td>
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<tr>
<td>2.</td>
<td>T2 Clinical logic</td>
<td>6.1</td>
<td>0.86</td>
<td>1.00</td>
<td>.45**</td>
<td>.21**</td>
<td>.46**</td>
<td>.32**</td>
<td>(.94)</td>
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<tr>
<td>3.</td>
<td>T1 Managerial logic</td>
<td>5.8</td>
<td>0.76</td>
<td>.11</td>
<td>.46**</td>
<td>.39**</td>
<td>(.82)</td>
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<tr>
<td>4.</td>
<td>T2 Managerial logic</td>
<td>5.4</td>
<td>0.93</td>
<td>.15*</td>
<td>.37**</td>
<td>.21**</td>
<td>.45**</td>
<td>.35**</td>
<td>(.94)</td>
<td></td>
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<tr>
<td>5.</td>
<td>T1 Organizational identification</td>
<td>5.4</td>
<td>0.97</td>
<td>.32**</td>
<td>.17*</td>
<td>.43**</td>
<td>.24*</td>
<td>.79**</td>
<td>.29**</td>
<td>(.83)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6.</td>
<td>T2 Organizational identification</td>
<td>5.2</td>
<td>1.00</td>
<td>.11</td>
<td>.38**</td>
<td>.23**</td>
<td>.47**</td>
<td>.18*</td>
<td>.71**</td>
<td>.29**</td>
<td>(.95)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7.</td>
<td>T1 Organizational trustworthiness</td>
<td>5.6</td>
<td>0.87</td>
<td>.11</td>
<td>.38**</td>
<td>.23**</td>
<td>.47**</td>
<td>.18*</td>
<td>.71**</td>
<td>.29**</td>
<td>(.95)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8.</td>
<td>T2 Organizational trustworthiness</td>
<td>5.3</td>
<td>0.84</td>
<td>.11</td>
<td>.38**</td>
<td>.23**</td>
<td>.47**</td>
<td>.18*</td>
<td>.71**</td>
<td>.29**</td>
<td>(.95)</td>
<td></td>
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</table>
### IMPACT OF DISCREPANT LOGICS ON SOCIALIZATION

#### Table 9: T1 Self-efficacy

<table>
<thead>
<tr>
<th>T1 Self-efficacy</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.2</td>
<td>0.50</td>
<td>.29**</td>
<td>.06</td>
<td>.30**</td>
<td>.16*</td>
<td>.35**</td>
<td>.09</td>
<td>.29**</td>
<td>.12</td>
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</table>

#### Table 10: T2 Self-efficacy

<table>
<thead>
<tr>
<th>T2 Self-efficacy</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.6</td>
<td>0.83</td>
<td>.11</td>
<td>.21**</td>
<td>.01</td>
<td>.32**</td>
<td>.14*</td>
<td>.33**</td>
<td>.12</td>
<td>.37**</td>
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</tbody>
</table>

#### Table 11: Number of years hospital experience

<table>
<thead>
<tr>
<th>Number of years hospital experience</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.1</td>
<td>1.56</td>
<td>-.01</td>
<td>.08</td>
<td>.09</td>
<td>-.18**</td>
<td>-.07</td>
<td>-.17</td>
<td>-.03</td>
<td>.13*</td>
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</table>

#### Table 12: Occupational group

<table>
<thead>
<tr>
<th>Occupational group</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.7</td>
<td>0.41</td>
<td>.16*</td>
<td>.09</td>
<td>-.14*</td>
<td>.01</td>
<td>.13*</td>
<td>-.01</td>
<td>.09</td>
<td>-0.04</td>
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</table>

#### Table 13: Age group

<table>
<thead>
<tr>
<th>Age group</th>
<th>M</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.9</td>
<td>2.03</td>
<td>-.07</td>
<td>-.14*</td>
<td>.17**</td>
<td>.04</td>
<td>-.16*</td>
<td>-.08</td>
<td>-.15*</td>
<td>-.08</td>
</tr>
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</table>

#### Table 14: Sex

<table>
<thead>
<tr>
<th>Sex</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.8</td>
<td>0.35</td>
<td>.15*</td>
<td>.06</td>
<td>.09</td>
<td>.11</td>
<td>.14*</td>
<td>.01</td>
<td>.04</td>
<td>-.03</td>
</tr>
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</table>

#### Table 15: Month of organizational entry

<table>
<thead>
<tr>
<th>Month of organizational entry</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.9</td>
<td>16.7</td>
<td>-.18*</td>
<td>.10</td>
<td>-.14*</td>
<td>.01</td>
<td>-.04</td>
<td>.10</td>
<td>-.01</td>
<td>.11</td>
</tr>
</tbody>
</table>

* *p < .05, **p < .01, ***p < .001; T1 = Time 1; T2 = Time 2; M = Mean; SD = standard deviation

Cronbach’s alphas appear in parentheses

Occupational group was coded 1 = clinical, 0 = non-clinical

Sex was coded 1 = female, 0 = male

Age groups were coded as 9 categories of 5 year increments in increasing age order, from 1 = ‘20 - 25 years’ to 9 = ‘61+ years’

A higher score on the month of organizational entry variable indicates that the participant entered the organization in a later recruitment month,
further into the period of instability.
Table 2
Correlations between Latent Change Factors (N=264)

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ΔClinical logic</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ΔManagerial logic</td>
<td>.58***</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. ΔOrganizational identification</td>
<td>.32***</td>
<td>.40***</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. ΔOrganizational trustworthiness</td>
<td>.36***</td>
<td>.44***</td>
<td>.72***</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ΔSelf-efficacy</td>
<td>.22**</td>
<td>.34***</td>
<td>.35***</td>
<td>.37***</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Years hospital experience</td>
<td>.08</td>
<td>.06</td>
<td>-.03</td>
<td>.03</td>
<td>-.09</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Occupational group</td>
<td>.09</td>
<td>.05</td>
<td>-.07</td>
<td>-.03</td>
<td>.02</td>
<td>.16**</td>
<td>___</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Age</td>
<td>-.14*</td>
<td>-.03</td>
<td>-.04</td>
<td>-.05</td>
<td>-.12</td>
<td>.51***</td>
<td>-.27***</td>
<td>___</td>
<td></td>
</tr>
<tr>
<td>9. Sex</td>
<td>.06</td>
<td>.08</td>
<td>-.05</td>
<td>-.04</td>
<td>.003</td>
<td>-.05</td>
<td>.11</td>
<td>-.17**</td>
<td>___</td>
</tr>
<tr>
<td>10. Month of organizational entry</td>
<td>.12</td>
<td>.06</td>
<td>.12</td>
<td>.11</td>
<td>.04</td>
<td>-.05</td>
<td>.04</td>
<td>-.02</td>
<td>.02</td>
</tr>
</tbody>
</table>

**p<.01, ***p < .001

Missing values were estimated and replaced using multiple imputation with a Bayesian estimator over 20 sets of analyses.

‘Δ’ denotes intra-individual changes between Time 1 and Time 2
These correlations control for the relationship between age, sex, month of organizational entry and the T1 latent variables.

Occupational group was coded 1 = clinical, 0 = non-clinical.

Sex was coded 1 = female, 0 = male

Age groups were coded as 9 categories of 5 year increments in increasing age order, from 1 = ‘20 - 25 years’ to 9 = ‘61+ years’

A higher score on the month of organizational entry variable indicates that the participant entered the organization in a later recruitment month, further into the period of instability.
Table 3

Standardized Confidence Intervals for Indirect Effects (N=264)

<table>
<thead>
<tr>
<th>Indirect Effect</th>
<th>95% confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of indirect effect from Δclinical logic to Δself-efficacy</td>
<td>0.02, 0.16**</td>
</tr>
<tr>
<td>ΔClinical logic → ΔOI → ΔSelf-efficacy</td>
<td>-0.001, 0.08</td>
</tr>
<tr>
<td>ΔClinical logic → ΔOT → ΔSelf-efficacy</td>
<td>0.007, 0.09*</td>
</tr>
<tr>
<td>Sum of indirect effect from Δmanagerial logic to Δself-efficacy</td>
<td>0.01, 0.17*</td>
</tr>
<tr>
<td>ΔManagerial Logic → ΔOI → ΔSelf-efficacy</td>
<td>-0.007, 0.08</td>
</tr>
<tr>
<td>ΔManagerial Logic → ΔOT → ΔSelf-efficacy</td>
<td>0.009, 0.10**</td>
</tr>
</tbody>
</table>

Number of samples = 1000

Missing values were estimated and replaced using multiple imputation with a Bayesian estimator over 20 sets of analyses

*p < .05, **p < .025

‘Δ’ denotes changes between Time 1 and Time 2; ΔOI = changes in organizational identification; ΔOT = changes in perceived organizational trustworthiness.

Scores on the latent change variables fall on a continuum that includes both positive and negative change (increases and decreases from T1 to T2). More positive scores indicate more positive change.
Figure 1

Hypothesized Theoretical Model

Discrepancy between injunctive and descriptive clinical logics

Discrepancy between injunctive and descriptive managerial logics

Logics Discrepancies

Socialization processes

Outcome

Discrepancy between injunctive and descriptive clinical logics

Discrepancy between injunctive and descriptive managerial logics

H1a

H1b

H2a

H2b

Change in organizational identification

H3

Change in organizational trustworthiness

H3

Change in newcomer self-efficacy

Logics Discrepancies

Socialization processes

Outcome
Figure 2

The Impact of Discrepant Logics on Changes in Organizational Identification, Perceived Trustworthiness and Self-efficacy Over Time (N=264)

ΔClinicalL → ΔOI: .23***
ΔManagL → ΔOI: .18***
ΔManagL → ΔOT: .25***
ΔOI → ΔSelf-efficacy: .09**
ΔOT → ΔSelf-efficacy: .15***

*p < .05; **p < .01; ***p < .001; regression coefficients appear on each path; Missing values were estimated and replaced using multiple imputation with a Bayesian estimator over 20 sets of analyses.
This model controls for month of entry to the organization, number of years hospital experience, sex, age, and occupational group (clinical vs. non-clinical); and includes correlations between: the T1 logics, the T2 logics, and organizational identification and organizational trustworthiness at T1 and T2 respectively. $\Delta$Clinical$L$ = discrepancies between clinical logics T1 to T2; $\Delta$Manag$L$= discrepancies in managerial logics T1 to T2; $\Delta$OI = changes in organizational identification T1 to T2; $\Delta$OT= changes in perceived organizational trustworthiness T1 to T2; $\Delta$Self-efficacy= changes in self-efficacy T1 to T2
## Appendix

**Exploratory Factor Analysis of Items Measuring Institutional Logics (N=264)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1 (Clinical Logic)</th>
<th>Factor 2 (Managerial Logic)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1 (α = .85)</td>
<td>Time 2 (α = .88)</td>
</tr>
<tr>
<td></td>
<td>Time 2 (α = .82)</td>
<td>Time 2 (α = .90)</td>
</tr>
<tr>
<td>1. The quality of patient care (c)</td>
<td>.59</td>
<td>.60</td>
</tr>
<tr>
<td></td>
<td>.69</td>
<td>-.47</td>
</tr>
<tr>
<td>2. Using resources efficiently (m)</td>
<td>.16</td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td>-.03</td>
<td>.51</td>
</tr>
<tr>
<td>3. Upholding patient rights (e.g. right to privacy, to choose treatment etc.) (c)</td>
<td>.66</td>
<td>.17</td>
</tr>
<tr>
<td></td>
<td>.67</td>
<td>.77</td>
</tr>
<tr>
<td>4. Patient well-being (c)</td>
<td>.60</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>.79</td>
<td>.79</td>
</tr>
<tr>
<td>5. Managing the costs of treatment options (m)</td>
<td>.12</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>-.07</td>
<td>.79</td>
</tr>
<tr>
<td>6. Maintaining good clinician-patient relationships (c)</td>
<td>.68</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td>.73</td>
<td>.21</td>
</tr>
<tr>
<td>7. Maximising the efficiency of the ward/department (m)</td>
<td>.17</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>.18</td>
<td>.33</td>
</tr>
<tr>
<td>8. Developing clinical knowledge and skills (c)</td>
<td>.62</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>.82</td>
<td>.51</td>
</tr>
<tr>
<td>9. Upholding clinical standards (e.g. integrity, competence) (c)</td>
<td>.62</td>
<td>.18</td>
</tr>
<tr>
<td></td>
<td>.82</td>
<td>.46</td>
</tr>
<tr>
<td>10. Following the directives of one’s supervisor (m)</td>
<td>.13</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>.21</td>
<td>.33</td>
</tr>
<tr>
<td>11. Minimising legal or reputational risks to the hospital (m)</td>
<td>.18</td>
<td>.47</td>
</tr>
<tr>
<td></td>
<td>-.10</td>
<td>.46</td>
</tr>
<tr>
<td>12. Meeting departmental KPI’s and targets (e.g., patient waiting times) (m)</td>
<td>.18</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>-.10</td>
<td>.33</td>
</tr>
<tr>
<td></td>
<td>.47</td>
<td>.51</td>
</tr>
<tr>
<td></td>
<td>.82</td>
<td>.46</td>
</tr>
</tbody>
</table>

(c) denotes item included in clinical logic scale; (m) denotes item included in managerial logic scale

KPI = Key performance indicators