The Effects of Pre-Entry Career Maturity and Support Networks in Workplace on Newcomers’ Mental Health

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Abstract: The Effects of Pre-Entry Career Maturity and Support Networks in Workplace on Newcomers’ Mental Health: Kaoru Kawai, et al. Department of Health Sociology, School of Health Science and Nursing, The University of Tokyo—The present study examined the effects of pre-entry experiences (i.e. career maturity), as well as support networks (i.e. informational and friendship), on newcomers’ mental health (i.e. depression, self-esteem, psychosomatic symptoms, and work motivation). We performed a longitudinal study of 890 men and women who first entered the workplace in 2003. Surveys were distributed at two time points: just prior to entering the workplace, and two months after entering. Results indicated that career maturity related positively to newcomers’ mental health, and newcomers with high career maturity were more successful in establishing positive relationships with superiors and co-workers. Although, informational support networks positively related to work motivation, friendship networks did not show any direct effects on mental health. These results underscore the crucial roles of career maturity and informational networks in facilitating the transition to the workplace. The results also provide empirical support for an expanded view of the importance of pre-entry experiences to workplace newcomers’ mental health.

Key words: Career maturity, Mental health, Support networks, Work motivation, Newcomers

Newcomers’ mental health

Making the transition from college to first job is often a stressful process in life. Newcomers are thought to adjust to new environments through the process of organizational socialization, through which they learn their job and become a “member of the team”1). According to Wanous, newcomers experience more stress right after entry than either before or after they have gained some experiences2). Many prior studies have been devoted to examining ways of reducing newcomers’ stress3, 4). This area is quite important and Major et al. indicated that newcomers’ experiences during their first month in the workplace predicted socialization outcomes5), and that successful workplace adjustment in the first month was a crucial factor in future career development6–9). Additionally, employees’ mental health has been related to withdrawal behaviors, lower job performance, and occupational morbidity, and mortality6, 7).

Earlier research has shown that newcomers’ workplace adjustment (i.e. mental health) are related to post-entry experiences with the job and organization, such as job condition10–12), role ambiguity and role conflict13, 14), unmet expectations15), person-environment fit16), social support from superiors and co-workers4, 17), and information-seeking behavior18). Other researchers, have focused their effects on examining the effect of pre-entry experiences on newcomers’ workplace adjustment, such as career exploratory behavior19), job choice experiences20), realistic job preview21), expectation22) and anticipation23).

Holton and Russell suggested that investigators need to examine how pre-entry experiences influence the socialization process and adjustment23), and other researchers note that pre-entry experiences remain strong influences on work attitudes, stress symptoms, and turnover intentions months or years after workplace entry10, 20, 24, 25). Louis and others also argued that difference in pre-entry experiences should affect workplace adjustment26–28). Therefore, it would be desirable to gather pre-entry data, in studies on the effects of newcomers’ mental health29–31).

On the other hand, McEvoy and others theorized to the contrary, that the effects of pre-entry experiences would be relatively unimportant because they would be displaced by the actual post-entry socialization
experiences of the job and organization\cite{32, 33}. Thus, little research has tested the joint effects of pre-entry experiences and post-entry experiences on newcomers’ mental health.

The purpose of this study was to examine the effects of pre-entry and post-entry factors on workplace newcomers’ mental health, with the goal of promoting an understanding of workplace adjustment that appropriately incorporates a range of significant pre- and post-entry influences.

**Pre-entry experiences**

The process of organizational socialization begins with a stage called “anticipatory socialization”\cite{34}. Pre-entry experiences during the recruitment and selection process are considered to be part of the anticipatory socialization phase. Anticipatory socialization corresponds to the exploratory period in Schein’s career cycle model\cite{1}, in which the individual examines or contemplates their future career. Stumpf and Hartman reported that career exploratory behavior two months prior to organizational entry correlated with success in the organizational socialization process, resulting in positive workplace adjustment and decreased turnover intention two months after entry\cite{35}. On the contrary, Riorden et al. reported that pre-entry job choice experiences did not affect later perceptions of workplace fit or worth, or workplace adjustment\cite{36}.

Recently, colleges and universities in Japan are paying increased attention to the career guidance, attempting to help students succeed at career development tasks and promote their career maturity. Increasing career maturity during the recruitment period refers to success in the process of anticipatory socialization\cite{35, 36} and is considered a critical predictor of future adjustment\cite{37}. The concept of career maturity is central to a developmental approach to understanding career behavior and involves assessing the individual’s level of career progress and competency in relation to his or her relevant career development tasks\cite{38}. Career maturity refers, broadly, to the individual’s readiness to cope with career development tasks and make informed age-appropriate career decisions\cite{39}. Definitions include the individual’s ability to make appropriate career choice, incorporating both the awareness of what is required to make career decisions, and the degree to which one’s choices are both realistic and consistent over time\cite{40}. Patton and Creed found that career maturity is a predictor of a successful post-school transition\cite{41}. Bloor and Brook found that undergraduate students who reported a high level of career maturity also reported greater satisfaction with life and exhibited higher self-esteem than participants with less career maturity\cite{32}.

Based on the above, we hypothesized as follows:

**Hypothesis 1 (H1):** Newcomers’ pre-entry career maturity influences newcomers’ post-entry mental health.

**Post entry experiences**

Role theory proposes that the interactions of superiors and co-workers with newcomers play an important role in newcomers’ learning and adjusting to their new environment\cite{28}. These relationships influence newcomers’ role perceptions and influence the role stress that they experience\cite{5, 8, 43}. Such relationships are also an important factor in newcomers’ ongoing adaptation, adjustment, and learning\cite{6, 22, 44}.

Relationships with superiors and co-workers are established very early during the socialization process\cite{5, 43} and such relationships significantly impact socialization outcomes\cite{5, 46, 47}. Louis et al. found that daily interaction with superiors and co-workers were the most important factor in fostering socialization\cite{47}. The stress literature suggests that social support has the effect of reducing negative outcomes, and much of the socialization literature agrees that a positive relation with others is critical to workplace adjustment\cite{26}.

Morrison structurally categorized newcomers’ support network as informational or friendship-based\cite{49}. Newcomers’ informational support networks relate to organizational knowledge, task, mastery, and role clarity, while friendship support networks relate to social integration and organizational commitment, and these two structures lead to newcomers’ success of socialization\cite{49}.

Fisher found social support helped reduce levels of unmet expectations\cite{12}, whereas Nelson and Quick found social support reduced stress\cite{40}. Fisher also employed cross-lagged regression to assess causality among support and adjustment outcomes, and reported that higher levels of social support appear to lead to improved adjustment outcomes, rather than the reverse\cite{15}.

Buunk and others suggested cross-sectional evidence that clarifying work tasks and support from superiors is more important than support from co-workers, and related to newcomers’ assimilation and adjustment\cite{50, 51}. Some researchers suggested newcomer interaction with co-workers provides social acceptance and support\cite{29, 52} and ameliorates effects of unmet expectations\cite{5, 10, 28}. Positive co-worker relations also bridge gaps between formal training and real world work requirements thereby helping to interpret and filter events\cite{53}, help meet social, self-esteem, and mentoring needs\cite{54}, and such positive relations serve as a primary mechanism for social learning\cite{55}.

These prior researches lead us to the following hypotheses:

**Hypothesis 2a (H2a):** Informational support networks are cross-sectionally and positively related to newcomers’ mental health.

**Hypothesis 2b (H2b):** Friendship support networks are cross-sectionally and positively related to newcomers’ mental health.
A secondary purpose of the study was to examine the mediation effects of newcomers’ support networks on the relationship between pre-entry experiences (i.e. career maturity) and post-entry mental health. Saks and Ashforth previously described the importance of identifying such mediators on workplace adjustment 56. This will help ascertain whether or not, as mentioned earlier, the effects of pre-entry experiences are displaced by actual post-entry experiences.

While much research has emphasized the importance of workplace support networks in reducing roll stress and uncertainty, the recent paradigm shift in socialization theory and research has focused attention on newcomers as proactive agents who affect their own organizational adjustment18, 57, 58. According to Miller and Jablin, newcomers can reduce uncertainty in their work environment through their own proactive efforts57. From this perspective, newcomers with a high level of career maturity might more successfully construct positive relationships with superiors and co-workers.

In view of the above theory and studies, we hypothesized the following.

Hypothesis 3a (H3a): Increased newcomer career maturity promotes informational support networks development.

Hypothesis 3b (H3b): Increased newcomer career maturity promotes friendship support networks development.

Hypothesis 4a (H4a): Newcomers’ informational support networks mediate the relationship between career maturity and mental health.

Hypothesis 4b (H4b): Newcomers’ friendship support networks mediate the relationship between career maturity and mental health.

Schonfeld and Ruan noted that research on mental health outcomes to date has usually lacked data on pre-entry psychological symptoms 59. Assessment of pre-entry symptoms would be expected to prove helpful in creating the “instrumental” variables required for developing models of cause and effect60. Accordingly, we measured newcomers’ pre-entry state of mental health in this study. Following the methodological guidelines of Zapf et al. for longitudinal surveys61, 62, we tested our hypotheses using a structural equation model (SEM), a model that is considered useful for the explication of causal relationships.

### Methods

#### Sample

Questionnaires were sent to 890 graduates of humanities departments at four universities in the Tokyo metropolitan area who were scheduled to enter the workplace in April 2003. These included 325 men and 565 women (average age 22.2 yr), with a distribution of 354, 247, 66, and 223 individuals from each university. Questionnaires were mailed to the subjects at two time points: late March, just before entering the workplace (T1), and early June, after two full months on the job (T2). The respondents returned the questionnaires by mail. Recent research has shown that newcomers adjust rapidly to their new organizational context5, 8, 14, with significant changes typically found 3 or 4 months after entry. Cooper-Thomas and Anderson found that significant adjustment had occurred by approximately two

### Table 1. Descriptive characteristics and mental health scores of the subjects included in the analysis

<table>
<thead>
<tr>
<th>Time1 (n=296)</th>
<th>Time2 (n=229)</th>
<th>CES-D (T1)</th>
<th>Self-esteem (T1)</th>
<th>Psychosomatic symptoms (T1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>65 (22.0%)</td>
<td>48 (21.0%)</td>
<td>14.4 ± 6.7</td>
<td>35.0 ± 7.6</td>
</tr>
<tr>
<td>Female</td>
<td>231 (78.0%)</td>
<td>181 (79.0%)</td>
<td>14.1 ± 9.4</td>
<td>33.6 ± 6.6</td>
</tr>
<tr>
<td>University</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>100 (33.8%)</td>
<td>71 (31.0%)</td>
<td>15.0 ± 9.3</td>
<td>33.3 ± 7.0</td>
</tr>
<tr>
<td>B</td>
<td>104 (35.1%)</td>
<td>88 (38.4%)</td>
<td>14.2 ± 9.5</td>
<td>33.4 ± 7.2</td>
</tr>
<tr>
<td>C</td>
<td>29 (9.8%)</td>
<td>26 (11.4%)</td>
<td>12.2 ± 9.3</td>
<td>36.7 ± 7.2</td>
</tr>
<tr>
<td>D</td>
<td>63 (21.3%)</td>
<td>44 (19.2%)</td>
<td>15.0 ± 10.3</td>
<td>34.6 ± 6.0</td>
</tr>
<tr>
<td>Company scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>−50</td>
<td>57 (19.3%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 −499</td>
<td>99 (33.4%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 −999</td>
<td>34 (11.5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000−3,000</td>
<td>48 (16.2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,001−</td>
<td>50 (16.9%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no answer</td>
<td>8 (2.7%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation n=229</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerk</td>
<td>52 (22.7%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical workers</td>
<td>58 (25.3%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>60 (26.2%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>32 (14.0%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>others</td>
<td>24 (10.5%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no answer</td>
<td>3 (1.3%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N=229 for CES-D(T1), Self-esteem (T1), Psychosomatic symptoms (T1). Company scale measured at Time1, Occupation measured at Time2.
months after entry\textsuperscript{9}, and the chosen time points were based on their research.

We received 296 (response rate 33.3\%), and 269 (30.2\%) responses at the first, and second time points respectively, with 229 respondents participating in both surveys. Table 1 lists demographic features of the study sample. There were no significant demographic differences between those who returned and those who did not return the second survey.

### Measures

#### Career maturity (measured at $T_1$)

Based on a career readiness scale initially developed by Sakayanagi\textsuperscript{36} based on theories put forth by Crites and Super \textit{et al.}, we created a career maturity scale with 11 items that assessed subjects’ career interest (4 items), planning (4 times), and autonomy (3 items). Example items include “I very much look forward to my future career”, “I planned my career such that I could engage in my desired occupation”, and “I do not want work involving a great deal of personal responsibility” (this last item was scored inversely). Possible responses ranged from “strongly disagree”, scored as 1, to “strongly agree”, scored as 5. The $\alpha$ coefficient for the scale was 0.88. The possible total score ranges from 11 to 55, with higher scores reflecting higher levels of career maturity.

#### Support networks (measured at $T_2$)

To measure newcomers’ support networks, we followed Ibarra and Morrison’s egocentric network survey techniques\textsuperscript{48, 63}. An egocentric network is an individual’s unique set of social contacts. Egocentric networks are not intended to provide an overall description of the social structure within an organization. Instead, they are useful for understanding how a person’s unique web of contacts (his or her ego-centered ‘universe’) relates to variables at the individual level of analysis, such as social support, power, advancement, perception, and attitudes\textsuperscript{64}. Egocentric networks are useful for studying organizational newcomers since they represent only a small fraction of the social system in which they are embedded\textsuperscript{49}.

Workplace sources of informational and friendship networks were assessed in the survey, using techniques modeled after similar surveys used in prior studies\textsuperscript{48, 63}.

Respondents were asked to complete a chart providing details about their support networks. For the informational support network, respondents were asked to write the number (size) of “people at work who have been regular and valuable sources of job-related information,” and further to provide the initials of up to six informational network members. Respondents provided details regarding each individual including his or her relative hierarchical rank (status: 1=same rank, 2=two or more years seniority, 3=management level), the average frequency with which they exchanged information with the individual (frequency: 1=once a month, 2=several times a month, 3=several times a week, 4=nearly every day), and whether they socialized with the individual over drinks or dinner (intimacy: 1=no, 2=yes).

For the friendship support network, respondents were asked to list the number (size) of “people at work who you consider to be friends, that is, people who you might choose to see socially in a non-work related context.” (Note that in Japan, after-work socialization with company seniors is often perceived as a work-related obligation; therefore, we were careful to word this question so as to imply social contact of a non-work related nature). Respondents were again asked to list the initials of up to six such individuals, and for each individual, indicate the average frequency of their conversations (see the frequency scale above) and the closeness of their relationship (intimacy: 1=not very close, 2=somewhat close, 3=very close). In this scale, higher total scores are posited to reflect more effective networks.

To examine the hypothesis model, informational support network characteristics used items of the status, frequency, and intimacy parameters and friendship support network characteristics used items of size, frequency, and intimacy parameters. These selections were based both on prior research as well as our findings regarding which items correlated significantly by network analysis with mental health scores in the top or bottom deciles at $T_2$.

#### Mental health

Three measures assessed poor mental health, and one measure assessed work motivation.

As poor mental health reflects failure of workplace adjustment in this study, declines in self-esteem, depressive symptoms and psychosomatic symptoms were measured, all of which were commonly reported by newcomers with unsatisfactory workplace adjustment\textsuperscript{65–67}. We used the following scales to measure these symptoms at both of the two data collection points: the CES-D (Center for Epidemiological Studies Depression) scale, which involves 20 items with a four-point response scale (range 0–60); Rosenberg’s self-esteem scale, 10 items with a five-point rating scale (range 10–50), which measures self-esteem through self-respect and perceived self-worth rather than superiority or inferiority compared to others\textsuperscript{66}; and from a condensed version of the CFSI (Cumulative Fatigue Symptom Index) developed by Yamazaki and Asakura\textsuperscript{67}, we selected 12 items related to psychosomatic symptoms such as headache, sleeplessness, and fatigue (range 0–12). The $\alpha$ coefficient values for CES-D were 0.87 and 0.90, for self-esteem they were 0.82 and 0.85, and for psychosomatic symptoms 0.62 and 0.72 at $T_1$, and $T_2$, respectively. To examine the hypothesis model, we...
grouped the CES-D, self-esteem, and psychosomatic symptom scale results into one latent variable termed poor mental health. The score for the self-esteem scale was inverted such that higher values would reflect poorer mental health. Because scale reliability and validity of these measures had already been tested by prior studies, we used the total score of each variable as an indicator of latent variable.

Recently, corporations have been paying increasing attention to the concept of work motivation, an adjustment outcome highly correlated with productivity70). Work Motivation is a form of internal psychological energy71) and prior studies have reported a strong correlation between work motivation and physical and psychological health; it has also been shown to predict turnover intention and job satisfaction72, 73). We measured work motivation using the MSQ (Motivation of Status Quo) scale, which was developed based on data from a sample of over 100,000 subjects in Japan74). MSQ questionnaires investigate topics such as individuals’ interest in, desire to continue and assignment of meaning to work (range 5–20). Examples items include: “I feel volition for the present work”; and “My present work is interesting”. We measured work motivation at $T_2$. The $\alpha$ coefficient value was 0.89.

Demographic variables

Age, sex, universities, corporation size and job type were asked of respondents as demographic variables.

Data Analysis

We performed our data analysis in four basic steps. First, we determined whether there were any differences between newcomers and “dropouts” with regard to demographic characteristics and other variables. Next, we performed preliminary statistical analyses (means, standard deviations, and correlational analysis) to gain an overview of our data before pursuing a more detailed assessment of our hypotheses. Then, we examined the measurement model of career maturity and work motivation, as recommended by Anderson and Gerbing75). To this end, exploratory factor analyses were conducted. We selected items based on a factor loading greater than 0.70. We limited the number of items used in our analysis given that longitudinal analyses are more easily performed using a smaller number of indicators56; a minimum of three indicators per variable are generally recommended77, 78). Finally, we tested our hypothesized model. Figure 1 portrays the hypothesized model of links among measures.

The model fit was assessed using the $\chi^2$ test, CFI (0.95 or above), GFI (0.9 or above), and RMSEA (0.05 or below). SPSS for Windows 11.5J was used for statistical analyses, and Amos 4.02 was used to generate structural equation models.

Results

Step 1: Analysis of differences between panel group and dropouts

Table 1 shows respondent characteristics and mean mental health variable scores at $T_1$. We examined the means of the three poor mental health parameters for significant differences according to respondent characteristics (gender and university), but no significant differences were found ($t$-test and ANOVA). We also compared the mean size and status characteristics of support networks according to corporation size and job type, but found no significant differences for either informational or friendship support networks.

The $t$-test revealed no significant differences between
the panel group and the dropouts. We additionally found no significant difference in mean poor mental-health parameters at T1 between the 229 respondents who answered both surveys and the 67 who failed to respond to one survey. Therefore, we believe that our results are not significantly confounded by response bias.

**Step 2: Correlation analyses**

Pearson correlations between all variables are shown in Table 2. The table shows cross-time stability on the CES-D, self-esteem, and psychosomatic symptoms. Mental health variables except psychosomatic symptoms were correlated moderately to career maturity, and support networks. Psychosomatic symptoms correlated moderately only with career maturity. There were moderate significant correlations among career maturity, informational support network, and friendship support network variables. Additionally, work motivation correlated significantly with all three poor mental health variables.

**Step 3: Measurement model**

First, the second-order model with three first-order factors (career interest, planning and autonomy) was tested for constructing career maturity. The measurement model provided an acceptable fit to the data when considering the fit statistics, χ²=24.33 (17), p=.111, CFI=.990, RMSEA=.043, GFI=.974. Next the one-factor model was tested for constructing work motivation. The measurement model of work motivation also provided an acceptable fit to the data when considering the fit statistics, χ²=10.99(4), p=.027, CFI=.990, RMSEA=.049, GFI=.982.

**Step 4: Hypothesized model**

Figure 2 presents the results obtained from the test of the model. Looking at the fit indices, it can be concluded that the model fits the data well: χ²=280(227), p=.009, CFI=.986, RMSEA=.032, GFI=.909.

The first hypothesis (H1) tested was that career maturity has a longitudinal and positive influence on newcomers’ post-entry mental health. Figure 2 shows that the longitudinal path between career maturity and poor mental health was negative (β=-.22), while work motivation was positive (β=.25). Thus, H1 was supported.

Hypotheses 2a and 2b proposed positive and cross-sectional associations of both informational and friendship support networks with mental health. Figure 2 shows that only the hypothesized relationship between informational support network and work motivation was supported (β=.30). Therefore, H2a was partially supported, whereas, the association with friendship support network (H2b) was not supported.

Hypotheses 3a and 3b specified longitudinal and positive associations of career maturity with both informational and friendship support networks. Figure 2 shows positive and significant longitudinal paths between career maturity and both informational and friendship support networks (β=.30, and β=.27, respectively). Thus, H3a and 3b were supported.

Hypotheses 4a and 4b proposed that both types of support networks mediate the relationship between career maturity and post-entry mental health. Although it was weaker than a direct effect, Fig. 2 illustrates a role for informational support network in mediating the relationship between career maturity and work motivation. Therefore, H4a was partially supported, while H4b was not supported.

In addition, newcomers’ pre-entry poor mental health was strongly associated with post-entry poor mental health (β=.51), but did not show a significant relationship with work motivation, informational support network, or friendship support network.

**Discussion**

In this study, we examined the effects of pre- and post-
entry factors and experiences on newcomers’ post-entry mental health, applying a longitudinal design to a sample of workplace newcomers.

First, our results primarily support Hypothesis 1, indicating that workplace preparedness prior to entering the workplace had direct effects on newcomers’ post-entry mental health after. Our finding that the influence of career maturity extends to workplace adjustment is consistent with previous theory and researches emphasizing the importance of pre-entry experiences. It is consistent with the assumption of Major et al. that relationship patterns with superiors and co-workers are established early in the socialization process, and that such relationships significantly impact socialization outcomes.

Second, our results also suggest the importance of newcomers’ informational support networks. This is consistent with previous studies that vocational support from superiors is associated with newcomers’ workplace adjustment and attitudes. It is consistent with the assumption of Major et al. that relationship patterns with superiors and co-workers are established early in the socialization process, and that such relationships significantly impact socialization outcomes.

Similarly, Allen et al. found in their mentoring study, that the career-related mentoring was especially important to facilitating newcomers’ aspect of socialization. These results also suggest that informational support networks may be critical not only to newcomers’ socialization success, but ultimately to corporate productivity, given that work motivation has been found to correlate strong with productivity.

A third important finding in this study was that newcomers with a high level of career maturity were successful in constructing positive relationships with superiors and co-workers. Furthermore, informational support networks appeared to partly mediate the relationship between career maturity and work motivation. This finding suggests that, during the first few months on the job, newcomers may focus their attention on acquiring information, and this behavior is associated with higher levels of career maturity. Otherwise, newcomers’ acquisitions of important information were related to their knowledge, and readiness to cope with career development tasks.

Some of our results were unexpected. First, the newcomers’ friendship support networks did not show any direct effects on poor mental health, or work motivation. One possible explanation is that, as mentioned by Klein and Weaver, newcomers’ mental health was affected by other variables besides socialization. Therefore, support from outside the
organization might be more efficient for this kind of stress reduction. Yet, friendship support network correlated moderately with informational support network, and this result suggests that the friendship support network might have indirect effect on work motivation, or alternatively that the friendship support network contributes to the work motivation improvement of newcomers who constructed positive informational support networks.

Second, paths between both informational and friendship networks and poor mental health were not significant. However, correlation between these variables showed moderate significance. Therefore, one possible explanation is that support networks have positive direct influences on other variables, such as role stressors and socialization tactics, and that these variables might mediate the relationship between support networks and mental health. Moreover, the informational support network had positive effects on work motivation, and work motivation correlated moderately to poor mental health. Thus, there might be an indirect relationship between informational support network and mental health. Clarification of the apparently complex relationship between newcomers’ support networks and mental health is an important area for future attention.

We conclude that career maturity strongly influences the workplace socialization process and outcomes for workplace newcomers. This integrated process results in active, proactive newcomers who are agents in their own adjustment. Further research is needed to examine how career maturity develops and how pre-entry experiences (e.g. career maturity, environmental circumstances or individual characteristics) influence the socialization processes and workplace adjustment.

In addressing the limitations of the present study, we hope to simultaneously suggest avenues for future research. First, all of the data used in this study were based on self-reports. However, because career maturity is difficult to observe, individuals are probably the best source to report their career maturity. Further, we measured newcomers’ poor mental health on different points in time, some of the biases of self-report data such as common method variance should be less of a problem.

Second, we measured outcome variables at only two fixed time points. The research period of two months was chosen based on prior research, but several recent studies have shown significant newcomer adjustment just 4 wk after organizational entry. The time lag problem intrinsic to longitudinal research in general is difficult to solve.

Third, we tested only direct effects between support networks and adjustment outcomes such as poor mental health and work motivation. Saks and Ashforth have emphasized that the identification of moderators and mediators in the newcomer socialization process is crucial. In future research, it would be valuable to analyze support network buffering effects on adjustment outcomes. It would also be valuable to examine the mediating effects on role stressors such as role ambiguity and role conflict on mental health.

Finally, we examined the relationship between support networks and mental health using a cross-sectional design, which does not allow for the interaction of support network and mental health over time. The results of this study underscore the importance of elucidating these developmental relationships and the variables that impact or mediate their effects, for which additional longitudinal studies are needed.

Although the limitations discussed above imply that our results should be interpreted with care, we wish finally to also review a few strengths of our study. First, our study involved a relatively large sample and utilized multiple indicators of mental health. According to Vaillant, mental health should both reflect not only absence of symptoms but also human potential, which can be conceptualized widely as the capacity to work and to love, positive psychology, maturity, subjective well-being, emotional or social intelligence, and successful adaptation. Therefore, our multiple indicators of mental health might reflect not only workplace adjustment, but also human potential. Second, our results, overall, contribute to the body of research favoring a comprehensive view of newcomers’ workplace adjustment as a cumulative process in which both pre- and post-entry experiences influence outcome. Additionally, our study suggests that both career maturity and informational support networks were important influences on the socialization process. Career maturity, in particular, seemed to play a strong role in newcomer adjustment and attitudes. With this in mind, it may be useful for research to examine how career maturity could be fostered, such as through improved undergraduate institution workplace-related education (career guidance).

From a practical perspective, our results indicate that high preparedness and knowledge of a new job produce positive mental health after employment. This finding suggests organizations should make efforts to provide important and useful information about the organization or content of job, while their undergraduate. This kind of effort might help promote their career maturity. Although research has demonstrated that newcomers are proactive agents, the role of organizational insiders is critical in change. Training superiors, to offer profitable information may be an important step toward ensuring successful adjustment of newcomers.

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