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ORIGINAL ARTICLE

The Mediated Relationship of Leadership on Job Insecurity

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Job insecurity is a predominant work stressor that has negative effects for individuals and organizations. The purpose of this study is to enhance the understanding of the effect of organizational management, more specifically of production- and employee-oriented leadership, on job insecurity. Moreover, two potential mediators of leadership—goal clarity and trust—are investigated. Cross-sectional questionnaire data (n = 1329) from an acute care hospital in Sweden was used. Both leadership styles were negatively associated with job insecurity. In addition, production-oriented and employee-oriented leadership had indirect effects on job insecurity. More specifically, we found goal clarity to be the prominent mediator of the relation between production-oriented leadership and job insecurity. Organizational actions such as leadership are important for working preventively with job insecurity. It is the mechanisms of leadership that may reduce job insecurity. This is the first study to show how leadership styles may influence employees' perceptions of job insecurity.

Over the last decades, heath care organizations in most industrialized countries have undergone major organizational changes through striving for improved effectiveness and economic savings (Cunningham et al., 2002), often called new public management (Ferlie Ashburner, Fitzgerald, & Pettigrew, 1996). These changes have also been noticed in Sweden (Falkenberg, Näswall, Sverke, & Sjöberg, 2009; Öhrming & Sverke, 2001, 2003), where longitudinal studies (e.g., Petterson, Hertting, Hagberg, & Theorell, 2005) have detected an increase in mental health complaints among health care staff, which according to Petterson and colleagues was due to the organizational changes health care employees were exposed to. Job insecurity, the feeling that one's job is at risk (Hellgren, Sverke, & Isaksson., 1999), is one of the more prevalent stressors in today's working life that often occurs in conjunction with organizational change (Keim, Landis, Pierce, & Earnest, 2014). From previous research, it is well known that job insecurity may result in negative consequences for both the concerned individuals and the organizations in which they work (for meta-analytical results, see Cheng & Chan, 2008; Sverke, Hellgren, & Näswall, 2002). For instance, job insecurity can interfere negatively with attaining performance goals (Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Podsakoff, LePine, & LePine, 2007) or safety behavior on the job (Probst & Brubaker, 2001) and has been related to a decrease in health and well-being (Cheng & Chan, 2008; Sverke et al., 2002). For health care organizations, job insecurity may therefore be particularly important to monitor because patient safety may be at risk when health care workers experience job insecurity. Several researchers have called for more research on the prevention of job insecurity and ways to decrease its consequences (e.g., De Witte, 2005; Sverke & Hellgren, 2002; Vander Elst, Baillien, De Cuyper, & De Witte, 2010). In the present study, we address this research gap by investigating how two specific leadership styles may be related to—and can be used to prevent—job insecurity.

This study makes several contributions to the job insecurity and leadership literature. First, specific leadership styles may increase employees' resources. Here, we study production- and employee-oriented leadership as antecedents of job insecurity because leadership has been shown to affect the work environment and, consequently, employees' well-being and productivity (Avolio, Reichard, Hannah, Walumbwa, & Chan, 2009; Skakon, Nielsen, Borg, & Guzman, 2010). We therefore contribute to the

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literature on the antecedents of job insecurity by adding new antecedents to the job insecurity literature, namely the two specific leadership styles investigated in this study. Second, in addition to investigating the role of these two leadership types, we investigate the specific mechanisms through which the leadership styles may affect job insecurity, that is, why production- and employee-oriented leadership may be related to job insecurity. This study answers the calls to increase the understanding about the mechanisms of core constructs in psychology, such as leadership (cf. Judge, Piccolo, & Illies, 2004; Sverke, De Witte, Näswall, & Hellgren, 2010; Taris & Kompier, 2003). The study of mechanisms through which specific leadership behaviors may give rise to consequences represents yet another contribution to the job insecurity and leadership literature. Combined, the knowledge generated by the present study can facilitate the design of primary organizational interventions to minimize the sources of job insecurity (cf. Cooper & Cartwright, 1997) and to develop leadership training programs that can take these specific mechanisms into consideration to foster a good work environment for employees.

Job Insecurity and Its Organizational Antecedents

Job insecurity has been defined as employees' concern about the continuity of their employment (Klandermans & Van Vuuren, 1999). Even though job insecurity has been operationalized in some studies as working under a temporary contract (Pearce, 1998) or working in an organization undergoing downsizing or reorganizations (Büssing, 1999; Roskies & Louis-Guerin, 1990), other studies show that individual employees working at the same organization experience different levels of job insecurity (De Witte & Näswall, 2003; Letourneux, 1998; Mauno, Kinnunen, Mäkikangas, & Nätti, 2005). Therefore, job insecurity can be seen as a subjective phenomenon, which consists of a cognitive and an affective component. The cognitive component entails the employees' estimation of the likelihood that an involuntary job loss may occur in the future, whereas the affective component represents the fear and worry employees experience regarding potential job loss (Hartley, Jacobson, Klandermans, & van Vuuren, 1991). As job insecurity concerns possible future job loss, this uncertainty is harder to cope with compared to an actual job loss because, according to stress theory (e.g., Lazarus & Folkman, 1984), in the case of harm or loss, the individual can at least start coping with the situation, whereas uncertainty makes it difficult to know how to handle the problematic situation. Therefore, job insecurity has often been associated with employees feeling powerless about their employment situation (Greenhalgh & Rosenblatt, 1984).

Less research effort has been put into identifying antecedents of job insecurity compared to investigating its consequences. The existing research is summarized in a recent meta-analysis by Keim et al. (2014), who found that several organizational and work environmental conditions—such as working in blue collar jobs, having a temporary contract, and having been exposed to organizational changes—were related to higher levels of job insecurity. Moreover, a lack of organizational communication, perceived role ambiguity, and role conflict were associated with higher levels of job insecurity. In addition, other predictors of job insecurity are related to the actions of the organization, such as the employees' perceived fairness during organizational change (Brockner, Grover, Reed, & Dewitt, 1992; Jack & Céleste, 2007) or company performance in general (Debus, König, & Kleinmann, 2014). Moreover, employee participation in decision-making (Vander Elst et al., 2010), supervisor support (Schreurs, van Emmerik, Günter, & Germeys, 2012), leader–member exchange, and organizational justice (Zhao, Lim, & Teo, 2012) have been found to be associated with lower levels of job insecurity. Accordingly, organizations and their actions influence the emergence and magnitude of job insecurity among their staff.

Managers, as the direct representatives of the organization in the day-to-day contact with employees, can influence the degree of participation, the quality and quantity of communication, and the degree of support offered to employees (Avolio et al., 2009; Skakon et al., 2010). Hence, managers indirectly influence the work environment factors associated with job insecurity through the way they lead. Consequently, managers' leadership may also affect employees' perceptions of job insecurity, which Greenhalgh and Rosenblatt (1984) have proposed. Despite this, surprisingly little research has focused on leadership behaviors as antecedents of job insecurity (with an exception of Hisham Hamid, 2015, who investigated ethical leadership as an antecedent). Other studies that have taken leadership styles into account when investigating job insecurity have mainly operationalized leadership styles as a boundary condition (i.e., moderator) to further understand the relationship between potential antecedents and job insecurity (Heponiemi et al., 2012; Loi, Lam, & Chan, 2011) or between job insecurity and its outcomes (Cheng & Chan, 2008; Hu & Zuo, 2007; Probst, Jiang, & Graso, 2016). In contrast, in this study, we investigate two of the most known leadership styles (production- and employee-oriented leadership; Judge et al., 2004) and their direct relation to job insecurity. Hence, we operationalize leadership as a potential antecedent that may affect the development of job insecurity.

Production- and Employee-Oriented Leadership and Job Insecurity

Leadership describes the behaviors managers engage in to guide employees toward a shared goal (Bryman, 1992). It is related to employees' well-being, work attitudes, and job performances (Judge & Piccolo, 2004; Skakon et al., 2010). In this study, we use the well-established two-factor leadership theory, which has proven to have stable results over the years (Fleishman, 1995; Judge & Piccolo, 2004) and has been successfully applied in different occupational contexts (e.g., the health care context; Lornudd, Tafvelin, von Thiele Schwarz, & Bergman, 2015; Zampieron, Spanio, Bernardi, Milan, & Buja, 2013). Here, we differentiate between two types of leadership styles: production- and employee-oriented leadership behavior (Ekvall & Arvonen, 1991; Fleishman & Harris, 1962). Though these two styles have been frequently studied over the years (Judge et al., 2004), different authors have used different labels for these constructs, for example, initiating structure and

showing consideration (Stogdill, Goode, & Day, 1962) as compared to concern for production and concern for people (Blake & Mouton, 1978). In this study, we use the terms production- and employee-oriented leadership for these two leadership styles. Managers using production-oriented leadership behavior initiate a clear structure at the workplace. They plan work tasks systematically and clarify work goals and responsibilities. Moreover, they monitor and follow up with work progress continuously to assure goal attainment. These managers have a strong focus on attaining work goals and, therefore, use production-oriented leadership behavior to support employees in their work (Ekvall & Arvonen, 1991; Fleishman & Harris, 1962). Managers who engage in employee-oriented behavior, on the other hand, show consideration for the individual employees and acknowledge employees' feelings and needs and provide personal support. These managers have a strong focus on creating good relationships with their employees and a good atmosphere at work through being friendly and approachable, as well as being concerned about the employees' well-being (Ekvall & Arvonen, 1991; Fleishman & Harris, 1962).

Based on the conservation of resources theory (COR), individuals' well-being and health is dependent on the gain, maintenance, or loss of resources (Hobfoll, 1989, 1998). Resources constitute different things, such as objects, personal characteristics, personal energies, or personal and workplace conditions. At work, resources can constitute an employee's relationship with the manager, social support, provided clarity, or provided structure. According to COR, the loss of resources leads to negative consequences, whereas the maintenance or gain of resources is associated with health and well-being (Hobfoll, 1989, 1998). The kind of leadership employees are exposed to at the workplace may therefore be understood as a way to increase, maintain, or decrease employees' resources, which may explain why the different leadership styles result in varying degrees of health and well-being for employees (cf. Clarke, Arnold, & Connelly, 2015).

Compared to employee-oriented leadership, managers who use production-oriented leadership may place a stronger focus on clarifying goals, prioritizing tasks, and being clear regarding responsibilities and mandates. Moreover, they may focus more on communicating within the organization regarding decisions to keep employees informed and give employees clear guidelines about expectations posed upon them; therefore, production-oriented leadership may provide employees with resources or at least the chance to maintain their current resources. Previous research investigating the general effects of this form of leadership has shown varying results depending on how production-oriented leadership was operationalized. In a review by Cummings et al. (2010) in which production-oriented leadership was operationalized as dissonant leadership or management by exception, it was found to be related to negative outcomes, such as decreased job satisfaction, increased job stress and exhaustion, and fewer extra efforts at work. Duxbury, Armstrong, Drew, and Henly (1984) operationalized production-oriented leadership as initiating a clear structure at work and could not find these negative effects reported

by Cummings et al. (2010). In this study, we follow the operationalization of production-oriented leadership used by Duxbury et al. (1984). In the case of job insecurity, a lack of organizational communication and perceived role ambiguity have been found to give rise to job insecurity (Keim et al., 2014), whereas organizational measures such as clear communication (Vander Elst et al., 2010) and defining clear roles at work (Jiang & Probst, 2013) have been negatively related to job insecurity. Based on the theoretical reasoning and previous empirical results, it can be assumed that production-oriented leadership focusing on setting clear goals, expressing clear expectations, and introducing solid structure at work for employees to reach their work goals is negatively related to job insecurity, as this type of leadership is supposed to provide employees with resources. We therefore predict the following:

Hypothesis 1: Production-oriented leadership is negatively related to job insecurity.

Managers who make use of employee-oriented leadership create friendly relationships with their employees to assure their satisfaction and well-being. By showing consideration and respect, managers try to build trust and induce security for employees. Another way these managers may relate to their employees is by providing social support when needed. Employee-oriented leadership may therefore provide employees with resources or at least the chance to conserve their current resources. Employee-oriented leadership has been associated with employee motivation, with satisfaction, and with affective well-being and low levels of stress in employees (Cummings et al., 2010; Judge & Piccolo, 2004; Skakon et al., 2010). Studies investigating job insecurity have shown that good relationships between managers and employees can be beneficial for reducing job insecurity and result in fewer negative outcomes (Hu & Zuo, 2007; Loi, Ngo, Zhang, & Lau, 2011). Moreover, support from the supervisor has been found to be associated with low job insecurity and fewer negative consequences (Lim, 1997). Based on the theoretical reasoning and previous empirical results, it can be assumed that employee-oriented leadership, in which managers are responsive to employees' emotions and focused on good relations, is negatively related to job insecurity, as this type of leadership is supposed to provide employees with resources. We therefore predict the following:

Hypothesis 2: Employee-oriented leadership is negatively related to job insecurity.

Mediators Between Leadership and Job Insecurity

Besides studying the direct effects of leadership, several authors have highlighted the lack of knowledge about how leadership may affect employee outcomes, that is, in what way managers influence employees when using certain leadership behaviors (Judge & Piccolo, 2004; Northouse, 1997). Therefore, in this study, we investigate two mechanisms through which production- and employee-oriented leadership may be related to job

insecurity. As the different leadership behaviors have different focuses—production-oriented leadership is aimed at providing a clear structure for employees, and employee-oriented leadership is aimed at establishing a good atmosphere and relationship with employees—it is likely that different mechanisms exist. For this reason, we investigate two potential intervening variables that are directly related to the aims of the two investigated leadership styles and that may transmit the effects of these specific leadership styles on job insecurity. We assume goal clarity as a mechanism for production-oriented leadership on job insecurity, whereas we study trust as a mechanism for employee-oriented leadership on job insecurity. Using COR (Hobfoll, 1989, 1998), goal clarity and trust can be understood as the two concrete ways managers can provide resources to employees when engaging in production-oriented and employee-oriented leadership, respectively. According to COR, an increase of resources, in this case through the manager's way of leading, is most likely a possibility to prevent the rise of job insecurity and could also be assumed to result in the increased well-being of employees in the longer perspective (Hobfoll, 1989, 1998).

Goal clarity as a mediator. Goal clarity is a job resource that makes work clearer and more comprehensive for employees. According to the job characteristics model by Hackman and Oldham (1980), goal clarity represents an important job characteristic that has a positive influence on motivation and on the well-being of employees (Arnetz & Blomkvist, 2007; Elovainio & Kivimäki, 1996). Goal clarity might also be important for job insecurity. One characteristic of job insecurity that makes it such a severe stressor is the inherent unpredictability and uncertainty (Greenhalgh & Rosenblatt, 1984). Previous research has shown that introducing clarity in the work context of employees, for instance, through communicating organizational changes clearly and transparently and being clear about employees' work roles (Jiang & Probst, 2013; Vander Elst et al., 2010) is related to lower job insecurity and fewer negative consequences. Managers who make use of production-oriented leadership try to initiate a clear structure at the workplace to assure goal attainment for employees (Judge et al., 2004). This may involve managers communicating what they expect from their employees, which areas of responsibilities employees have, and what goals employees are to reach. When employees have this clarity, they also have a chance to respond and act according to these goals and expectations; hence, it is possible for them to deal with the situation and increase their feeling of control (cf. Lazarus & Folkman, 1984). Being in control has been found to be negatively related to job insecurity (Greenhalgh & Rosenblatt, 1984). Managers using production-oriented leadership may provide resources to employees through providing clarity, which lets employees maintain or even increase their resource pool (cf. Hobfoll, 1989). Based on the empirical findings, as well as the theoretical reasoning of COR and the job characteristics model, we predict the following:

Hypothesis 3: The relationship between production-oriented leadership and job insecurity is mediated by goal clarity.

Trust as a mediator. Trust in the employer, representing the employees' willingness to accept vulnerability (Mayer, Davis, & Schoorman, 1995), is a key concept to understanding the relationship between employer and employee. Trust and how it develops can be further understood through the perceived organizational support theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Eisenberger & Stinglhamber, 2011; Shore & Shore, 1995). According to the perceived organizational support theory, employees develop a general perception concerning how much the organization's leaders value employees' contributions and whether the organization's leaders are concerned about employees' well-being based on previous actions of the organization's leaders. Supportive aspects of leadership, such as employee-oriented leadership, may increase the perception of organizational leadership support and lead to trusting relationships at the workplace, which subsequently are related to positive employee outcomes (Kurtessis et al., 2015). Empirical studies on trust have shown that trust is related to positive work outcomes, such as task performance and organizational citizenship behavior (Aryee, Budhwar, & Chen, 2002; Chen, Aryee, & Lee, 2005), and positive work attitudes, such as organizational commitment, job satisfaction, and the intention to stay (Aryee et al., 2002). In organizations undergoing restructuring, trust in the employer has been shown to negatively relate to job insecurity experiences postrestructuring (Arnold & Staffelbach, 2012). Trust has also been related to reduced levels of perceived uncertainty (Chiles & McMackin, 1996). Managers who make use of employee-oriented leadership focus on building strong relationships, which are characterized by mutual respect and trust. These managers show empathy and can sense the needs of their employees (Fleishman & Salter, 1961). Employee-oriented leadership may facilitate trusting relationships, which, in turn, let employees maintain or increase their resources and therefore may be associated with lower levels of job insecurity (cf. Hobfoll, 1989). Based on the empirical findings and theoretical reasoning, we predict the following:

Hypothesis 4: The relationship between employee-oriented leadership and job insecurity is mediated by trust.

Methods
Procedure and Participants
This study is based on cross-sectional data collected in 2001 and 2002 at a corporatized acute-care hospital, in which management and the board have direct governance, in the Stockholm region in Sweden. Physicians and nurses received questionnaires at their home addresses, with a letter explaining the purpose of the study and assuring the participants that their responses were confidential and that their participation was voluntary. A second letter was included in which the hospital management expressed its support for the study. Employees returned

the questionnaire with a business-reply, postage-paid envelope addressed to the research team.

The questionnaire was sent to 2,409 employees. A total of 1,760 questionnaires were returned (response rate of 73.06%). After employees with no relevant information in any of the studied variables were excluded, an effective sample size of 1,329 employees remained. A more detailed description of the sample can be found in **Table 1**.

Measures
Leadership and job insecurity. Leadership was measured with two subscales to assess production-oriented leadership and employee-oriented leadership (Ekvall & Arvonen, 1994). A sample item for production-oriented leadership is "My supervisor gives clear instructions," and a sample for employee-oriented leadership is "My supervisor shows regard for the subordinates as individuals." These two subscales were measured on a 4-point Likert scale ranging from *seldom or never* (1) to *often times/always* (4). The original subscales from Ekvall and Arvonen (1994) had five items each; however, for this study, those items had to be reduced to three items version on factor loadings. The reliability was .83 for production-oriented leadership and .85 for employee-oriented leadership.

Job insecurity was measured with Ashford, Lee, and Bobko's (1989) 10-item subscale that captures the perceived threat to a job. An example item is "I can lose my job and be laid off permanently," and the reliability for this scale was .74. Job insecurity was rated on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5).

Mediators. Goal clarity was measured with four items based on items used by Rizzo, House, and Lirtzman (1970) and Caplan (1971). A sample item is "I know exactly what is expected of me." The scale had a reliability of .75. Goal clarity was rated on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Trust was measured by a five-item scale based on Robinson (1996). A sample item is "I can expect my employer to treat me in a consistent and predictable fashion," and the reliability was .93. Trust was rated on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5).

Control variables. Three control variables (age, gender, and employment contract) were identified based on the recent meta-analysis by Keim et al. (2014). In their analysis, job insecurity experiences were more prevalent among younger employees and those with temporary contracts. Moreover, research on job insecurity (e.g., see Cheng and Chan, 2008; De Witte, 1999; Rosenblatt, Talmud, & Ruvio,

Table 1: Sample Characteristics of Participating Nurses and Physicians (N = 1,329).

	Nurses (N = 1,091)	**Physicians (N = 238)**
Age	42 years	44.2 years
Gender (Female)	95%	48.3%
Contract (Permanent)	92.7%	74%
Tenure	10.44 years	7.87 years

1999) has found some gender differences in the levels of job insecurity. In the present study, age was measured in years, and employment contract (0 = permanent employment and 1 = other form of employment) and gender (0 = woman and 1 = man) were represented by dichotomized variables.

Analysis. We used structural equation modeling in Mplus with maximum likelihood estimation. Multiple-fit indices—including the chi-square statistic, the comparative fit index (CFI), the root mean-square error of approximation (RMSEA), and the standardized root mean-square residual (SRMR)—were employed to evaluate model fit. Traditional cut-off criteria (CFI > .90; SRMR and RMSEA < .08) were used to indicate an acceptable fit (Kline, 2010; Marsh, 2007), and more strict criteria (CFI and TLI > .95; SRMR < .08 and RMSEA < .06) were used to indicate a good fit (Hu & Bentler, 1999).

Following the procedures outlined by Anderson and Gerbing (1988), we examined the measurement model prior to estimating the structural models. We then estimated two structural models: one direct effects model, including the direct effects of production-oriented and employee-oriented leadership on job insecurity, and one indirect effects model examining the mediating role of goal clarity and trust in the relationship between leadership behavior and job insecurity. Using the recommended procedure for testing mediational models in structural equation modeling, we estimated the total and specific indirect effects of the two leadership behaviors on job insecurity by employing bootstrapping procedures to assess the 95% bias-corrected (BC) confidence intervals (CI) of these effects (Rucker, Preacher, Tormala, & Petty, 2011). To investigate the importance of the mediator, a contrast between the two specific indirect effects was calculated.

Results
Descriptive statistics and correlations between the study variables are presented in **Table 2**. The correlations were all significant and in the expected direction. For example, both production- and employee-oriented leadership were negatively but weakly correlated with job insecurity ($r = -.11$, $p < .001$ and $r = -.15$, $p < .001$—respectively). The two leadership styles were positively related ($r = .53$, $p < .001$). In addition, production-oriented leadership was positively correlated with goal clarity ($r = .39$, $p < .001$) and trust ($r = .46$, $p < .001$). Employee-oriented leadership was positively correlated with trust ($r = .53$, $p < .001$) and goal clarity ($r = .31$, $p < .001$). The two mediators goal clarity and trust were negatively related to job insecurity ($r = -.19$, $p < .001$ and $r = -.18$, $p < .001$—respectively). Higher age was related to high levels of goal clarity and trust ($r = .14$, $p < .001$ and $r = .11$, $p < .001$—respectively). Men rated lower goal clarity and less trust ($r = -.10$, $p < .001$ and $r = -.06$, $p = .04$—respectively), and holding a temporary employment contract was associated with higher levels of employee-oriented leadership and lower goal clarity ($r = .06$, $p = .02$ and $r = -.09$, $p < .001$—respectively).

The measurement model consisted of five intercorrelated latent variables: production-oriented leadership, employee-oriented leadership, goal clarity, trust, and job insecurity. This model demonstrated a fit to the data

Table 2: Descriptive Statistics and Correlations Between all Study Variables (N = 1,329).

Scale	M	SD	1.	2.	3.	4.	5.	6.	7.
1. Age	42.47	10.89							
2. Gender (Male)	0.13	0.34	.07*						
3. Temporary contract	0.23	0.78	−.21**	.05					
4. PO leadership	2.92	0.73	.04	−.04	−.00				
5. EO leadership	3.38	0.70	.04	−.05	.06*	.53**			
6. Goal clarity	4.11	0.74	.14**	−.10**	−.09**	.39**	.31**		
7. Trust	3.43	0.94	.11**	−.06*	−.03	.46**	.53**	.45**	
8. Job insecurity	1.70	0.61	.02	−.00	.02	−.11**	−.15**	−.19**	−.18**

Notes: * $p < .05$, ** $p < .01$, PO leadership = production-oriented leadership, EO leadership = employee-oriented leadership.

Table 3: Mediation of the Effect of the Two Leadership Styles and Job Insecurity Through Goal Clarity and Trust (Standardized Coefficients).

Direct effects	Standardized coefficients
PO leadership → job insecurity	.08, $p = .14$
EO leadership → job insecurity	−.09 $p = .12$
PO leadership → goal clarity	.43, $p < .001$
PO leadership → trust	.25, $p < .001$
EO leadership → goal clarity	.10, $p = .05$
EO leadership → trust	.44, $p < .001$
Goal clarity → job insecurity	−.23, $p < .001$
Trust → job insecurity	−.08 $p = .12$

Indirect effects	Standardized coefficients and the 95% confidence interval
Total indirect effect for PO leadership	−.12, $p < .001$, 95% BC CI [−.18, −.07]
Specific indirect effect for PO leadership through goal clarity	−.10, $p < .001$, 95% BC CI [−.16, −.05]
Specific indirect effect for PO leadership through trust	−.02, $p = .13$, 95% BC CI [−.05, .01]
Total indirect effect for EO leadership	−.06, $p = .03$, 95% BC CI [−.11, −.01]
Specific indirect effect for EO leadership through goal clarity	−.02, $p = .08$, 95% BC CI [−.05, .00]
Specific indirect effect for EO leadership through trust	−.03, $p = .14$, 95% BC CI [−.08, .01]

Note. PO leadership = production-oriented leadership, EO leadership = employee-oriented leadership; the coefficients are considered significant when the 95% bias corrected bootstrap confidence interval (BC CI) does not include zero; the model fit for the indirect model is as follows: χ^2 (337) = 1,543.22; $p < .001$; CFI = .92; RMSEA = .05; 95% CI (.049, .055); SRMR = .05.

ranging from acceptable to good: χ^2 (265) = 1,188.45; $p < .001$; CFI = .93; RMSEA = .05; 95% CI (.048, .054); SRMR = .05. Further information can be requested by contacting the first author.

Direct Effects of Leadership on Job Insecurity

We tested a structural model, including direct paths from production-oriented leadership and employee-oriented leadership on job insecurity. The control variables were included as covariates in the model, predicting job insecurity. Contrary to Hypothesis 1, production-oriented leadership was unrelated to job insecurity ($\beta = −.03$, $p = .47$). Employee-oriented leadership, on the other hand, was negatively related to job insecurity ($\beta = −.15$, $p < .001$), supporting Hypothesis 2. However, the model fit was a bit low—χ^2 (146) = 959.38, $p < .001$, CFI = .87, RMSEA = .07, 95% CI (.061, .069), SRMR = .05—suggesting that other variables might be involved. Among the
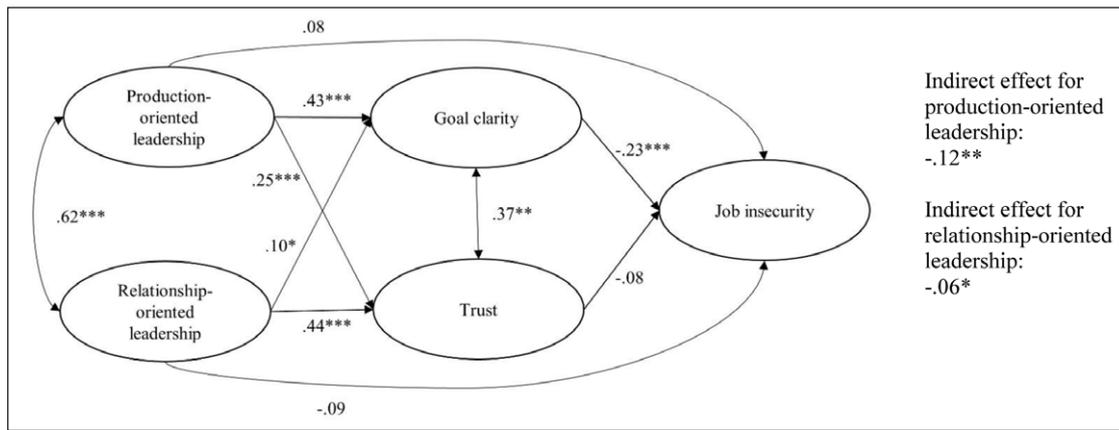
Figure 1: Mediation model with goal clarity and trust as explanatory factors between the leadership styles and job insecurity (standardized coefficients). * $p < .05$, ** $p < .01$; the model fit is as follows: χ^2 (337) = 1,543.22; $p < .001$; CFI = .92; RMSEA = .05; 95% CI (.049, .055); SRMR = .05. For readability, control variables were not included in the figure.

covariates, age was positively related to job insecurity (β = .06, p = .04), and gender and employment contract were unrelated to job insecurity.

Mediated Effects of Leadership on Job Insecurity

We then tested the indirect relationships between leadership and job insecurity that were mediated by goal clarity and trust (see **Table 3** and **Figure 1**). The indirect model provided an acceptable fit to the data: χ^2 (337) = 1,543.22; $p < .001$; CFI = .92; RMSEA = .05; 95% CI (.049, .055); SRMR = .05. The total indirect effect of production-oriented leadership on job insecurity through goal clarity and trust was significant (–.12; 95% BC CI [–.18, –.07], $p < .001$). The specific indirect effects of production-oriented leadership on job insecurity through goal clarity were significant (–.10; 95% BC CI [–.16, –.05], $p < .001$), and the specific indirect effect via trust was nonsignificant (–.02; 95% BC CI [–.05, .01], p = .13). The contrast between the specific indirect effects was also significant (–.08, p = .02), supporting Hypothesis 3 and thus suggesting that goal clarity (and not trust) mediates the effect of production-oriented leadership on employees' job insecurity.

The total indirect effect of employee-oriented leadership on job insecurity, which was mediated by trust and goal clarity, was also significant (–.06; 95% BC CI [–11, –.01], p = .04). However, neither the specific indirect effects through goal clarity or trust nor the contrast of the specific indirect effects were significant. Hence, Hypothesis 4 was only partly supported. The indirect effects model explained 37% of the variance in trust, 25% of the variance in goal clarity, and 8% of the variance in job insecurity.

Discussion

Job insecurity is known to have many negative consequences for the individual employee and the organization (Cheng & Chan, 2008; Sverke et al., 2002). Previous research has shown that organizational measures, such as communicating and providing opportunities for participation, are associated with lower levels of job insecurity and fewer negative outcomes (Jiang & Probst,

2013; Vander Elst et al., 2010). However, little is known about the direct relationship between leadership and job insecurity—which is surprising, as managers shape the everyday work environment of employees and thus also influence how employees perceive situations at work (cf. Avolio et al., 2009; Skakon et al., 2010). Therefore, in this study, we investigated two leadership styles as antecedents of job insecurity. Moreover, we went one step further by assessing two specific processes through which production- and employee-oriented leadership may affect job insecurity. Based on the content and aim of the two leadership styles, we chose to investigate goal clarity and trust in this study. Therefore, we aimed to address two important issues. First, our study contributes to the research on how job insecurity can be decreased. In this study, we investigated leadership as a potential organizational measure through which organizations can influence employees and their perceptions of job insecurity. This knowledge may be translated into practice in the design of primary and secondary prevention programs aimed at decreasing job insecurity and its consequences by modifying leadership styles in the organization. Second, this study creates new knowledge concerning the mechanisms behind leadership and its effects (Judge, Bono, Ilies, & Gerhardt, 2002; Judge, Piccolo, & Ilies, 2004; Northouse, 1997), providing answers to the question of why certain leadership behaviors may be associated with specific consequences. This is important knowledge that is required when one designs leadership-development programs and trains managers to decrease job insecurity and its consequences in the workplace.

We found mixed support for the direct effects of leadership on job insecurity. Only employee-oriented leadership had a direct and negative association with job insecurity. This effect of employee-oriented leadership follows the predictions of COR (Hobfoll, 1989); managers who lead with an employee focus seem to increase their employees' resources, and this action is associated with lower levels of job insecurity. It was surprising that production-oriented leadership was not associated with job insecurity. There are several explanations for this finding. First, production-oriented leadership may primarily be associated with job

insecurity through the means of several mechanisms (e.g., different mediators). When different mediators exist, the effects can cancel each other out, resulting in a nonsignificant association between production-oriented leadership and job insecurity. Second, the measure of production-oriented leadership might also be one reason why we did not find the expected relationship. The measure of production-oriented leadership used in this study primarily focused on how managers operate and instruct employees (plan carefully, follow the plan, and provide detailed instructions); hence, the measure addresses everyday activities. However, job insecurity is a future-oriented construct that reflects the concern about the future of the job in general. Therefore this study's measure of production-oriented leadership, which focuses on the actions of the managers on a daily basis, might not directly address employees' concerns under production-oriented leadership.

However, in looking at the bivariate relations, we can find significant associations in line with the hypotheses, as both types of leadership were negatively associated with job insecurity. This fits well into the research on the effects of leadership; in this research, leadership behavior has been found to relate to outcomes such as better well-being, reduced stress, more favorable work attitudes, and higher levels of job performance (Judge & Piccolo, 2004; Skakon et al., 2010). Whereas leadership has been studied from different perspectives and through different types of operationalization, in the present study, we investigated only two forms of leadership behaviors. Future studies should include other forms of leadership, such as transformational or servant leadership (Avolio & Gardner, 2005; Bass, 1985), to increase the understanding of how different forms of leadership may relate to job insecurity.

Even though some statistical approaches define a direct relation as a necessary condition in order for mediation to be tested (Baron & Kenny, 1986), newer approaches conclude that it is possible to investigate and find mediation effects without an initial direct relation (e.g., between leadership and job insecurity; MacKinnon, 2008). Therefore, our null findings regarding the relationship between production-oriented leadership and job insecurity do not affect the further investigation of potential mediators in this context. Goal clarity was hypothesized to function as a specific mediator for the effects of production-oriented leadership on job insecurity, whereas trust was assumed to be the specific mediator that would explain why employee-oriented leadership behavior may be associated with job insecurity. Production-oriented leadership was associated with goal clarity, which was negatively related to job insecurity. Hence, managers' focus on clarifying goals, prioritizing tasks, and communicating their expectations is associated with employees having a better understanding of their work roles (e.g., their perceptions of goal clarity). This clarity seems to be related to more security and is associated with less job insecurity. These findings are in line with Hackman and Oldham's (1980) job characteristics model that claims that different job characteristics, such as goal clarity, are important for employees' psychosocial work environment, health, well-being, and performance.

These results are also in line with the little research that has investigated how organizational measures may result in lower job insecurity. For instance, communication has been negatively related to job insecurity but may increase clarity for employees, which may be why it is negatively related to job insecurity (Jiang & Probst, 2013; Vander Elst et al., 2010).

Even though the relationship between employee-oriented leadership and job insecurity is mediated, which has been indicated by an overall significant indirect effect, neither of the two mediators tested in this study was strong enough to account for the effect individually. This significant overall indirect effect, in contrast to the nonsignificant specific effects, may also indicate that other mechanisms may exist that could further explain the relation between employee-oriented leadership and job insecurity. For instance, based on the perceived organizational support theory, it can be expected that the feeling of being appreciated (Eisenberger et al., 1986; Eisenberger & Stinglhamber, 2011; Shore & Shore, 1995), the satisfaction of needs as operationalized through the self-determination theory (Deci, Connell, & Ryan, 1989), or social support (Kurtessis et al., 2015) might function as mediators of the relationship between employee-oriented leadership and job insecurity. Therefore, authors in future studies should consider such factors as mediators to further understand the relation between employee-oriented leadership and job insecurity. Furthermore, researchers could also look at subgroups to understand for whom and under which conditions leadership and job insecurity are related. Our study contributes to the literature on leadership through our investigation of two mechanisms behind production- and employee-oriented leadership styles; it is in line with calls that have been put forward for the processes behind leadership to be unraveled (Judge et al., 2002; Judge, Piccolo, & Ilies, 2004; Northouse, 1997). Moreover, as a contribution to the job insecurity research, the knowledge from this study can be used to design interventions to try to decrease job insecurity and its negative effects. Thus far, hardly any research has applied the knowledge on job insecurity and translated it into effective interventions to decrease job insecurity and its consequences (for an exception, see Abildgaard, Nielsen, & Sverke, 2017). In this study, we chose to investigate two mediators that can be used to understand the leadership process and found that the effects of production-oriented leadership may go through goal clarity, whereas the effects of employee-oriented leadership seem to be more complicated. Hence, future studies should investigate other mechanisms to unravel the leadership process, which is a prerequisite to building effective leadership development programs. Another important avenue for future research is the need to understand the organizational impact, in particular, of the actions that organizations can take to create a better work environment and reduce job insecurity. This may be particularly relevant for organizations that undergo organizational change, which has been found to

make employees more susceptible to experience job insecurity (Keim et al., 2014).

Methodological Considerations

The potential limitations of this study are worth mentioning. First, we based the analyses on a cross-sectional design, which makes it impossible to make a statistically based statement about the direction of causality. In fact, the relation between trust and goal clarity on the one hand and job insecurity on the other may in fact be reversed. Employees who experience job insecurity may start to doubt their employers and lose trust in them (cf. Zapf, Dormann, & Frese, 1996). Previous studies have shown that employees react to job insecurity by, for example, changing their attitudes toward their employers and their work (Cheng & Chan, 2008; Sverke et al., 2002). However, because the association between leadership and job insecurity has received limited research attention, the present results give a first indication that it is worthwhile to further investigate how leadership behavior is associated with job insecurity and how leadership behavior can prevent job insecurity. To cope with the problem of causality, future studies should investigate such associations using longitudinal data.

The fact that the data was collected in 2001 may hinder the possibility of generalizing the findings to contemporary working life. However, nationally representative statistics show that the work situation of employees in the Swedish health care sector as of today is comparable to that of 2001 (Statistics Sweden and Swedish Work Environment Authority, 2002; Swedish Work Environment Authority, 2014). Moreover, this study uses a health care sample. However, the investigated relations are not particular to health care and are aimed to be generalized to other occupational groups. It is therefore recommended to replicate this study using different occupational groups to assure that the results are also valid there. Another methodological issue that should be mentioned is that all data were obtained using self-reports, which may have introduced a common method bias to the study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We tried to reduce this bias by emphasizing that participation in the study was voluntary and that confidentiality was guaranteed (cf. Conway & Lance, 2010). Moreover, because job insecurity, trust, and goal clarity all represent experiences, they are hard to assess via other forms of measurement and should therefore preferably be assessed through interviews with employees. On the other hand, leadership, which concerns the behaviors that managers enact, can be assessed by managers instead of by employees (as was done in this study) to introduce another data source. However, research on self–other agreement has shown that managers' ratings of their leadership are not congruent (Atwater & Yammarino, 1992) and that managers do not always rate what they actually do but what they would do hypothetically (Baumeister, Vohs, & Funder, 2007). We therefore decided that using employee ratings of leadership may be a relevant and sufficient source of information regarding leadership.

Conclusion

Previous research has established that job insecurity is related to negative consequences for both employees (e.g., through decreased work-related well-being) and their organizations (e.g., more negative attitudes toward the organization, lower levels of performance, and poorer safety behavior). Given that experiences of job insecurity arise in an organizational context and hence partly depend on organizational practices, we therefore investigated how production- and employee-oriented leadership styles relate to job insecurity. Moreover, we also examined the mechanisms through which managers' leadership styles may relate to employees' job insecurity experiences. The results showed that the relationship between production-oriented leadership and job insecurity was mediated by goal clarity. Moreover, employee-oriented leadership had a direct effect on job insecurity, and the results indicate that mediators are important—however, not the two that were included in this study separately but rather a combination of them. These results indicate that there is not only one way through which leadership styles can affect employees' perceptions of job insecurity. Managers can work actively to prevent job insecurity at their workplaces by being clear and specific about the work goals and by focusing on building relationships with their employees. Moreover, these two leadership behaviors are important beyond their relationships to job insecurity, as they have previously been associated with a variety of positive outcomes that promote a good psychosocial work environment.

Competing Interests

The authors have no competing interests to declare.

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