

The association between subordinate perception of task and relation oriented leadership behaviors and sense of coherence among a sample of Swedish white-collar workers

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Received 3 May 2017

Accepted 7 February 2018

Abstract.

BACKGROUND: Evidence suggests that leadership behaviors and sense of coherence (SOC) influences subordinate health. However, this has not been investigated in any detail.

OBJECTIVES: To study the association between leadership behaviors and SOC. It was hypothesized that both task and relation oriented leadership behaviors would be positively associated with SOC, whereas a laissez-faire leadership would be negatively associated with SOC.

METHODS: This is a cross-sectional quantitative study of managers and subordinates in a large governmental organization. The study used two common and empirically tested leadership styles: task oriented leadership and relation oriented leadership. In a logistic regression analysis, the association between types of leadership behavior and SOC were analyzed while controlling for age, gender, income, type of employment and organizational tenure.

RESULTS: Neither task oriented or relation oriented leadership behavior were significantly associated with SOC.

CONCLUSIONS: The result indicates that the type of leadership behavior exercised is not directly associated with subordinate's SOC. In future studies the importance of subordinate leadership preferences should be acknowledged. More research is needed to reach an understanding as to the nature of and the potential of this mechanism.

Keywords: Workplace well-being, psycho-social working conditions, health, managerial style, manager influence

1. Introduction

Managerial leadership may be described as influencing organizations in two primary ways: first, through direct leadership behaviors (such as through the use of task and relation oriented behaviors) [1] that influence subordinates and, second through

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the indirect behaviors of determining subordinate working conditions (such as deciding grade of and conditions for demand, control and support [2]). The focus in this study is on subordinate perception of direct leadership behaviors and its possible association with sense of coherence (SOC). This article defines leadership as an “influence process used to accomplish organisational objectives” [3]. Leadership behaviors has been found to be related to and influencing employee health [4–6]. The exact nature of the relation between leadership behaviors and subordinate health is not well described in the literature and more studies are needed. Studies have sought to expand the understanding by identifying interesting mediating and moderating factors between leadership behaviors and subordinate health [7–13]. For instance, perceptions of job demand, control and support from the model of Karasek & Theorell [2], was identified as a mediator between perceived leadership behaviors and subordinate health [9].

To develop a theory around leadership and subordinate health there does seem to be a need for studies that describe links between leadership theory and recognized theories of health. An example of such theory is Antonovsky’s [14] theory of sense of coherence. A sense of coherence is a way of defining and making sense of the world. In a large number of empirical studies, it has been found how a strong sense of coherence (SOC) is positively associated with various aspects of health. Such results are consistent through national contexts and different occupational settings [15]. A weak SOC has also been found to be associated with a higher mortality rate [16]. Thus, individuals with a strong SOC tend to be healthier. It is however to our knowledge, not clear in what way leadership behaviors are associated with SOC. The aim of the present article is to study the relation between perceived leadership behaviors and SOC.

1.1. Leadership

For this article, leadership is primarily made up of the behaviors a manager uses to influence subordinates [3]. The authors acknowledge and share the view represented by, for instance, Alvesson & Spicer [17] who opined that leadership does not necessarily need to be studied by its function. At the same time, we share the view that leadership, when intentionally delegated to a specific position with formal authority, will likely result in certain outcomes, preferred or not, when practiced in a particular manner [18].

There are numerous findings as to what sort of leadership behaviors are needed to achieve desired organizational goals such as effectiveness [18–20], performance and productivity [21, 22], quality [23], job satisfaction [24, 25] or health [4, 5, 20, 61]. From a development perspective, it is positive to remember that leadership behaviors can be learned. Well-designed leadership development interventions have found in several studies significant positive results [26, 27]. A recent study also found that specific healthy and effective leadership behaviors can be influenced through leadership development programs [28]. Another recent study presents results of how to craft sustainable workplaces and managerial practices [67]. However, a study by Vinberg et al. [6] indicates that relatively extensive workplace oriented prevention and rehabilitation interventions might have a limited effect on perceptions of health and psychosocial working conditions. Although, limited effects could be related to an overall trend in deteriorating psychosocial working conditions, insecurity and increased organizational changes in working life during the study period. It was clearly described as important the need to further develop high quality interventions that combine the individual and organizational level [6]. The objective of this article is not to add to the debate as to what sort of leadership should ultimately be practiced or how it is developed to optimize these outcomes in different contexts. The interest is rather to study how leadership behaviors, as perceived by subordinates, are associated with SOC. In taking this approach it is valuable to note that most theories of leadership behavior share a common base in two leadership dimensions as identified through independent research projects carried out at Ohio State University [29–31] and the University of Michigan [32–34]. The two dimensions were consideration or employee centered leadership behaviors and structure or production centered behaviors. Yukl [18] argued that these dimensions are fundamentals in most leadership theories. Given this, these two dimensions will be used as a theoretical base in this article. Important to note is that dimension names vary from study to study, with for instance, Ekvall and Arvonen [35, 52] having ‘employee and production oriented’ behaviors, whereas Lewin [68] uses democratic and authoritarian leader behavior while Bass [69] and Lennerlöf [70, 71] chose consideration and initiating structure. Despite this difference in semantics, the dimensions appear strikingly similar and consistent across studies [35, 52, 72–74]. In line with Yukl et al. [1], these two dimensions will

RELATION	C. Low task/High relation	B. High task/high relation
	D. Low task/low relation	A. High task/low relationn
	TASK	

Fig. 1. Leadership behaviour profiles.

hereafter be referred to as relation and task oriented leadership behaviors.

The emphasis of task oriented leadership is, for instance, on clarifying what results are expected, assigning tasks to subordinates and the setting of specific goals/standards for how work shall be performed. Relation oriented leadership instead emphasizes, for example, building relationships by giving support/encouragement and recognizing contributions [1]. While other leadership behaviors have been acknowledged in the literature, such as change oriented behaviors [35], these two dimensions have been found consistent in a large amount of studies since the 1950's [18, 35, 36].

While relation and task dimensions in leadership behaviors are well established, it is unlikely that any manager practices a purely task or relation oriented leadership. Rather, some mix of the two styles is the norm. This is evident in several established theories of leadership where leadership is modeled as having a high degree of relationship orientation and a low degree of task orientation or in the alternatives of low task and relation orientation, high task and relation orientation or low relation and high task orientation (see Fig. 1). The debate regarding the best leadership style may actually be disagreement as to when and how managers should vary the proportion of relationship and task behaviors in the leadership that they practice. As regards health outcomes, structure oriented behaviors have been found to influence subordinate health positively [37]. The more common finding is that strong relation oriented leadership behaviors are positively associated with subordinate health [5, 20, 38]. Several studies have found that the absence of a clearly defined leadership (what Yukl [18] and Lewin et al. [75] refer to as *laissez-faire* leadership) is negative for different reasons for both individual and organizational outcomes. For example, Skogstad et al. [45] found that this type of leadership profile was positively correlated with role conflict, role ambiguity, and conflicts with co-workers. In a non-work context, experiencing such ambiguities and uncertainties has been found to discourage the development of SOC [46].

1.2. Sense of coherence

Sense of coherence (SOC) describes a person's life orientation and is thought to be a multi-dimensional phenomenon that is made up of the three integrated components: *comprehensibility*, *manageability* and *meaningfulness* [14]. These three are defined as: '... a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable [comprehensibility]; (2) the resources are available to one to meet the demands posed by these stimuli [manageability]; and (3) these demands are challenges, worthy of investment and engagement [meaningfulness] ...' [14 p.19].

In accordance with other descriptions of resiliency, such as self-efficacy [39], a strong SOC is thought to make an individual able to cope with the challenges and demands that one encounters throughout life. In turn, this is thought to be beneficial for health [14]. Antonovsky described SOC as a product of experiences made during the process of socialization and in early adulthood. Given this, SOC is seen as being relatively stable after age 30 [14]. This finding has found limited support in empirical studies. For that matter, studies have found that SOC continues to develop throughout life [40]. For instance, it has been found that interventions aimed at strengthening SOC have significant effects on the SOC of study participants [41]. This has been reported as true for younger persons as well as for adults above age 30 [42]. Also, levels of SOC have been found to vary according to work characteristics such as influence at work, job security and the quality of a subordinate-manager relationship [43]. While some studies suggest that SOC might be relatively stable throughout the course of life the literature more supports a view of SOC as being a dynamic phenomenon that develops as a result of life experiences, including at a workplace. Lastly, if SOC is considered as a form of attitude then it is changeable from a social psychology perspective [44].

The literature is sparse on descriptions of the specific relation between leadership behaviors and SOC. An exception is the study by Feldt, Kinnunen and Mauno [43], where it was found that a subordinate's positive perception of a subordinate-manager relationship was positively associated with SOC. The study did not explicitly focus on specific perceptions of leadership behaviors. Rather, the study looked at

the employees perceived quality of the subordinate-manager relationship in terms of feedback from managers or subordinate perception of managerial frankness. The results showed that changes in the leader-subordinate relationship, and changes in the organizational climate at year one were associated with a change in SOC in a one year follow up. Such findings lend support to the idea that levels of SOC are affected by experiences made in workplaces. In Feldt et al.'s [43] article the manner that employees perceived managerial relational behaviors seemed to vary along with the level of SOC. A study in which established styles of leadership behaviors were studied in relation to subordinate SOC would therefore be a valuable contribution towards the continued development of a coherent theory of leadership and its relationship with subordinate health.

It could be hypothesized that the two dimensions of relational and task oriented leadership behaviors are equivalent, albeit in different ways, to the three dimensions of SOC. Task oriented leadership, emphasizes clarifying what results are expected, sets specific goals/standards for work tasks, and explains rules/operating procedures. Antonovsky [14] similarly has in his definition of *comprehensibility* an emphasis on how a person with a high level of SOC finds life "structured, predictable, and explicable". Task oriented leadership behaviors should also provide employees with the resources needed to handle demands posed by internal and external stimuli encountered in everyday living. As such, a task oriented leadership could be argued to be beneficial for the *manageability* dimension of SOC as well. Relations oriented leadership behaviors could be associated with *meaningfulness* by its emphasis on behaviors such as "empower people to determine the best way to do a task", "recognize contributions and accomplishments" or provision of support [18 p. 66]. If the above comparison between SOC and task/relation leadership behaviors are combined with the Feldt et al. [43] study and taken to mean both task and relation oriented leadership, then these behaviors could be expected to be positive for SOC. On that basis the first hypothesis states that:

H1: A perceived leadership with an emphasis on either task or relation behaviors (profiles A-C in Fig. 1) will be positively associated with SOC.

Task oriented leadership is argued to be beneficial for manageability and comprehensibility, and a relation oriented leadership to be positive for subordinates sense of meaningfulness. As such it logically follows that a leadership characterized by both a

weak task orientation as well as relations orientations, such as laissez-faire leadership, would be negatively related to SOC. Hence, hypothesis 2 states that:

H2: A perceived laissez-faire leadership (profile D in Fig. 1) will be negatively associated with SOC.

2. Method

In 2011, a questionnaire was distributed via email to all staff in two departments of a Swedish governmental body. Addresses came from the organizational records. In total, 2,135 questionnaires were sent out with two reminders. From automatic e-mail responses, it was concluded that 27 respondents were no longer affiliated to the organization, leaving a potential study population of 2108 respondents. Out of these 1058 questionnaires were handed in, yielding a response rate of 50.2 per cent. A significant number of the study participants were external workers (temporary contractors with their formal employment through a consultant/contracting company or self-employed). The questionnaire included a narrative that clearly stated that all questions only concerned the respondent's work with that employer. Respondents were asked to note whether they were directly employed or if they were external workers (temporary contract workers/self-employed). The overall amount of internal missing values in the dataset was 5.6 per cent. Little's [50] MCAR test ($p > .05$) indicated that the internal missing data did not add bias in the analyses. After listwise deletion of missing values of the variables included in this study, a total of 873 respondents remained.

To avoid mixing categories external workers who had previously been employed directly were excluded from the analyses. Given this study's focus on perceived leadership style, any respondent in a managerial position was also excluded. Self-employed contractors were overrepresented in both these excluded categories. After the exclusion of ex-employees and managers, the number of self-employed contractors was too few to be meaningfully included in the analysis. Self-employed contractors were therefore excluded. Finally, a small number of respondents were working on fixed term contracts. These were both internal and external workers. When each category was further split up into dummy variables the number of respondents in each cell was too small. To avoid weakening the robustness of the analyses, respondents on fixed term contracts were excluded. This resulted in a final sample of

502 respondents included in the analyses. For further details regarding the data, see Svensson et al. [48]. The proportion of male/female respondents among respondents and non-respondents was the same. A series of chi-square analyses and ANOVAs regarding age, gender, and organizational tenure were carried out to compare first respondents and those who responded to the reminders. No differences were significant.

The respondents were asked to evaluate their manager's behavior in a survey distributed via the organization's internal mail system. It is possible that some respondents felt a need to adjust their response so as to not endanger their standing in the workplace. This matter is arguably most relevant with respect to the external staff, temporary agency workers and consultants included in the study as their assignments could be quickly terminated. The result of a previous study using the same data [48] does not indicate any problems with such a response bias.

2.1. Measures

The three items constituting the dependent variable were taken from Lundberg and Nyström Peck [51]. Each item corresponds to the three dimensions in SOC: 'Do you usually feel that the things that happen to you in your daily life are hard to understand? (comprehensibility); 'Do you usually see a solution to problems and difficulties that other people find hopeless? (manageability); Do you usually feel that your daily life is a source of personal satisfaction [rev.] (meaningfulness). Following the same procedure as in the original source, the items were added together using an index ranging from 0 (excellent SOC) to 6 (very poor SOC). A score of 3 was considered to be a low SOC. The argument for dichotomizing the scale at that point is that very few people have very low levels of SOC [46]. For example, in this sample, 22 percent reported a low SOC when a 3 was made the cut-off point.

Four of the highest loading items from Ekvall and Arvonen [35, 52] were used to measure perceptions of task and relations oriented leadership behavior ('Do you think that your manager: shows regard for subordinates as individuals, encourages and gives support, gives clear instructions, and states substantial and clear objectives'). The response scale ranged from 1 ('No, not at all') to 4 ('Yes, to a great extent'). These items have been deemed valid in studies carried out in Sweden, Finland and USA [35, 45, 53].

Following the same procedure as in Svensson, Vinberg and Larsson [48], the variables were analyzed in a principal component analysis using varimax rotation. In line with Hair's recommendations [54] for the present number of observations, Jolliffe's criteria [55] of retaining components with eigenvalues >0.7 was selected. To operationalize the leadership profiles in Fig. 1, the factor loadings were saved as variables and split at their respective midpoints. This generated the two variables: *Task high/low* and *Relation high/low*. These dichotomous variables were added together and recoded in the 'Leadership behavior' variable, with values 1 (profile A)=high task/low relation, 2 (profile B)=high task/high relation, 3 (profile C)=low task/high relation, and 4 (profile D)=low task/low relation. The leadership behaviors A, B and C were introduced as dummy variables in the logistic regression model. Leadership behavior D was chosen as the reference category.

Age was introduced as a continuous variable in the analysis. Education was introduced as a dummy variable with values 1=low education (no college education) and value 0=higher education (college education/university education). Income was dummy coded into 1=SEK 0–29,000 per month=1 and 0=more than SEK 30,000.¹ In earlier studies, it has been seen that external workers perceive the leadership practiced in their organizations differently when compared to the perceptions of internal employees [47, 48]. Svensson [49] also found that external workers differ from internal employees as regards constructs closely related to SOC (e.g., self-confidence). Therefore, the type of employment was controlled in the analyses.

Employee category was coded as external worker = 1 and internal employee = 0. Organizational tenure was introduced as a continuous variable given in months. The analyses were carried out using STATA version 14.

3. Results

As is seen in Table 1, 22 percent of the respondents had a low SOC score. The most common leadership behavior perceived in this sample is Profile B (high task/low relation), reported by 53 percent of respondents. The fact that to a great extent this organization

¹USD 1 = SEK 6.85 (10 February 2014). Mean income in Sweden in the year of the study was approximately SEK 23,000 (approximately USD 3,360) per month.

Table 1
Descriptive data

	Mean (s.d.) or proportion
Strong SOC	78%
Age	45.1 (10.4)
Gender (female)	39.4%
Education (low education)	25.9%
Income (low income)	14.5%
Organizational tenure	74.9 (95.1)
Type of employment (external worker)	31%
Leadership profile A	9.2%
Leadership profile B	53%
Leadership profile C	27.5
Leadership profile D	10.4%

Table 2
Logistic regression. SOC regressed on perceived leadership behaviors (strong SOC = 1, weak SOC = 0)

	OR	95% CI	
Age	1.022	0.996	1.048
Gender (female = 1)	1.372	0.852	2.209
Education (low education = 1)	1.140	0.645	2.013
Income (low income = 1)	0.520*	0.272	0.997
Organizational tenure	1.001	0.998	1.003
Type of employment (external worker = 1)	2.628***	1.486	4.650
<i>Leadership profile (profile D = ref.)</i>			
Profile A	0.748	0.290	1.930
Profile B	1.101	0.530	2.287
Profile C	0.928	0.425	2.025
Nagelkerke R ²			0.034

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

relies on external workers is apparent in the large standard deviation for the organizational tenure variable. The mean tenure for external workers was 38 months and the corresponding number for the internal employees was 92 months.

The results from the logistic regression analysis are shown in Table 2. The only variables significantly associated with SOC are income and type of employment. Having a low income is associated with a 48 percent lower probability of a strong SOC as compared with those having a high income ($(.52-1)*100$, [56 p. 23]) (56). Interestingly, external workers are significantly more likely to have a strong SOC. Most striking about the results in Table 2 is the numbers for perceived leadership behavior. None of the odds ratios for leadership behavior are significant. In fact, contrary to Hypothesis 1, the odds ratios for leadership Profile A and C are negative. Hypothesis 2 stated that a perceived laissez-faire leadership (Profile D) will be negatively associated with SOC i.e., that the odds ratio for having strong SOC (SOC = 1) will be negative for Profile D. As leadership

Profile D was selected as the reference category in the analysis the odds ratios for leadership profiles, A-C would have to be positive to validate H2. In line with this argument, the odds ratio for leadership Profile B is positive. It is however, not significant. Hypothesis 2 is therefore not supported. In summary, neither H1 nor H2 are supported by the results presented here.

4. Discussion

Leadership behavior as perceived by employees has been found to be associated with various aspects of health [4, 5, 25]. There is a paucity of in-depth knowledge about this association at a detailed level to support the development of a coherent theory that includes mediating and moderating factors. The three SOC components *comprehensibility*, *manageability* and *meaningfulness*, have also been found to be associated with health. The core premise of this study was that task direction from one's manager would be likely to support *manageability* and *comprehensibility* whereas relationship oriented leadership behavior could be expected to make life appear more *meaningful*. As such, both task oriented and relation oriented leadership behaviors were hypothesized as being positively associated with SOC. If such a relationship had been established, it would be a step towards a unified theory of leadership behavior and health. The results did however, not support the hypothesis. None of the leadership behaviors perceived by the study participants were significantly associated with reporting a strong SOC.

A possible explanation for the result could be found in the way that perceived leadership behavior was operationalized in the study. High and low levels of task and relation oriented leadership behavior were combined into a nominal variable with four categories (see Fig. 1). This made it possible for the relation and task oriented scores for each leadership profile to cancel each other out; i.e., any significant association between, for instance, relation oriented leadership behavior and SOC is hidden when it is bundled together with perceived task orientation. To check for this possibility, an alternative analysis (not presented here) was carried out in which the raw variables for task and relation oriented leadership was introduced separately. The result was essentially the same as presented here; perceived leadership behavior was not significantly associated with SOC.

A second explanation of the results might be that the concept of SOC refers to an individual's orientation towards life in general and that there are other factors than workplace experiences that are of greater importance for the development of SOC. Antonovsky [14] hypothesized that SOC, to a great extent, was being shaped by an individual's experiences during the process of socialization. If this is true, experiences at work could be of little importance for the development of SOC. The empirical support for the socialization hypothesis has not been strong however. SOC has been found to keep changing throughout the life course [57] and in relation to experiences made in specific contexts such as the work context [43]. Feldt et al. [43] found the perceived quality of the manager – subordinate relationship in a work context to be associated with SOC and job security. Such findings lend support to the idea that SOC is continuously affected by experiences made in everyday life; including the workplace.

Another possible explanation for these results is that the importance of leadership in promoting subordinate health is a question of subordinate leadership preferences than actual leadership behavior. In other studies it has been found how work status congruence i.e., being employed in the wanted position or at the preferred type of employment contract is important for job satisfaction and health [58]. This is consistent with Festinger's [59] cognitive dissonance that maintains that an attitude/belief (in this instance SOC) changes so that belief and action are the same. It is therefore reasonable to assume that a subordinate who is led in a manner preferred/understood will be more satisfied and experience a greater sense of control and manageability, regardless whether the leadership behavior is more task and/or relation. This point needs to be addressed in future studies, in which items tapping into both subordinate leadership behavior preference(s) and leadership behavior being experienced will make it possible to better understand the potential importance of leadership preference for the variation in SOC.

The results from this study do not support those presented in a study by Feldt et al. [43] in which it was found that a change in the perceived leadership from base line to follow-up were associated with a change in levels of SOC. One possible explanation could be the operationalization of leadership relationships. In the Feldt et al. study [43], the emphasis is on opportunities for receiving help and support from one's manager if needed to handle difficulties whereas this present study focuses on distinct types

of leadership behaviors such as showing regard for subordinates as individuals or stating substantial and clear objectives. This difference does also reflect the potential importance of receiving leadership in congruence with perceived needs and preferences and this is a matter that should usefully be further analyzed in future studies.

That external workers had high levels of SOC when compared to internal employees was an unexpected finding. Previous studies have found that external workers often experience higher levels of stigmatization, inferiority or even conflict in the workplace [see 60]. Such negative experiences would seemingly depress these workers' SOC's. Most studies in this area studied blue-collar workers whereas this study assessed skilled white-collar workers. It is a possibility that the nature of the work itself, or the opportunities in the labor market at large, are more favorable for white-collar contractors than for blue-collar contractors - which in turn is beneficial for SOC. This is a matter that can easily be studied in greater detail.

Leadership is also an important factor when seeking to create and then sustain healthy work organizations (HWO) that have organizational health i.e., both the people working in an organization have good health and organizational effectiveness is high [see e.g., the NIOSH-model, 62]. In a recent review by Eriksson et al. [63] about a whole-system approach to workplace health promotion focuses on management, leadership and economic efficiency to create sustainable workplaces; a small number of studies were found. Two articles, Larsson et al. [64] and Sirola-Karvinen et al. [65], were recommended as a starting-point when seeking to conceptually learn more about the implementation of whole-system approaches to sustainable workplaces. In the review, only one article, by Larsson et al. [66], fulfilled all four review criteria. This highlights the need for more research within the field. In this study SOC is the dependent variable including the three dimensions of *comprehensibility*, *manageability* and *meaningfulness* which all three has the potential of being relevant to simultaneously promoting employee health and organizational effectiveness. As argued earlier in the article when stating the hypothesis, the task and relation oriented leadership behaviors can logically be connected to the dimensions of SOC. These leadership behaviors have in earlier studies showed associations with both health [5, 20, 25] and effectiveness [18, 20]. This opens new possibilities for further research and expanding the knowledge base for

whole-system approaches within the HWO perspective. To study leadership behaviors that potentially could influence SOC, as in this article, is an important step in developing this whole system research.

The cross-sectional design does however imply that no claims for causality can be made. Given that no significant association between leadership behavior and SOC could be observed, this matter should be of limited concern. Although the sample is large with a sufficient number of respondents to perform the analysis, and that analyses of non-respondents did not raise cause for concern, the non-random sampling means that selection bias cannot be excluded. In order to avoid response fatigue, the indexes for leadership behavior were shortened versions of indexes originally developed by Ekvall and Arvonen [35, 52]. The highest loading items for each sub-scale were selected. Nevertheless, it would be preferable if future studies of external worker perception of leadership behavior could have indexes with more items that measure more nuances of leadership behaviors.

The survey was distributed via the organizations internal mail system. Given that the respondents were asked to evaluate their manager's behavior it could be argued that they felt a need to adjust their response so as to not endanger their standing in the workplace. This would, as such, be both an ethical issue as well as a matter of analytical precision. This problem is arguably most apparent for the external staff, temporary agency workers and consultants included in the study since their affiliation with the organization in question could be terminated at short notice. A previous study using the same data did however, find that the external staff did evaluate their manager's leadership behavior in a manner that could be argued to be less favorable as compared to the internal staff [48]. Such a result suggests that such response bias is probably not a matter of concern in this case. In spite of these limitations, the current study adds important research knowledge about the relation between leadership and SOC. Especially since there are a limited amount of studies regarding this matter.

5. Conclusion

The hypotheses predicting an association between perceived leadership behavior and SOC were not supported. Therefore, the conclusion is that leadership behavior in this organizational context does not explain levels of SOC. This conclusion is drawn with certain limitations in mind. To be able to analyze the

association between leadership behavior and SOC in coming studies, the importance of subordinate leadership preferences should be acknowledged.

Conflict of interest

None to report.

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