



Research Article

Volume-06|Issue-07|2025

Observations of Supervisors Communication Styles and their Effects in Remedial Appraisal Interviews

Gerdie H. Jullens*¹, Abraham P. Buunk ²

¹Jullens, Winschoterdiep 1011, 9724 GT Groningen, The Netherlands,

²Department of Psychology, University of Groningen, the Netherlands, Rozenstraat 74a, 1016 NX Amsterdam, The Netherlands.

Article History

Received: 14.06.2025

Accepted: 18.07.2025

Published: 23.07.2025

Citation

Jullens, G. H., Buunk, A. P. (2025). Observations of Supervisors Communication Styles and their Effects in Remedial Appraisal Interviews. *Indiana Journal of Humanities and Social Sciences*, 6(7), 63-72

Abstract: This article describes the development and validation of the Jullens Observation Communication Instrument (JOCIN). We used this instrument to assess the communication styles of male supervisors (n = 68) in role-playing situations, in which they addressed a professional male actor who played the role of an employee, on absenteeism. The role-plays were videotaped and two trained observers (experts) used the JOCIN. During the role-plays, also the peers of the supervisors (n = 67) assessed their colleagues with this instrument. In the two sets of data we found the same factor structure with two factors, i.e., a 'relation-oriented style' and a 'task-oriented style'. The composite reliability (CR) and the square root of the Average Variance Extracted (AVE) supported the convergent and divergent validity of the instrument. According to the experts, the supervisors adopted rather a task-oriented communication style than a relation-oriented style. Moreover, the task-oriented style had a positive impact on the employee's intention to change his absenteeism behaviour and the relation-oriented style affected the employee's feeling of ease with the supervisor.

Keywords: observation instrument, role-playing, communication of male supervisors.

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INTRODUCTION

In many organizations supervisors conduct remedial appraisal (RA) interviews with employees to attempt to raise their performance and enhance their productivity (Cummings & Schab, 1978). These may be formal and structured interviews that are often held several times per year. Regularly, the subject is the undesirable behaviour of the employee, for example his or her frequent absenteeism. Geurts (1994) defined *absenteeism* as the absence due to sickness irrespective of its causes (including maternity leave, injuries, illnesses or diseases that are not related to work). *Sickness* refers only to the act of reporting sick, *illness* to subjective complaints that have not been – or cannot be – medically diagnosed and *disease* pertains the objective diseases or injuries that are examined and confirmed by a physician. In some cases the RA interview turns into conflicts (Cederblom, 1982) because the supervisor and employee may disagree whether the latter is responsible for loss of production due to his or her frequent absenteeism. The occurrence of conflicts may be influenced by the communication style of the supervisors. In their communication, supervisors may circumvent conflicts and thus affect the satisfaction of employees (Richmond & McCroskey, 2009). Therefore, an important determinant of the effectiveness of an RA interview appears to be the communication style of the supervisor. Effectiveness refers in the present context to the positive influence of the styles on the behaviour of the employee with whom the supervisor conducts an RA interview.

The communication style of supervisors may be described along two dimensions: relation-oriented and task-oriented (e.g. Penley and Hawkins, 1985). Sullivan (1988) connected these orientations to two types of speech acts: the perlocutionary and illocutionary speech acts (Austin, 1962) and noted that supervisors apply these in RA interviews. Supervisors who employ relatively more perlocutionary speech acts, are focussed on providing the employee with information on tasks, goals, and performance. Their RA interviews are in this case thus more task-oriented. Supervisors who perform relatively more illocutionary speech acts, are focussed on establishing a bond with employees by showing consideration. Their RA interviews are in this case thus more relation-oriented. The extent to which the communication styles are applied in RA interviews may differ across supervisors and may determine the effectiveness of the interview. Supervisors are not often aware of using these styles and their effects on the employee's behaviour. Nevertheless, supervisors could apply their communication styles to motivate employees to accomplish work (Sullivan, 1988) and to reduce their negative responses during the interview (Cederblom, 1982). However, it is not clear to which extent supervisors apply each style to influence the absenteeism behaviour of the employee with whom the supervisor conducts an RA interview. In the present research we examined with an observational method to what extent the communications styles distinguished here reduce the negative responses by affecting the employee's feeling of ease with the supervisor, as well as by changing their

absenteeism behaviour, which is inversely proportional to the motivation of the employee to accomplish work.

Observing RA interviews is a more appropriate method than the commonly applied, indirect measures of self-report questionnaires or verbal reports from employees. Answers to such questionnaires are inevitably influenced by individual characteristics, such as the ability to reflect upon oneself (Csank & Conway, 2004), the awareness of behavioural dispositions (Carver & Scheier, 1981), and response biases such as halo effects, social desirability, acquiescence, leniency effects, and yea- and nay-saying (Podsakoff *et al.*, 2003). Moreover, Miller, *et al.* (2015) noted that several studies have shown that the relation between self-report and what people actually do is often relatively low, with an average correlation of around .23 (Vazire & Mehl, 2008). Given these limitations of self-reports, we developed an observation instrument to assess the task and relational communication styles and their effects on the employees in RA interviews. Although more than half a century ago, Bales (1950) developed a well-know observation system, Interaction Process Analysis (IPA), to observe the interaction of group members while discussing decisions. We did not adopt the system in our study because it received a fair amount of criticism. For example, Hartley (2006) criticized Bales' system for failing to define the six categories of each component specifically and for the lack of a valid description of the underlying behaviours. Furthermore, Wasserman and Inui (1983) noted that observers are forced to choose between task-oriented actions and social-emotional oriented actions. Consequently, high scores on the task components induce low scores on the social-emotional components, and vice versa. These limitations affect the reliability and the validity of the scores. Hartley (2006) noted that the system also fails to indicate the intensity of communication actions. Finally, various authors objected that the system aims at a global characterization of interactional situations and therefore does not take account of the specific environmental characteristics, such as features of a formal RA interview between a supervisor and an employee in an organizational setting (Mishler, 1984; Wasserman and Inui, 1983; Byrne & Long, 1976). Therefore, Hartley (2006) recommended using an alternative observation approach that focuses on the most important characteristics of the situation.

Although the system of Bales has received much criticism, it has contributed considerably to the definition of leadership styles *consideration* and *initiating structure* (Eagly *et al.*, 2015; Halpin & Winer, 1957). These leadership styles share characteristics with the relation-oriented and task-oriented communication styles, respectively, which we examined in our study. Supervisors who exhibit consideration, offer personal support and approach their employees in a friendly way (Yammarino *et al.*, 2005). These supervisors are approachable and actively helpful towards subordinates, and when situations change they give warnings (House,

1971; Judge *et al.*, 2004). Supervisors aim at establishing a bond with employees and this is associated with the relation-oriented communication style. Supervisors who show the behaviour of initiating structure focus on tasks and approach their employees directly. Such supervisors have clear expectations about the performance of their employees; they specify procedures to follow and provide work schedules (House, 1971). This leadership style is associated with providing information on tasks, goals, and performance to the employee, and is thus related to the task-oriented communication style of supervisors.

The two types of leadership styles are often associated with gender (Eagly and Johnson, 1990; Engen *et al.*, 2001). Female supervisors are thought to adopt a leadership style that is more focussed on consideration than on initiating structure and male supervisors are thought to do the reverse. If consideration and initiating structure are indeed linked to respectively a relation-oriented and a task-oriented communication style, then female supervisors should be more relation-oriented in their communication, and male supervisors more task-oriented. There is however limited evidence for the existence of gender differences in these leadership styles. Eagly and Johnson (1990) conducted exploratory and descriptive meta-analyses on this issue in laboratory studies ($n = 25$), assessment studies ($n = 56$) and organizational studies ($n = 289$). These meta-analyses showed that the often-assumed sex differences are found in laboratory and assessment studies, but not in organizational studies. Only in the laboratory and assessment studies male supervisors adopted a leadership style that was rather task-oriented than relational-oriented and the female supervisors showed the reverse. However, the participants in the laboratory studies were exclusively students and the individuals who acted in the assessment settings were not supervisors in real life. Such samples are of course not representative of the population of supervisors and therefore the results cannot be generalized to other populations, for example to supervisors in business and industry. The lack of evidence in organizational studies for sex differences in leadership styles might also be due to limitations. First, the samples of these studies constituted mainly of supervisors of elementary school principals or university administrators. As with the experimental studies, the samples are not representative of the population of all sorts of supervisors and therefore these results can neither be generalized to other populations. Second, the data in most of these studies were collected with questionnaires and the participants either rated themselves or their subordinates rated them. The behaviour of supervisors described by questionnaires may not be in line with the actual leadership behaviour of supervisors in natural settings. This limits the ecological validity of these studies (Brewer, 2000).

In addition, the most widely used questionnaire to assess leadership styles, the Leader Behavior

Description Questionnaire (LBDQ) (Hemphill & Coons, 1957), is also not without its problems. The LBDQ measures the constructs of Consideration and Initiating Structure (Halpin and Winer, 1957). Meta-analyses have questioned the construct validity of the LBDQ (Judge *et al.*, 2004). Given these validation issues in organizational studies, it is not clear to what extent female supervisors would adopt a leadership style that is more focussed on consideration than initiating structure and that male supervisors would employ the reverse. In a similar vein, it is not clear whether female supervisors would be more relation-oriented and male supervisors more task-oriented in their communication. This suggests that there is a clear need for a valid and reliable instrument that measures the extent of the applied communication styles by female or male supervisors and their effectiveness in interviews.

As a first step we applied our newly developed instrument in a sample of male supervisors from the construction industry. In line with the results of the earlier performed experimental studies on the typical gender leadership styles, we hypothesized that male supervisors would communicate more task-oriented than relation-oriented in RA interviews with male employees. As the influence of each style on the employee's behaviour is not clear, we expected that a relation-oriented style, stronger than the task-oriented style, affects the employee's feeling of ease with the supervisor and that the task-oriented style, stronger than a relation-oriented style, influences the employee's intention to change his absenteeism.

For studying the RA interview we used a role-playing situation as a research paradigm. In this paradigm, the supervisor addressed a professional actor who played the role of an employee. The advantage of this situation is that in each interview the employee was the same individual, who was instructed to respond to the behaviour of the supervisor in a natural manner (Bellack & Hersen, 1978; Hersen & Bellack, 1977). In this way, the situation was standardized and trained observers (experts) as well as peers of the observed supervisors could assess the supervisors' communication styles and their effects on the 'employee'. These two groups of observers independently used our instrument for a first evaluation of the construct validity.

METHODS AND MATERIALS

Sample

A large scaffolding construction company (with 840 employees) in the Netherlands offered a training program to the supervisors in the company. The purpose of the training was to teach supervisors how to discuss the topic of absenteeism with employees in RA interviews. A part of the training program was role-playing RA interviews. The supervisors played a role in which they addressed a professional actor, in the role of an employee, on his absenteeism. These RA interviews were videotaped, because afterwards two experts

assessed the communication styles of the supervisors and the behaviour of the employee. During the training the group members also assessed the role-playing supervisor and the 'employee'.

The training was conducted by the first author in the autumn of 2012 or, if a supervisor was unable to attend, in the summer of 2013. Supervisors ($n = 107$) of the company, who supervised at least five employees, were invited for the training. Participation of the training was voluntary, and given our research interests only male supervisors ($n = 68$) performed a role-play for our study. These subjects were aged between 24 and 58 years. Ten of the supervisors were highly educated, 28 were middle educated, and all of them had mainly an administrative or financial background. The other 30 participants had a low educational level with mostly a technical background.

Observation instrument

For our observation instrument we used adjectives and commonly used sayings as items. These characterized the communication actions of a supervisor in a short and precise manner and enabled the observers to be focussed on the most important characteristics of his actions. For the selection of adjectives and commonly used sayings, we consulted the literature that focuses on the relation-oriented and task-oriented behaviour of men and women (Buss, 1995b; Buss & Kenrick, 1998; Eagly & Wood, 1999; Geary, 2010). The descriptions of these behaviours were summarized into ten adjectives and four commonly used sayings. Examples of adjectives are cooperative and competitive. An example of a common saying is: "Going for the company". We also formulated two items that represent the components of Bales' system: task-oriented and social-emotional actions. These items were markers of the constructs and defined clearly the nature of the construct. The items were "To what extent the supervisor is relation-oriented?" and "To what extent the supervisor is task-oriented?"

The 14 items were presented as a semantic differential (Osgood, Suci and Tannenbaum, 1959) because well-defined opposing scoring categories facilitate a reliable and easy scoring. For each item, the observer was asked to characterize the supervisor's behaviour on a 7-point scale, from -3 to +3, with the 0 indicating that the supervisor has characteristics of both categories. Thus from the central point to the left side of the scale the numbers descend negatively and to the right side they mount positively. Each scale was flanked by opposing pairs of adjectives or commonly used sayings. An example of a pair of opposing adjectives is 'cooperative' positioned at the left side of the scale versus 'competitive' on the right side. If the observer thought that the supervisors behaviour was much more 'competitive' than 'cooperative', the chosen point had to be associated with the adjective 'competitive', resulting in a score of +1, +2 or +3.

The two items that directly expressed Bales' components and served as markers of the constructs, are to be scored on a 6-point Likert scale (0-5). A score of 0 meant that the behaviour was not noticed at all and a 5 the behaviour was observed clearly.

Behavioural measures of the employee

To develop a measure for the behaviour of the 'employee' the first author and actor formulated four items based on watching a sample video in which the trainer played the role of a supervisor and the actor played the employee. One item referred to the rating of the 'employees' intention to change his behaviour in reducing his absenteeism and the other three items concerned the employee's feeling of ease with the supervisor during the RA interview. The latter three items were: "Did the 'employee' feel comfortable in the presence of his supervisor?"; Was the employee feeling understood by the supervisor?"; Was the employee in contact with the supervisor?"; The four items were presented using a 6-point Likert scale (0-5), where the meaning of the category scores was the same as for the two markers of the constructs mentioned earlier. For measuring the employee feeling of ease with the supervisor, we computed a scale score as the mean of the three item scores.

The application of the observation instrument

To ascertain that all the actions and reactions of the 'employee' and supervisor were observed, the instrument was applied directly after the RA interview. We assumed that after finishing the RA interview, the assessor could determine more accurately whether the supervisor was, for example, rather cooperative than competitive during the RA interview, and how the 'employee' reacted to his behaviour.

Pilot study

To evaluate the use of the instrument among experts and peers we performed a pilot study. The three observers involved were an expert in observations, a professional supervisor, and a lowly educated person. They used the instrument after watching a sample movie. Based on their assessment and opinions we adjusted the content of some items to the lowest educational level of an assessor because we expected that several peers of the supervisors had a low education.

The assessors

Both the peers of the supervisors and experts used the instrument to score the RA interviews. The peers of these supervisors received instructions for the observation instrument during their training program, while the experts were intensively trained and watched videos that were taped during the training. The program that the supervisors received, and the training of the experts are described below.

The supervisors program

The program of the supervisors consisted of two sessions, in which the theory of conducting an RA interview on employee's absenteeism was discussed and in which the supervisors performed role-plays with a professional male actor.

In the first session participants role-played an RA interview and were asked to re-enact cases that cause troubles in practice. After each role-play, the peers and the trainer gave feedback on the behaviour of the supervisor. The feedback was related to structuring the RA interview, setting a goal, asking questions, and summarizing parts of the RA interview.

In the second session, participants performed role-plays, which were videotaped. Before starting up the role-plays the trainer informed the participants about the goal of her research and by asking them to allow her to use these videotapes for research. The trainer also explained the use of the observation instrument because the participants were each other's assessors. The role-players selected one of seven submitted cases. An example of one of these cases is: 'William is 42 years old, employed for 22 years as a scaffold constructor. Frequently he reported sick because of flu symptoms'. The role-plays lasted at least 7 minutes and were limited to 10 minutes.

The training of two experts in observations

The experts were two bachelor students psychology. To prevent gender-related biases, we selected one male and one female, who signed a statement of confidence.

The first author of this article and a male co-trainer trained the students in observing the videotapes to become experts. The training took 36 hours spread over six sessions in which the students observed independently six videos that were not part of this study. After watching each video, the students filled out the observation instrument. To improve the inter-observer reliability, the observers discussed the items when the scores differed more than two points from each other. At least seven days later, the observers watched three of the six videos again. The thus collected data was used to assess the inter-observer reliability during training and the intra-observer reliability after training.

After finishing the training both experts observed all 68 videos of RA interviews to be used for this study, which allows for considering the inter-observer reliability of the study into detail. Finally, the trainer randomly selected six videos of this sample two months later and the experts observed those for the second time to examine the intra-observer reliability.

RESULTS

Observer reliability

We first determined the inter-observer reliability and intra-observer reliability of the experts. As a measure of agreement between the two observers rating the same item for the same video we used the Gower coefficient (Gower, 1971). That is, we computed for each item i and video v the Gower coefficient S_{iv}

$$S_{iv} = 1 - (|a_{iv} - b_{iv}| / R_v),$$

with $|a_{iv} - b_{iv}|$ the absolute difference in scores of observers a and b of item i on video v , and R_v the range of the scores; R_v equals six for the 14 adjectives and commonly used sayings, and five for the other 6 items. A coefficient of 1 indicates perfect agreement in absolute value, and 0 indicates the maximally possible disagreement.

During the training of the observers, the values of Gower coefficient across all 20 items of the six videos showed a mean of .84 (range .74-.92), indicating that on average our raters showed less than 1-point difference in scores. This indicates that the inter-observer reliability during training was already quite good. The values of Gower coefficient computed for the repeated three observations across all 20 items of these videos showed a mean of .89 (range .78-1.00). This indicates a high intra-observer reliability after training.

For the 68 videos of RA interviews included in this study, we obtained the following measures for the inter- and intra-observer reliability. The values of Gower coefficient across all 20 items of the 68 videos showed a mean of .85 (range .79-.88). The repeated scoring of six videos by the female resulted in Gower coefficients with a mean of .87 (range .75-1.00), and by the male with a mean of .88 (range .73-1.00). These averages indicated that on average each rater showed less than 1-point difference in scores, both between and within the observers. These results showed a high degree of agreement and we concluded that they demonstrate sufficient inter-observer and intra-observer reliabilities.

Validity and reliability

In order to explore the construct validity of the observation instrument, we conducted factor analyses on the average scores of the two experts and on the average scores of the peers, where the number of peers varied from two to eight due to differences in group size. Only the rating scores of the communication styles were involved in these factor analyses. Before performing the factor analyses, we recoded 10 items, in order to equalize the direction of the answers on all items.

We first performed exploratory Common Factor Analyses (CFA) with unweighted least squares for extraction and Promax for rotation through SPSS on the 16 items referring to the communication the supervisor. We did so on the sample of 68 observed supervisors, both as assessed by their peers and as assessed by the experts.

In this way we could compare the factor structures between the peers and experts. We performed an oblique rotation as we expected the factors to be correlated, as is typical in this kind of applications (Baglin, 2014). In advance we decided to extract two factors in accordance with the expected two communication styles of the supervisor. We used the scree-criterion to validate this decision.

For the sample of the experts the successive first four eigenvalues were 7.79, 3.28, 1.27 and 0.67, and for the sample of the peers the successive first four eigenvalues were 8.05, 2.81, 1.03 and 0.68. For both samples the scree-criterion would thus indicate retaining two factors. For the sample of the experts, the retained two common factors explained 65.15 % of the variance and for the sample of the peers 63.05 %, which is in general considered as high. Table 1 shows the Promax rotated structure matrices as estimated on the basis of the data of the experts and peers. For both the sample of the experts and peers, the two factors could be well interpreted and labelled as the “relation-oriented style” and “task-oriented style” of communication. In line with the presumed structure, nine items were related to the factor of relation-oriented communication style and seven to the task-oriented style. For each item, the correlation between the presumed associated factor was high for all items except for one item: “The supervisor is business-like”. This item (as assessed by the peers) correlated higher with the other factor. For two items of the task-oriented style (as assessed by the experts), the correlation with the relation-oriented factor were substantially negative (i.e., $<-.5$), implying that “dominant” and “business-like” behaviour of the supervisor is typically shown by supervisors scoring low on the relation-oriented factor. A similar low correlation was found for one item of the relation-oriented style, implying that “questioning” behaviour is associated with low scores on the task-oriented factor. These exploratory factor analyses offer support for the construct validity of the relation-oriented and task-oriented scales. Therefore the observation instrument consisted of 7 items pertaining to the task communication style and 9 items pertaining to the relation communication style of the supervisor.

For an additional assessment of the construct validity, we examined the convergent and divergent validity. For the convergent validity, we computed the correlations between the factors generated by the experts and peers. The correlation for the relation-oriented factor was .74, $p < 0.01$ and for the task-oriented factor .53, $p < 0.01$. These levels of correlations suggest indeed a reasonable level of construct validity, although more for the relation-oriented than for the task-oriented factor. To assess the divergent validity for the samples, we compared the square root of the Average Variance Extracted (S_{AVE}) for the factors with the correlations between the factors (Chin *et al.*, 1997). In the sample of the experts, S_{AVE} was 0.83 for the relation-oriented

factor, and 0.74 for the task-oriented factor. Regarding the peers, S_{AVE} was 0.82 for relation-oriented factor and 0.69 for the task-oriented factor. The correlation between the factors was -.37 for the sample of the experts and -.47 for the sample of the peers, indicating that a moderate negative relationship. Within both the sample of the experts and the peers, the S_{AVE} for both factors was higher than the correlation between these factors. This endorses the divergent validity for both samples.

Finally, we assessed the reliability of the relation-oriented and task-oriented factors using the

Composite Reliability Coefficient (CRC) (Raykov, 1997). To this end, we performed two separate common factor analyses using a single factor, on the subset of items associated with the relation-oriented and task-oriented factors. For the sample of the experts, the CRC of the relation-oriented factor was 0.95 and 0.90 for the task-oriented factor. Regarding the peers, the CRC of relation-oriented factor was also 0.95 and 0.86 for the task-oriented factor. These CRC values are rather high, indicating that the scales have a high reliability.

Table 1: Promax rotated structure matrix generated by the experts and peers

Items	Experts Orientation			Peers Orientation		
	Relation	Task	Communalities	Relation	Task	Communalities
The supervisor goes for the 'employee'	.93	-.30	.87	.77	-.20	.62
The supervisor is people oriented	.89	-.13	.84	.90	-.46	.81
The supervisor is kind	.86	-.34	.74	.83	-.46	.69
The supervisor is caring	.86	-.29	.74	.88	-.41	.78
The supervisor is interested	.83	-.21	.70	.85	-.35	.73
The supervisor is trustful	.81	-.35	.66	.85	-.29	.74
The supervisor is cooperative	.77	-.30	.59	.85	-.47	.74
The supervisor is tactical	.76	-.38	.59	.63	-.05	.48
The supervisor is questioning	.70	-.53	.57	.82	-.57	.71
The supervisor directs the RA interview	-.26	.87	.77	-.26	.72	.52
The supervisor is task-oriented	-.18	.84	.72	-.19	.68	.49
The supervisor goes for the company	-.28	.82	.68	-.32	.67	.45
The supervisor is dominant	-.56	.79	.71	-.47	.74	.56
The supervisor is solution oriented	-.11	.67	.47	.03	.54	.39
The supervisor is business-like	-.50	.59	.44	-.78	.75	.80
The supervisor is formal	-.31	.57	.34	-.53	.75	.60

Note: Loadings larger than .5 in absolute value are printed in bold face.

Differences between the relation-oriented and task-oriented styles

To test our hypothesis that male supervisors perform rather the task-oriented than the relation-oriented styles in RA interviews with their employees, we constructed two scales on the average scores of the two experts and on the average scores of the peers. The construction was based on the similarity of the factor structure of experts and peers. The relation-oriented scales were computed as the mean of the nine relation-oriented items, and the task-oriented scales as the mean of the seven task-oriented items. To construct the task-oriented scale and the relation-oriented scale, we adjusted the 6-point Likert scales (0-5) of the items, which served as marker of the construct, to a 7-point scale with zero as the central point of each scale to ease the interpretation.

We first performed a profile analysis to test whether there was a difference between the relation-oriented and task-oriented styles and whether the assessments of the experts and peers were similar. To this

end, we did a split plot MANOVA, with as within-subject factors type of observer (expert, peer) and scale (relation-oriented, task-oriented). There was a significant main effect of scale, $F(1,134) = 11.98$, $MSE = 9.00$, $p < 0.01$, and a significant interaction effect between style and the type of observer $F(1,134) = 9.27$, $MSE = 6.97$, $p < 0.01$.

As follow-up analyses, we applied paired-samples t -tests on the means of the task-oriented and relation-oriented scale scores for each type of observer. Among the experts the scores on the task-oriented scale ($M = 0.86$ $SD = 0.72$) were significantly higher than on the relation-oriented scale ($M = 0.18$ $SD = 0.93$); $t(67) = -4.42$, $p = 0.00$, 95% $CI(-0.99, -0.37)$. Among the peers, the scores on the task-oriented scale ($M = 0.78$ $SD = 0.60$) were not significantly different from the scores on the relation-oriented scale ($M = 0.74$, $SD = 0.79$); $t(67) = -0.31$, $p = ns$, 95% $CI(-0.33, 0.24)$.

Further, we examined the differences between experts and peers on the two scales. The paired samples

t-tests revealed that the scores of the experts on the task-oriented communication scale ($M = 0.86$, $SD = 0.72$) were not significantly higher than the scores of the peers on the same scale ($M = 0.78$, $SD = 0.60$); $t(67) = 1.01$, $p = ns$, 95% *CI* (-0.08, 0.24). The same analysis for the relation-oriented scales revealed that the scores of the experts ($M = 0.18$, $SD = 0.93$) were significantly lower than that of the peers ($M = 0.74$, $SD = 0.79$); $t(67) = -7.27$, $p = 0.00$, 95% *CI* (-0.71, -0.41).

We conclude that the experts and peers of the observed supervisors differ in assessment of the communication styles by the supervisors. According to the experts, the male supervisors showed more a task-oriented communication style than a relation-oriented style, which confirms our hypothesis. In contrast, the peers assessed that the same supervisors applied the task-oriented style with the same strength as the relation-oriented style.

The influence of the styles on the behaviour of the 'employee'

We tested the influence of the styles on behaviour of the actor who played the role of employee in the (RA) interview. That is, we expected that a relation-oriented style of the supervisor would affect the 'employees' feeling of ease with the supervisor and that

the task-oriented style, stronger than the relation-oriented style, would be positively associated with the intention of the 'employee' to change the absenteeism behaviour.

Because the employee's feeling of ease with the supervisor and his intention to change his absenteeism were scored on 6-point Likert scales (0-5), we adjusted these to a 7-point scale with zero as the central point of each scale to ease the interpretation. Multiple regression analyses were run on the samples of the experts and the peers separately for assessing the effects of the communication styles on the behaviour of the 'employee'

In Table 2, the results of the regression analyses on the expert data are summarized. In the sample of the experts, the styles of the supervisor significantly affected the 'employees' feeling of ease with the supervisor, $F(3.64) = 68.27$, $p < 0.00$, $R^2 = .76$. The styles were also significantly associated with his intention to change his absenteeism, $F(3.64) = 14.72$, $p < 0.00$, $R^2 = .41$. As we expected, the relation-oriented style affected the 'employees' feeling of ease with the supervisor more than the task-oriented style. Also in line with our expectations, the influence of the task-oriented style was stronger than the relation-oriented style on the 'employees' intention to change his absenteeism.

Table 2: Regression analyses for the styles predicting the 'employees' behaviour, observed by the experts

Predictors	'Employees' feeling of ease with the supervisor			'Employees' intention to change his absenteeism		
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>B</i>	<i>SE</i>	<i>B</i>
Relation style	0.93***	0.08	1.01	0.48**	0.15	0.47
Task style	0.18*	0.08	0.15	0.62***	0.13	0.47
Relation * Task	-0.13	0.07	-0.18	0.09	0.12	0.11

Note: $n = 68$. *** $p < .001$ ** $p < .01$ * $p < .05$

In Table 3, the results of the regression analyses on the peers' data are summarized. For the sample of the peers, the styles of the supervisor overall significantly influenced the 'employee' $F(3.64) = 34.74$, $p < 0.00$, $R^2 = .62$. As can be seen in Table 3, only the relation-oriented style significantly affected the 'employees' feeling of ease with the supervisor during the interview.

Regarding the intention of the 'employee' to change his absenteeism, the styles of the supervisor were also overall significantly related $F(3.64) = 2.87$, $p < 0.05$, $R^2 = .12$. However, as Table 3 shows, none of the styles had a significant independent effect.

Table 3: Regression analyses for the styles predicting the 'employees' behaviour, observed by the peers

Predictors	'Employees' feeling of ease with the supervisor			'Employees' intention to change his absenteeism		
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>B</i>	<i>SE</i>	<i>B</i>
Relation style	0.86***	0.14	0.86	0.24	0.21	0.24
Task style	0.08	0.14	0.07	0.34	0.21	0.26
Relation * Task	-0.06	0.11	0.07	0.08	0.16	0.09

Note: $n = 68$. *** $p < .001$

In contrast to the experts, the results of the peers did not support our expectations, except that the relation-oriented style positively affected the 'employee'.

DISCUSSION

We constructed an observation instrument to assess the task-oriented and relation-oriented styles of

supervisors in an RA interview. We call it the Jullens Observation Communication Instrument (JOCIN). Trained observers (experts) and peers of the observed supervisors used the JOCIN. These groups of observers assessed independently the same supervisors under different conditions with the aim to validate the applied instrument. The same factor structure was found among the experts as among the peers. In both samples, we

found two factors that could be well interpreted and labelled as the 'relation-oriented style' and 'task-oriented style' of communication. The measures of the Composite reliability (CR), the square root of the Average Variance Extracted (AVE), and the correlations between the factors supported the convergent and the divergent validity for both samples.

The experts and peers differed in their opinion about the adopted styles by the supervisors. According to the experts, the communication of the supervisors was more task-oriented than relation-oriented, which supported our hypothesis. However, according to the peers the same supervisors used the task-oriented style as often as the relation-oriented style. If we assume that the communication styles are related to leadership styles, then the results of the experts are in line with the meta-analyses on experimental studies that suggest that male supervisors tend to adopt a leadership style that is more focussed on the task than on relation (Eagly and Johnson, 1990). The results of the assessment by the peers did not confirm a gender-stereotypical style of male supervisors.

The experts and peers also assessed the effects of the adopted styles on the behaviour of the actor who played the role of an employee. The assessments of both groups confirmed our expectation that the relation-oriented style affected the 'employees' feeling of ease with the supervisor. However, the experts and peers differed in their assessment regarding the effect of these styles on the 'employees' intention to change his absenteeism. In line with our expectation, the results of the experts showed that the task-oriented style had impact on the intention of the 'employee' to change his absenteeism. According to the peers none of the styles influenced this intention of the 'employee'.

The discrepancy between the assessments by the experts and peers can be explained by differences in conditions under which the observations were conducted. First, while the same two experts did all observations, the number of peers per observed supervisor varied from one to nine. Second, the experts were highly educated, while 85% of the peers had a low education. Third, in contrast to the experts, the peers had no psychological background information, were also supervisors themselves, had to assess their colleagues during the actual occurrence of the behaviours, instead of from a video, and were not trained in observation, but only received limited instructions to apply the JOCIN. Finally, repeating the observations was not possible for the peer group, but it was certainly an opportunity for the experts. Given all these constraining factors in the assessments by the peers, it seems plausible that the experts may have performed their assessments more accurately than the peers. The accuracy of the experts is also reflected in the demonstration of sufficient inter-observer and intra-observer reliabilities. Based on the inter-observer and intra-observer reliability of the experts and the better assessment conditions compared with those of the peers,

we may have more confidence in the internal validity of the assessment of the experts. Thus, especially trained observers should use the JOCIN to obtain reliable results.

Concerning the external validity, our results depended on role-playing situations in which the supervisors performed their own role and the actor played the role of employee. For the generalization of our results to the behaviour of the supervisors in organizational settings, it is important to consider comments by Bellack *et al.* (1978, 1979) who conducted research on the relation between role-play and overt behaviour. Based on six simple observed variables, such as eye contact and smiles of psychiatric patients, Bellack *et al.* (1978, 1979) found that the behaviour in a role-play was only weakly related to the behaviour in naturalistic situations. However, these researchers actually suggested that role-playing has a better external validity when role-play is applied in interviews with extended interactions and when the simulated situations are relevant for the subjects, such as in employment interviews. In such role-plays the subject are expected to behave in a natural way. These conditions are applicable to our study. The supervisors were brought into a situation for addressing an 'employee' with the aim to enhance his productivity. This simulated situation was relevant for them, lasted at least 7 minutes and therefore required extended interaction. The role-play procedure may have aroused anxiety because the male supervisors were aware of being observed and being assessed by their peers, and, moreover, they knew that the RA interviews were video taped for research. Because of their anxiety, the supervisors may have behaved differently if they conducted a RA interview with their own employee instead of an actor. However, the supervisors were accustomed to being observed and assessed because the role-playing was also applied in the first session of the training program and consequently knew the actor. Moreover, these training sessions were learning situations, thus their anxiety may have been fairly reduced. Based on confidence in the opinions of the experts (internal validity) and on the role-playing conditions formulated by Bellack *et al.* (1978, 1979), we may generalize the outcome of the adopted styles to the population of male supervisors who conduct RA interviews in the construction industry. They tend to perform a task-oriented communication style rather than a relation-oriented style in RA interviews.

Although the present study provides a valid and reliable instrument for observing and assessing supervisors who conduct interviews, the study has some limitations. First, for the construct validity, the use of a multi trait method (Campbell & Fiske, 1959) may have provided stronger evidence for the convergent validity of the JOCIN. We could have distributed the applied instrument as a questionnaire to the employees of the supervisors, and have matched these with the assessments by the experts. Second, with respect to the internal validity, the experts in observation were two

bachelor students psychology and they were thoroughly trained in the use and characteristics of the JOCIN. This implies that they may have presumed that the pairs of opposing adjectives and commonly used sayings were associated with the task-oriented versus the relation-oriented communication of the supervisor. Third, the external validity of the instrument is not yet well established as we only examined the communication styles of a single group of supervisors. We did not compare these supervisors with another group because the data was not available. Finally, as we used an actor, the effects of the communication styles may not be generalizable to the population of employees. However, having supervisors conduct an RA interview with their own employees would have gone at the expense of the standardization of the situation.

Future research may also focus on the application of the JOCIN related to the gender typical leadership -and communication styles. The JOCIN could be applied to male supervisors who conduct an interview with a female employee as opposed to a male employee. Furthermore, instead of male supervisors, the communication styles of female supervisors could also be a subject of research. Finally, the JOCIN may be applied as a questionnaire for research on the culture of an organisation in relation with the communication styles of superiors.

CONCLUSION

We conclude that our research and instrument may have important theoretical and practical implications. Our study was relatively unique in using an observation instrument, instead of a questionnaire, to assess the behaviour of supervisors. We demonstrated that each communication style of superiors influences the behaviour of employees differently and that both styles are needed for different targets. This information is useful for supervisors how to discuss sensitive and conflict inducing issues, for example absenteeism, with employees in RA interviews. We showed that the JOCIN is valid and reliable across different assessment conditions. The JOCIN is suitable in training situations for giving feedback to supervisors on using their communication styles and for measuring changes in their styles. In this way, RA interviews will be more effective for achieving targets. Moreover, the JOCIN is an asset for further research on the communication styles of supervisors and on her application for other purposes.

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