*Business and Management Theory and Practice* 2025, 2(2), 3353.
https://doi.org/10.54517/bmtp3353

Article

# Theoretical speculations versus empirical realities: Assessing the van Ruler model of communication

**Omid Mahdieh[1,*], Robert Trevethan[2]**

[1] Department of Management, Faculty of Humanities, University of Zanjan, Zanjan 45371-38791, Iran
[2] Independent academic researcher and author, Albury, NSW, Australia
*** Corresponding author:** Omid Mahdieh, mahdieh@znu.ac.ir

**CITATION**

Mahdieh O, Trevethan R. Theoretical speculations versus empirical realities: Assessing the van Ruler model of communication. Business and Management Theory and Practice. 2025; 2(2): 3353. https://doi.org/10.54517/bmtp3353

**ARTICLE INFO**

Received: 27 February 2025
Accepted: 28 April 2025
Available online: 21 May 2025



**Abstract:** Communication plays a critical role in the success of organizations across all types and sectors. Following a brief overview that demonstrates the diversity of perspectives about communication within organizations, the validity and generalizability of van Ruler's four-strategy model, or grid, of organizational communication is examined in this study. A scale based on that model was created and subsequently administered to employees in two Iranian workplace settings. Confirmatory factor analyses failed to support the communication strategies proposed by van Ruler, and in initial exploratory factor analyses (EFAs), further disconfirmation of the model occurred because there were only two factors in the data for both samples. Refined follow-up EFAs challenged the model still further because both samples' data comprised a single factor. We conclude that compartmentalized conceptions of organizational communication may not always apply, but context-specific communication models might still function effectively in certain organizational cultures, especially where hierarchies or formal structures pertain.

**Keywords:** organizational communication; van Ruler; communication grid; communication strategy

## 1. Introduction

More than two decades ago, Craig argued that communication was not only complicated but also in disarray as a discipline [1]. His analyses led him to propose what he referred to as seven traditions, or vocabularies, of communication theory: rhetorical, semiotic, phenomenological, cybernetic, socio-psychological, sociocultural, and critical. Whatever the merits of Craig's proposal, it appears to have had little precedent, or consequence, in relation to at least one major area of communication, namely organizational communication. Evidently, there are not only different ways of conceptualizing communication, but organizational communication has had its own, independent, trajectory. In this introduction, we initially provide information indicating that organizational communication has been conceived of and investigated within a wide array of perspectives. Using this as a foundation, we then focus on one specific conception of organizational communication, the grid of communication strategies proposed by Betteke van Ruler [2].

Many approaches to organizational communication identify two broad scopes, internal and external, based on the targets of communication [3–6]. As one example of the division between these two types of communication, Clegg et al. proposed that organizational communication embraces three disciplines, namely human relations (communication with internal audiences), marketing (communication with customers), and public relations (communication with stakeholders such as local communities or environmentalists)—the first focusing on internal communication, and the second two on external communication [7] (p. 236).

Descriptions concerning the broad scopes of internal and external communication are provided in the next two subsections. These subsections are not intended to comprise a systematic review of organizational communication. Rather, by featuring a variety of unique perspectives about communication, the contents of these subsections are intended to provide relevant contextualization for van Ruler's integrated theory that we examine in the empirical component of our research.

## 2. Literature review

### 2.1. Internal communication

Internal communication refers to the transmission of information between people and departments in an organization, as well as to shareholders when shareholders are integrated within an organization. Internal communication comprises both formal and informal procedures, with directions of flow being vertical, horizontal, and diagonal as well as one-way and two-way. Within the broad area of internal organizational communication, a considerable body of theorizing and research has focused on communication styles (see, e.g., [8–10]). There has also been some interest in the functions of internal organizational communication, and there is a miscellany of other topics and perspectives, some of which are similar in focus but described with different terms, and some of which are different in focus but described with similar terms. The field of internal communication is therefore not easy to describe systematically. Some attempt to do so is provided below.

#### 2.1.1. Styles associated with internal communication

Communication style has been defined as "the way in which people communicate, a pattern of verbal and nonverbal behaviors that comprises preferred ways of giving and receiving information in a specific situation" [10] (p. 5), and has been regarded as including the level of directness, the degree of formality, and media preferences [11] (p. 129). Each style, therefore, indicates the way in which people interact with each other.

Sometimes, communication style has been studied in terms of individuals' effect on others—for example, the effect of managerial communication styles (passive, aggressive, and assertive) on employees' attitudes and behaviors [8]. In other research, attention has been directed more to interpersonal, two-way communication, sometimes according to objective and subjective meaning [12]. Other research has been used to investigate congruence of supervisor–subordinate communication [13]. In addition, research has been used to investigate supervisor–subordinate communication [14,15].

Several studies have been conducted to create instruments for measuring interpersonal communication or communication styles. In one study, the Communication Openness Measure was created to assess perceived communication openness in organizations [16]; in another study, the Index of Interpersonal Communicative Competence was created to assess the ability of a supervisor to solve employee-related problems [17]. Recently, perceptions about communication styles among junior high school students were examined using the Muslim Student Interpersonal Communication Scale [18].

#### 2.1.2. Functions associated with internal communication

Although the conceptual bases are not consistent, conceiving of internal communication in terms of functions is common. It has been argued that we communicate to create, recreate, and understand our realities, and that communication enables us to control our environments [19] (p. 2). From a different perspective, communication serves five major functions within a group or organization [20]. These functions are management, feedback, emotional sharing, persuasion, and information exchange. Another set of communication functions has been proposed: to provide knowledge, motivate organizational members, control and coordinate group activities, and permit expression of feelings [21] (p. 463).

### 2.2. External communication

External communication refers to the transmission of information between an organization and outside people (e.g., consumers), other organizations or businesses, and regulatory bodies. This form of communication can be studied from several perspectives, including strategies (sometimes referred to as communication models or typologies), advertising, and public relations.

#### 2.2.1. Strategies associated with external communication

A number of theorists and researchers have approached external organizational communication in terms of strategies. According to one perspective, communication strategies must take into account the audience, the purpose (or reason), channels and media, and expected responses to the communication [22]. According to a completely different perspective, there are three corporate communication strategies, one of which relates to the production of goods and services, another referring to an organization's social responsibility, and a third, hybrid strategy, based on a combination of the other two [23].

From yet another perspective, four organizational communication strategies were proposed [24], labeled process-oriented (focused on numbers, methods, planning, analysis, and details), people-oriented (focused on needs, motivation, team, understanding, cooperation, values, expectations, and relationships), action-oriented (focused on results, objectives, performance, efficiency, responsibility feedback, and achievement), and ideas-oriented (focused on concepts, innovation, new ways, improvement, and problem-solving).

#### 2.2.2. Advertising and public relations as aspects of external communication

External communication is often categorized as either advertising (with its strong links to marketing) or public relations. Advertising can be used for increasing product sales as well as for creating or enhancing the image of an overall brand or specific products. It has been characterized in a variety of ways. For example, "advertising is any form of non-personal presentation and promotion of ideas, goods, and services usually paid for by an identified sponsor" [25] (p. 359). It might also be that the purpose of advertising is to capture consumers' attention and direct it toward the company and its brands [26].

Public relations, on the other hand, involves building, reinforcing, and maintaining long-term relationships with a variety of audiences, including community members, shareholders, consumers, government regulators, and even employees [27–29] in order to create or maintain a favorable image of an organization. It is also likely that CEOs are aware that public acceptance of and trust in their companies, and therefore public relations, are essential for an organization's survival [30] (p. 1).

Although advertising and public relations both employ persuasive strategies, often with the use of mass media, it has been pointed out that they differ in several fundamental respects [25] (pp. 341–342). For example, advertising focuses on selling goods or services, whereas public relations focuses primarily on image management; advertising is not associated with interpersonal communication, whereas public relations sometimes is; and advertising requires financial outlay, whereas public relations messages are typically not paid for, often appearing as features, news stories, or editorials.

## 2.3. The van Ruler communication grid

One theory concerning organizational communication strategies that combines several aspects from the above range of perspectives, but appears to have received little conceptual or empirical examination, is the model proposed by Betteke van Ruler [2], who argued that organizational communication could be categorized according to four strategies that she claimed were "derived from communication theory and rooted in described public relations approaches in the Netherlands" (p. 123). To identify these strategies, van Ruler created a two-by-two grid with one-way versus two-way communication on one axis and denotative versus connotative bases of communication on the other. This resulted in four proposed communication strategies: information, persuasion, dialogue, and consensus building. They are depicted, in streamlined form, in **Figure 1**.

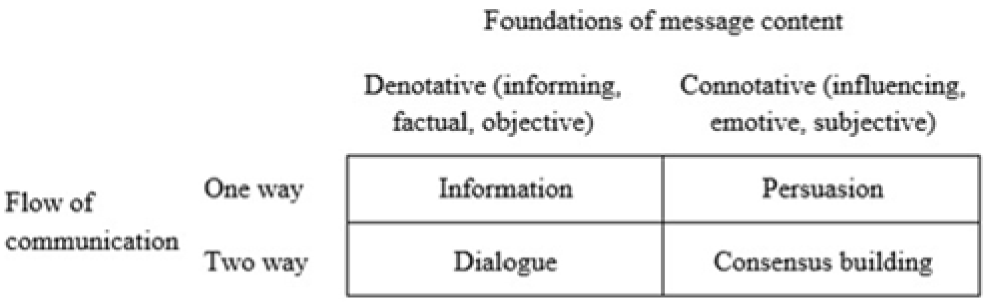


**Figure 1.** Adaptation of the van Ruler communication grid [2].

According to van Ruler, the information strategy (one-way/denotative) involves the provision of information to help people form opinions or make decisions. This "strategy demands well-rounded policy, informative messages, and an aware information-seeking public" [2] (p. 139). The persuasion strategy (one-way/connotative) is the basis of advertising, propaganda, and corporate image. According to van Ruler, this strategy targets people's knowledge, attitudes, and behavior. It is predicated on a persuasive message and a public that is latent in the sense of being aware of a topic but not regarding it to be an issue. The dialogue strategy (two-way/denotative) is intended to enhance policy generation and socially responsible activities. This strategy can also be used to conduct job discussions effectively, support small-scale brainstorming, and collect solutions to problems. It requires input from both sides and a public that is aware of a problem. Finally, the consensus-building strategy (two-way/connotative) is used to deal with issues within an organization or between an organization and external people and bodies, particularly when interdependent parties have conflicting interests. It involves "an active public, clear negotiations, and room in the policy development process of the organization" [2] (p. 140).

Although van Ruler developed her model within the framework of public relations, in her original publication, she suggested wider applicability by stating that "the four basic strategies are all identifiable in reality because they are used on an everyday basis in communications between people" [2] (p. 140). Furthermore, she stated that "anyone who manages an organization's communications can use individual strategies to resolve specific communication problems" [31]. The model is therefore potentially useful because it might apply beyond the sphere of public relations and include communication within as well as beyond an organization. It is also potentially useful because it comprises two common and important aspects of organizational communication—one-way versus two-way communication, and denotative/objective versus connotative/subjective meanings behind communication.

The van Ruler model has attracted some mention in the literature (see, e.g., [32–40]), but reference to it has been only occasional and, to our knowledge, the model has never been subjected to empirical examination. As van Ruler pointed out [2], "it is nothing more than a model developed from theory. It needs to be tested, to determine which strategies are applicable under given conditions, and how they should be used" (p. 140).

This research is intended to assess the validity of van Ruler's communication grid and we did so within two Iranian organizational contexts. Research institutions and public universities in Iran have active public relations departments, and therefore employees are likely to be aware of the processes and results of public relations both inside their organizations (e.g., among staff) and outside their organizations (e.g., among stakeholders). If the van Ruler strategies are used in these organizations, we believe their employees should be able to recognize those strategies. More specifically, we hypothesized that confirmatory factor analyses (CFAs) would provide an initial test of van Ruler's communication grid and that, if the grid was disconfirmed in CFAs, exploratory factor analyses (EFAs) would shed light on how communication was perceived by the employees.

## 3. Method

### 3.1. Participants

Two samples of Iranian employees are represented in this research. The first sample comprised research and administrative staff at research institutions supervised by the Iranian Ministry of Science, Research, and Technology. The second sample comprised support staff within a public university.

### 3.2. Instrument

To capture each of van Ruler's strategies adequately, the first author (initials temporarily anonymized for blind reviewing) used content analysis to mine information from van Ruler's 2004 article. As a result, six dimensions emerged: underlying concept, definition, aim, dominant characteristics, methods (means), and indication of success. Items were then generated, in some cases using wording that corresponded closely to wording in van Ruler's article, to represent each of these six dimensions within each of the four van Ruler strategies. A colleague who was familiar with organizational communication as well as with content analysis was asked first to examine what had been identified as dimensions in van Ruler's article and then to review the 24 items to assess whether they accurately represented each strategy and dimension. As a result, minor changes were made to some items.

A Likert-format scale was then created, containing the 24 items and response options of 1 to 5, labeled *very low*, *low*, *moderate*, *high*, and *very high* to indicate each item's resemblance to communication in the respondents' organizations. This scale was sent to 10 university colleagues (seven males, three females), all of whom had an academic background in organization and communication studies, with a request that they provide critical feedback. As a result of suggestions from these colleagues, minor changes were made to the wording of a small number of items. The Appendix contains an English translation of each item's full wording. Abbreviated versions are provided in **Table 1**, where the sequence of strategies conforms to the clockwise presentation of strategies in **Figure 1**.

**Table 1.** Abbreviated item contents based on content analysis.

| Dimension | Communication strategy | | | |
|---|---|---|---|---|
| | **Information** | **Persuasion** | **Consensus building** | **Dialogue** |
| Underlying concept | 1. Managing information transmission processes effectively | 7. Persuading people to do a job or accept an idea | 13. Building and maintaining relationships between individuals and among groups | 19. Participants being able to exchange ideas freely |
| Definition | 2. Distributing information precisely and in a timely fashion | 8. Creating attitudes, image building, and influencing employees' emotions | 14. Achieving mutual understanding, mutual respect, and cooperation | 20. Creating dialogue, interaction, and facilitation |
| Aim | 3. Providing effective and efficient transmission of information, and informing people about events | 9. Changing individuals' behaviors, attitudes, ideas, or opinions | 15. Building relationships among employees and stakeholders, and encouraging participative decision making | 21. Identifying specific problems, assessing alternative solutions, and selecting the most appropriate solutions |
| Dominant character-istics | 4. Well-rounded policy, informative messages that are completely clear, and addressing all employees | 10. Well-rounded policy, mostly clear and persuasive messages, and addressing some of the employees | 16. Clear negotiations, having specific locations where negotiations occur, and listening to the voice of employees | 22. Informative messages for both parties, listening to the voice of employees, and interactive policy making |
| Methods (means) | 5. Newsletters, office automation, bulletin boards, and instructions | 11. Letters, personal conversations, and informal distribution of information | 17. Bargaining, negotiations, and suggestion boxes | 23. Small-scale brainstorming, e-mail, consultation, and specialized friendly meetings |
| Indication of success | 6. Having transmitted the right information to the right people at the right time | 12. Having found the right tone of voice under any and all circumstances | 18. Having identified common interests and created mutually beneficial relationships | 24. Having facilitated communicative interactions between people, both inside and outside the organization |

### 3.3. Procedure

The 24-items and response options were embedded in a questionnaire that contained questions seeking information about respondents' sex, age, and number of years in their current workplace. Questionnaires were distributed by mail, email, or personally in hard-copy form at prospective respondents' workplaces, at which time brief information was provided about the aim of the study. Participation was indicated as being voluntary, and confidentiality of responses was assured. Respondents were asked to indicate the extent to which each item characterized their organization's communication.

In order to obtain the first sample, questionnaires were distributed across 39 research institutions, each of which had only a small number of staff. For the second sample, 300 questionnaires were distributed among the university's 415 support staff. Subsequently, the first author or an assistant went to the workplaces to collect questionnaires that had been completed.

For the first sample, 237 questionnaires were collected from 23 of the research institutions, but missing responses resulted in only 188 questionnaires being usable for subsequent analysis. For the second sample, 220 questionnaires were collected, but data from only 200 questionnaires were usable because of missing responses.

### 3.4. Analyses

Data were analyzed in terms of percentages, means, standard deviations (*SD*s), CFAs, EFAs, and parallel analysis. We regarded the normed $\chi^2$ (i.e., $\chi^2$/df) as preferable if < 3, but acceptable if 3 to 5 [41]. We also regarded the CFI and TLI as preferable if > 0.95, but acceptable if 0.90 to 0.95; the RMSEA as preferable if < 0.06, but acceptable if 0.06 to 0.08; and the SRMR as preferable if < 0.05, but acceptable if 0.05 to 0.08 [42].

In EFAs, we used principal axis factoring as the method of extraction, and, if there were two or more factors in the data, we anticipated using oblique (oblimin) rather than orthogonal rotations to avoid artificially forcing the data into separate factors. Cases with missing data were excluded pairwise. We disregarded items with loadings < 0.40 in light of loadings of 0.40 having been regarded as low [43] and loadings between 0.30 and 0.40 being regarded as "minimally acceptable" [44] (p. 116).

Most analyses were conducted with SPSS Version 22®. AMOS Version 21 was used for CFAs, and an online calculator was used for parallel analyses in conjunction with output from the EFAs [45]. Parallel analyses were based on principal components and were conducted with both 100 and 1000 randomly generated correlation matrices set at the 95th percentile.

## 4. Results

### 4.1. Profiles of samples

In the research institute sample (Sample 1), most respondents (67%) were men, although 1.1% did not indicate their sex. Nearly half of the respondents (46.3%) were 30 to 40 years of age, 33% were aged 41 to 50, and approximately equal, and low, percentages were less than 30 years of age (10.1%) or over 50 years of age (9%); 1.6% did not provide their age. Approximately one-third (34.6%) of the respondents had been working in their current organization for more than 15 years, 25.5% for 11 to 15 years, 21.8% for 6 to 10 years, and 14.4% for less than 6 years. The remaining 3.7% did not indicate how long they had worked in their current organization.

In the university sample (Sample 2), respondents were almost equally represented in terms of sex (49% male). A noticeable proportion (44.5%) were 41 to 50 years of age; 36.5% were 30 to 40 years of age, 14% were less than 30 years of age, and very few (5%) were more than 50 years of age. Approximately half (49.5%) of the respondents had been working at their university for more than 15 years, 20% for 11 to 15 years, 14.5% for 6 to 10 years, and 16% for less than 6 years.

## 4.2. Descriptive statistics for items

For both samples, means and standard deviations (*SD*s) on all items are shown in **Table 2**. Most means did not depart noticeably from the midpoint (3) of the response-option range and most *SD*s were similar in extent. However, Items 11 and 17 (within the persuasion and consensus-building strategies, respectively, and both referring to the methods dimension) attracted the lowest levels of agreement from respondents, and the *SD*s indicated that Item 11 had the widest distribution of responses in both samples.

**Table 2.** Means and standard deviations of items in each sample.

| | Sample 1 ($N$ = 188) | | Sample 2 ($N$ = 200) | |
|---|---|---|---|---|
| **Item** | **Mean** | ***SD*** | **Mean** | ***SD*** |
| 1 | 2.94 | 0.95 | 2.94 | 1.01 |
| 2 | 3.09 | 0.96 | 2.93 | 0.99 |
| 3 | 3.09 | 0.97 | 3.19 | 0.98 |
| 4 | 2.85 | 1.00 | 3.01 | 1.01 |
| 5 | 3.24 | 1.10 | 3.72 | 0.95 |
| 6 | 3.04 | 0.91 | 3.21 | 1.01 |
| 7 | 3.05 | 0.95 | 2.81 | 1.01 |
| 8 | 2.70 | 0.88 | 2.75 | 0.95 |
| 9 | 2.85 | 0.88 | 2.73 | 1.06 |
| 10 | 2.93 | 0.89 | 2.72 | 0.91 |
| 11 | 2.59 | 1.17 | 2.55 | 1.17 |
| 12 | 2.84 | 0.91 | 2.77 | 0.95 |
| 13 | 3.19 | 0.85 | 2.98 | 1.10 |
| 14 | 3.24 | 0.99 | 3.05 | 1.04 |
| 15 | 3.05 | 0.99 | 2.87 | 1.07 |
| 16 | 3.06 | 0.97 | 2.83 | 1.05 |
| 17 | 2.44 | 1.04 | 2.68 | 1.02 |
| 18 | 3.04 | 0.90 | 2.81 | 1.05 |
| 19 | 3.36 | 0.97 | 2.88 | 1.11 |
| 20 | 3.29 | 0.97 | 2.89 | 1.10 |

**Table 2.** (*Continued*).

| | Sample 1 ($N$ = 188) | | Sample 2 ($N$ = 200) | |
|---|---|---|---|---|
| **Item** | **Mean** | ***SD*** | **Mean** | ***SD*** |
| 21 | 3.16 | 1.01 | 2.90 | 1.10 |
| 22 | 3.01 | 1.00 | 2.81 | 1.00 |
| 23 | 3.17 | 1.10 | 2.94 | 1.18 |
| 24 | 2.99 | 0.94 | 2.84 | 0.93 |

## 4.3. Confirmatory factor analyses

For each sample, the 24 items were subjected to a CFA in which four factors were specified, each factor representing one of the van Ruler strategies with its predetermined set of six items representing each dimension. The results are shown in **Table 3**. For both samples, these results are highly similar in that the normed chi-square values were preferable and the SRMRs were acceptable, but the CFIs and TLIs were too low to be satisfactory, and the RMSEA was too high to be satisfactory. Because only the normed chi-square values met the criterion that we regarded as preferable, and only the SRMRs attained a level that we regarded as acceptable, we concluded that the four-factor model was untenable in both samples. We therefore conducted separate EFAs for each sample in order to identify reasons for lack of model fit.

**Table 3.** Results of confirmatory factor analyses for each sample based on four factors.

| **Metric**[a] | **Criteria concerning acceptability of metrics** | **Sample 1** | **Sample 2** |
|---|---|---|---|
| Normed $\chi^2$ (i.e., $\chi^2/df$) | < 3 preferable; 3–5 acceptable | 2.34 (576.13/246) | 2.73 (672.36/246) |
| CFI | > 0.95 preferable; 0.90–0.95 acceptable | 0.87 | 0.87 |
| TLI | > 0.95 preferable; 0.90–0.95 acceptable | 0.86 | 0.85 |
| RMSEA | < 0.06 preferable; 0.06–0.08 acceptable | 0.09 | 0.09 |
| SRMR | < 0.05 preferable; 0.05–0.08 acceptable | 0.07 | 0.06 |

[a] Abbreviations: CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation; CI = confidence interval; SRMR = standardized root mean square residual.

## 4.4. Exploratory factor analyses

Preliminary examination indicated that data from both samples were suitable for EFA in that the Kaiser–Meyer–Olkin indexes were 0.94 and 0.93 for Samples 1 and 2, respectively, and, for both samples, Bartlett's test of sphericity had $p < 0.001$.

For Sample 1, four eigenvalues were greater than 1 but the scree plot was ambiguous, suggesting the presence of either one or two factors in the data. For Sample 2, three eigenvalues were greater than 1 and the scree plot was also ambiguous, again suggesting either one or two factors in the data. Parallel analyses indicated that two factors were present in the data of both samples. Because parallel analysis has been recommended as usually providing a more accurate indication of the number of factors in a data set than is provided by either the number of eigenvalues > 1 or the scree plot (see [43]), we commenced our EFAs by seeking only two factors.

For Sample 1, an EFA constrained to two factors revealed those factors accounting for 53.36% of the variance (45.98% on the first factor, 7.39% on the second). The mean of the communalities was 0.44, with Items 5, 11, and 17 having the lowest communalities, all < 0.37. The remaining communalities ranged from 0.39 to 0.63. As shown in **Table 4**, 21 of the 24 items loaded on the first factor at > 0.40, although one of these items (Item 12) cross loaded almost equally on the second factor. Among the remaining three items, Item 11 loaded > 0.40 on the second factor, but Items 5 and 17 loaded < 0.40 on both factors. The two factors therefore comprised one major factor containing almost all of the items, and a second factor with only Item 11—the item that had the lowest and most divergent levels of endorsement from respondents (refer to **Table 2**). Item 17, also with a low level of endorsement, failed to load at ≥ 0.40 on either factor.

**Table 4.** Item loadings on two-factor solutions for each sample[a].

| | **Sample 1** | | **Sample 2** | |
|---|---|---|---|---|
| **Item** | **Factor 1** | **Factor 2** | **Factor 1** | **Factor 2** |
| 1 | 0.72 | | 0.63 | |
| 2 | 0.75 | | 0.76 | |
| 3 | 0.73 | | 0.80 | |
| 4 | 0.74 | | 0.74 | |
| 5 | | | 0.67 | |
| 6 | 0.73 | | 0.87 | |
| 7 | 0.75 | | 0.77 | |
| 8 | 0.48 | | 0.67 | |
| 9 | 0.58 | | 0.72 | |
| 10 | 0.47 | | 0.53 | |
| 11 | | 0.60 | | |
| 12 | 0.51 | 0.48 | 0.50 | |
| 13 | 0.68 | | | 0.57 |
| 14 | 0.86 | | | 0.53 |
| 15 | 0.72 | | | 0.55 |
| 16 | 0.73 | | | 0.52 |
| 17 | | | | 0.51 |
| 18 | 0.46 | | | 0.65 |
| 19 | 0.78 | | | 0.70 |
| 20 | 0.78 | | | 0.68 |
| 21 | 0.78 | | | 0.57 |
| 22 | 0.80 | | | 0.44 |
| 23 | 0.66 | | | 0.54 |
| 24 | 0.66 | | 0.45 | 0.43 |

[a] Loadings < 0.40 are not shown.

For Sample 2, an EFA constrained to two factors revealed the 24 items loading on two distinct factors that accounted for 56.17% of the variance (49.05% on the first factor, 7.12% on the second). The mean of the communalities was 0.52. Item 11 had an exceptionally low communality of 0.05, and the remaining communalities ranged from 0.36 to 0.68. As shown in **Table 4**, the first factor consisted of 11 items with loadings from 0.50 to 0.87, all of which were from the information and persuasion communication strategies. The only exception from those categories was Item 11 (from the persuasion strategy), which loaded at < 0.40 on both factors. The second factor was characterized by 12 items with loadings > 0.40, all of which were from the consensus-building and dialogue communication strategies. One of those 12 items, however, cross-loaded with Factor 1.

In order to explore whether the factor structures could be refined, we conducted a second EFA for each sample after removing items with unsatisfactory loadings. From Sample 1, we sought a single-factor solution after removing items 5 and 17 because they loaded on neither factor, Item 11 because it loaded on only the second (diminutive, essentially single-item) factor, and Item 12 for having a similar loading on both factors. The first three of these items had also exhibited the lowest communalities. From Sample 2, we sought a two-factor solution after removing Item 11 for not loading on either factor, and Item 24 for having loaded almost equally on both factors.

As a result, the 20 items on the single factor in the Sample 1 data accounted for 52.12% of the variance with loadings that ranged from 0.54 to 0.80 spanning all four proposed communication strategies. In the Sample 2 data, although both the scree plot and parallel analysis had suggested the presence of two factors, 22 of the retained items loaded on the first factor from 0.59 to 0.80, and only three items (one from the information strategy and two from the dialogue strategy) loaded on the second factor, all with loadings < 0.40. The predominant 22-item factor accounted for 50.71% of the variance. The refined EFAs, therefore, indicated the presence of only one factor in both samples' data.

## 5. Discussion

Our analyses strongly suggest that the four communication strategies proposed by van Ruler [2] are not robust across settings. This was initially demonstrated by the lack of model fit for both samples' data when four factors were sought in the CFAs. Disconfirmation of the four strategies also occurred in the first pair of EFAs, not only because there were only two factors in the data for both samples, but also because 20 of the 24 items in Sample 1 loaded on the first factor and only one item loaded uniquely on the second factor, but, in Sample 2, the first factor contained 11 of the 12 items from two of the strategies (information and persuasion) and the second factor contained 11 of the 12 items from the other two strategies (consensus-building and dialogue). Therefore, although there were two factors in each sample's data, those factors were substantially different in each case. In the subsequent, more refined, EFAs, the 20 items on the predominant factor in Sample 1 again loaded on a single factor, but two separate factors no longer existed for Sample 2, where 22 items loaded on a single factor—the latter outcome also demonstrating a fragile factor structure in that sample's data. Additionally, the percentages of variance accounted for by the single-factor results (52.12% and 50.71% for Samples 1 and 2, respectively) indicate that even a combination of the four proposed strategies does not strongly capture the nature of communication as perceived by the participants in this research.

The absence of separate factors is particularly interesting given that the items for each successive strategy were grouped together on the questionnaire in the sequence shown in **Table 1**. This might have unintentionally encouraged similar responses to be elicited within each strategy, thus resulting in the emergence of separate factors even if separate factors had no foundation in reality. Even this possible flaw in the questionnaires did not favor the presence of four factors in the data.

In the absence of evidence supporting the generalizability of the four proposed communication strategies, questions might be raised about whether any aspects of van Ruler's grid and our research concerning it are salvageable. Some possibilities do exist. For example, in both samples, most items were satisfactory by having responses that centered on the midpoint of the option range and exhibited moderate *SD*s—thus indicating satisfactory skewness and kurtosis. This suggests that many of the items might be suitable for use in other research if, for example, a global rather than compartmentalized indication of satisfaction with organizational communication is sought. Some items, however, might be defective, as indicated by them failing to load satisfactorily in the EFAs in the Sample 1 data. Most noticeably, these were items 5, 11, and 17 in three of the four strategies—all within the methods/means dimension. The problem therefore seems to have resided primarily with the nature of that particular dimension rather than with allocation of items to appropriate strategies. If subsequent research occurs with items from this study, attempts could be made to improve those specific items with different perspectives and wording.

Even if van Ruler's four strategies are not compartmentalized in the minds of those for whom the communication is intended, the demarcation of strategies and dimensions based on her model might be useful for discussion and planning within an organization, particularly for identifying where communication shortcomings exist and where efforts to effect improvements might be most needed and best targeted.

Nevertheless, models such as the one proposed by van Ruler might be too undifferentiated to be of conceptual, let alone practical, utility. As Yang and Taylor argued, "the contributions of public relations theory building to the larger communication discipline are less clear" [46] (p. 91). A more fruitful course of action in research might therefore avoid those kinds of models altogether. As indicated in the introduction of this article, organizational communication is multifaceted. Therefore, differently framed, and in some cases, situation-specific, conceptions of organizational communication might be more useful and appropriate. There are many reasons for this. For example, there is a greater range of options beyond those represented by one-way and two-way communication directions in the van Ruler model—particularly in some modern organizations that have a relatively flat organizational structure (see [47,48]). Interactional models are not only two-way. For example, they can also incorporate feedback loops as mechanisms for improving communication quality [49]. Furthermore, organizational communication can be regarded as a process [50,51] and the internet and social media are increasingly changing the nature of organizational communication [52–57] such that, for example, the same people are often both information receivers and senders [58], so new avenues for conceptualization and research are burgeoning. Another possibility is that variables such as national culture [59–61], organizational culture [62,63], values, and social norms [64,65] can affect the use of communication strategies in the organization.

Additional factors can be considered when investigating organizational communication. For example, communication channels can substantially influence how both the style and quality of information are perceived [66]. Organizational structure can also affect the communication process under different circumstances. It has been proposed that “a hierarchy performs better than a polyarchy in tough environments, whereas the reverse holds in friendly environments” [67] (p. 231). Furthermore, individual differences, especially gender, have been known for decades to affect the perception and reaction of people toward communication messages and channels [68–70]. Perhaps the influence of these differences has changed with the passage of time and warrants continuing exploration. Clearly, the field of organizational communication has been, and is likely to remain, richly varied, and therefore unlikely to yield to conceptualizations that are intended to be universally applicable. The findings of the present study raise questions about why the van Ruler model is inappropriate in Iranian organizations. Answering such questions seems to require the use of a qualitative-exploratory method. Future researchers could use this method to explore whether it is possible to use each of the van Ruler model’s strategies in different organizations, which organizations use these strategies, and what factors and characteristics influence the use of these strategies.

**Author contributions:** Conceptualization, OM and RT; methodology, OM and RT; software, OM; validation, OM and RT; formal analysis, OM and RT; investigation, OM and RT; resources, OM; data curation, OM; writing—original draft preparation OM; writing—review and editing, OM and RT. All authors have read and agreed to the published version of the manuscript.

**Conflict of interest:** The authors declare no conflict of interest.

## References

1. Craig RT. Communication theory as a field. Communication Theory. 1999; 9(2): 19–61. doi: 10.1111/j.1468-2885.1999.tb00355.x
2. van Ruler B. The communication grid: An introduction of a model of four communication strategies. Public Relations Review. 2004; 30(2): 123–143. doi: 10.1016/j.pubrev.2004.01.002
3. Yue CA, Zhou A, Page TG, et al. The past, present, and future of internal communication in public relations: A computational review of the emerging literature. Journal of Public Relations Research. 2025; 37: 4–30. doi: 10.1080/1062726X.2024.2329543
4. Dávalos-Mogollón M, Ramírez-Hernández MAS, Turriate-Guzman AM, et al. Internal communication in the Scopus Database: Systematic literature review 2019–2023. In: Nagar AK, Jat DS, Mishra DK, Joshi A (editors). Intelligent Sustainable Systems. Springer Nature Singapore; 2024. Volume 828. pp. 209–217.
5. Verčič AT. Public relations, a home for internal communication. Journal of Public Relations Research. 2025; 37: 1–3. doi: 10.1080/1062726X.2024.2434348
6. Perales-Aguirre AM, Cotito Mujica A, Turriate-Guzman AM, et al. External communication: A systematic literature review 2019–2023. In: Nagar AK, Jat DS, Mishra DK, Joshi A (editors). Intelligent Sustainable Systems. Springer Nature Singapore; 2024. Volume 828. pp. 261–269.

7. Clegg SR, Pitsis TS, Mount M. Managing & organizations: An introduction to theory and practice, 7th ed. SAGE Publications Ltd; 2024.
8. Dasgupta SA, Suar D, Singh S. Impact of managerial communication styles on employees' attitudes and behaviours. Employee Relations. 2013; 35(2): 173–199. doi: 10.1108/01425451311287862
9. Doyen B, Vlerick P, Maertens H, et al. Non-technical attributes and surgical experience: A cross-sectional study comparing communication styles and attitudes in surgical staff, trainees and applicants. International Journal of Surgery. 2019; 63: 83–89. doi: 10.1016/j.ijsu.2019.02.002
10. Saphiere DH, Mikk BK, Devries BI. Communication highwire: leveraging the power of diverse communication styles. John Murray Business Academic; 2005.
11. Bovée CL, Thill JV. Business communication today, 15th ed. Pearson; 2021.
12. Kreitler S. Communication style: The many shades of gray. Psychological Applications and Trends. 2021; 4: 17–21. doi: 10.36315/2021inpact004
13. Hatfield JD, Huseman RC. Perceptual congruence about communication as related to satisfaction: moderating effects of individual characteristics. Academy of Management Journal. 1982; 25(2): 349–358. doi: 10.2307/255996
14. Penley LE, Hawkins B. Studying interpersonal communication in organizations: A leadership application. Academy of Management Journal. 1985; 28(2): 309–326. doi: 10.2307/256203
15. Chen J, Silverthorne C, Hung J. Organization communication, job stress, organizational commitment, and job performance of accounting professionals in Taiwan and America. Leadership & Organization Development Journal. 2006; 27(4): 242–249. doi: 10.1108/01437730610666000
16. Rogers DP. The development of a measure of perceived communication openness. Journal of Business Communication. 1987; 24(4): 53–61. doi: 10.1177/002194368702400404
17. Vaught BC. An index of interpersonal communicative competence and its relationship to selected supervisory demographics, self-actualization and leader behavior in organizations [PhD dissertation]. North Texas State University; 1979.
18. Widyastuti DA, Purwanta E, Astuti B, et al. Assessing validity and reliability of Muslim student' interpersonal communication scale: A Rasch model study. Islamic Guidance and Counseling Journal. 2025; 8(1). doi: 10.25217/0020258551200
19. Beauchamp SR. Introduction to human communication, 3rd ed. Sage Publication; 2023.
20. Wijn R, Van Den Bos K. On the social-communicative function of justice: The influence of communication goals and personal involvement on the use of justice assertions. Personality and Social Psychology Bulletin. 2010; 36(2): 161–172. doi: 10.1177/0146167209347382
21. George JM, Jones GR. Understanding and managing organizational behavior, 5th ed. Prentice Hall; 2008.
22. Jones P. Communicating strategy. Gower; 2017.
23. Kim S, Rader S. What they can do versus how much they care: Assessing corporate communication strategies on Fortune 500 web sites. Journal of Communication Management. 2010; 14(1): 59–80. doi: 10.1108/13632541011017816
24. Borca C, Baesu V. A possible managerial approach for internal organizational communication characterization. Procedia—Social and Behavioral Sciences. 2014; 124: 496–503. doi: 10.1016/j.sbspro.2014.02.512
25. Dominick JR. The dynamics of mass communication: Media in the digital age, 8th ed. McGraw-Hill; 2005.
26. Selnes F, Lanseng EJ. Marketing management: A customer-centric approach. SAGE Publications Ltd; 2024.
27. Aitken I. Encyclopedia of the documentary film. Routledge; 2013.
28. Austin EW, Pinkleton BE. Strategic Public Relations Management: Planning and Managing Effective Communication Campaigns, 2nd ed. Taylor and Francis; 2015.
29. Tyagi CL, Kumar A. Advertising management. Atlantic; 2004.
30. van Ruler B, Vercic D. Overview of public relations and communication management in Europe. In: Public Relations and Communication Management in Europe: A Nation-by-Nation Introduction to Public Relations Theory and Practice. Mouton de Gruyter; 2004.
31. van Ruler B. The communication grid of tactics by Betteke van Ruler. Available online: https://bettekevanruler.nl/the-communication-grid-2/ (accessed on 20 February 2025).
32. Balaji MS, Kumar Roy S, Kok Wei K. Does relationship communication matter in B2C service relationships. Journal of Service Marketing. 2016; 30(2): 186–200. doi: 10.1108/JSM-08-2014-0290

33. Besley JC, Dudo AD, Yuan S, et al. Qualitative interviews with science communication trainers about communication objectives and goals. Science Communication. 2016; 38(3): 356–381. doi: 10.1177/1075547016645640
34. Gürel E, Kavak B. A conceptual model for public relations in museums. European Journal of Marketing 2010; 44(1/2): 42–65. doi: 10.1108/03090561011008600
35. Ihlen Ø, Van Ruler B. How public relations works: Theoretical roots and public relations perspectives. Public Relations Review. 2007; 33(3): 243–248. doi: 10.1016/j.pubrev.2007.05.001
36. Le Roux T. The description of South African corporate communication practitioners that contribute to organisational performance. Public Relations Review. 2014; 40(2): 193–215. doi: 10.1016/j.pubrev.2013.11.008
37. Luoma-aho V, Vos M. Towards a more dynamic stakeholder model: Acknowledging multiple issue arenas. Corporate Communications: An International Journal. 2010; 15(3): 315–331. doi: 10.1108/13563281011068159
38. Mahdieh O. Interaction between communication and organizational conflict and its relationship with performance. International Journal of Business Administration Studies. 2015; 1(2): 54–60.
39. Treurniet W, Messemaker M, Wolbers J, et al. Shaping the societal impact of emergencies: Striking a balance between control and cooperation. International Journal of Emergency Services. 2015; 4(1): 129–151. doi: 10.1108/IJES-06-2014-0007
40. Van Woerkum C, Aarts N. Staying connected: The communication between organizations and their environment. Corporate Communications: An International Journal. 2008; 13(2): 197–211. doi: 10.1108/13563280810869613
41. Schermelleh-Engel K, Moosbrugger H, Müller H. Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. Methods of Psychological Research. 2003; 8(2): 23–74.
42. Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal. 1999; 6(1): 1–55. doi: 10.1080/10705519909540118
43. Gaskin CJ, Happell B. On exploratory factor analysis: A review of recent evidence, an assessment of current practice, and recommendations for future use. International Journal of Nursing Studies. 2014; 51(3): 511–521. doi: 10.1016/j.ijnurstu.2013.10.005
44. Hair JF, Black WC, Babin BJ, Anderson RE. Exploratory factor analysis. In: Multivariate data analysis, 7th ed. Pearson Education; 2014. pp. 89–149.
45. Patil VH, Singh SN, Mishra S, Donavan DT. Parallel analysis engine to aid in determining number of factors to retain using R. Available online: https://analytics.gonzaga.edu/parallelengine/ (accessed on 20 February 2025).
46. Yang A, Taylor M. Looking over, looking out, and moving forward: Positioning public relations in theorizing organizational network ecologies: Positioning public relations in theorizing organizational network ecologies. Communication Theory. 2015; 25(1): 91–115. doi: 10.1111/comt.12049
47. Daft RL. Organization theory and design, 10th ed. South-Western Cengage Learning; 2010.
48. Robbins SP, Coulter MK. Management, 14th ed. Pearson Education; 2018.
49. Robbins SP, Judge T. Essentials of organizational behavior, 14th edition. Pearson Education; 2018.
50. Harris TE. Applied organizational communication: Principles and pragmatics for future practice, 2nd ed. Lawrence Erlbaum; 2002.
51. Harris TE, Nelson MD. Applied organizational communication: Theory and practice in a global environment, 3rd ed. Erlbaum; 2008.
52. Adams CA, Frost GR. The internet and change in corporate stakeholder engagement and communication strategies on social and environmental performance. Journal of Accounting & Organizational Change. 2006; 2(3): 281–303. doi: 10.1108/18325910610690090
53. Badea M. Social media and organizational communication. Procedia—Social and Behavioral Sciences. 2014; 149: 70–75. doi: 10.1016/j.sbspro.2014.08.192
54. Green M. How an organization's CSR communication style makes or breaks consumer trust: Strategic reputation building on Twitter. Annals in Social Responsibility. 2018; 4(1): 7–9. doi: 10.1108/ASR-03-2018-0003
55. Kollat J, Farache F. Achieving consumer trust on Twitter via CSR communication. Journal of Consumer Marketing. 2017; 34(6): 505–514. doi: 10.1108/JCM-03-2017-2127
56. Langer E. What's trending? Social media and its effects on organizational communication. Journal of Undergraduate Research. 2014; XVII: 1–10.

57. Siljanovska L. The influence of social media on organizational communication: case study in Republic of Macedonia. European Journal of Interdisciplinary Studies. 2015; 3(1): 83–92. doi: 10.26417/ejis.v3i1.p83-92
58. Wang G. Culture, paradigm, and communication theory: A matter of boundary or commensurability. Communication Theory. 2014; 24(4): 373–393. doi: 10.1111/comt.12045
59. Rhee Y, Moon B. Organizational culture and strategic communication practice: testing the competing values model (CVM) and employee communication strategies (ECS) model in Korea. International Journal of Strategic Communication. 2009; 3(1): 52–67. doi: 10.1080/15531180802608386
60. Smith PB. Communication styles as dimensions of national culture. Journal of Cross-Cultural Psychology. 2011; 42(2): 216–233. doi: 10.1177/0022022110396866
61. Amir S. The influence of national culture on communication practices: a case study on Malaysian organisations [PhD dissertation]. Queensland University of Technology; 2009.
62. Giri VN. Culture and communication style. Review of Communication. 2006; 6(1–2): 124–130. doi: 10.1080/15358590600763391
63. Brown AD, Starkey K. The effect of organizational culture on communication and information. Journal of Management Studies. 1994; 31(6): 807–28. doi: 10.1111/j.14676486.1994.tb00640.x
64. Scholderer J, Veflen N. Social norms and risk communication. Trends in Food Science & Technology. 2019; 84: 62–63. doi: 10.1016/j.tifs.2018.08.002
65. Almaatouq A, Alhasoun F, Campari R, Alfaris A. The influence of social norms on synchronous versus asynchronous communication technologies. In: Proceedings of the 1st ACM international workshop on Personal data meets distributed multimedia; 22 October 2013; Barcelona, Spain. pp. 39–42.
66. Berezan O, Yoo M, Christodoulidou N. The impact of communication channels on communication style and information quality for hotel loyalty programs. Journal of Hospitality and Tourism Technology. 2016; 7(1): 100–116. doi: 10.1108/JHTT-08-2015-0031
67. Visser B. Organizational communication structure and performance. Journal of Economic Behavior & Organization. 2000; 42(2): 231–252. doi: 10.1016/S0167-2681(00)00087-1
68. Juodvalkis JL, Grefe BA, Hogue M, et al. The effects of job stereotype, applicant gender, and communication style on ratings in screening interviews. The International Journal of Organizational Analysis. 2003; 11(1): 67–84. doi: 10.1108/eb028963
69. Ng CW. Do women and men communicate differently at work? An empirical study in Hong Kong. Women in Management Review. 1998; 13(1): 3–10. doi: 10.1108/09649429810369587
70. Vaught BC, Pettit JD, Taylor RE. Interpersonal communication behaviour of male and female administrators. International Journal of Educational Management. 1989; 3(2). doi: 10.1108/EUM0000000001947

# Appendix

**Table A1.** English version of final scale items.

| | **Information strategy** |
|---|---|
| 1 | Communication in this organization is based on effective management of information transmission processes. |
| 2 | Communication in this organization occurs by means of precise and timely distribution of information. |
| 3 | The aim of communication in this organization is effective and efficient transmission of information, and to inform people about events. |
| 4 | Communication in this organization is characterized by well-rounded policy, informative messages that are completely clear, and addressing all employees. |
| 5 | This organization often uses newsletters, office automation, bulletin boards, and instructions for communicating. |
| 6 | Communication success is based on transmitting the right information to the right people at the right time. |
| | **Persuasion strategy** |
| 7 | Communication in this organization is based on persuading people to do a job or accept an idea. |
| 8 | Communication in this organization is aimed at creating attitudes, image-building, and influencing employees' emotions. |
| 9 | The aim of communication in this organization is to change individuals' behaviors, attitudes, ideas, or opinions. |
| 10 | Communication in this organization is characterized by well-rounded policy, mostly clear and persuasive messages, and addressing some of the employees. |
| 11 | This organization often uses letters, personal conversations, and informal distribution of information for communicating. |
| 12 | Communication success is based on finding the right tone of voice under any and all circumstances. |
| | **Consensus-building strategy** |
| 13 | Communication in this organization is based on building and maintaining relationships between individuals and among groups. |
| 14 | Communication in this organization is intended to achieve mutual understanding, mutual respect, and cooperation. |
| 15 | The aim of communication in this organization is building relationships among employees and stakeholders, and to encourage participative decision making. |
| 16 | Communication in this organization is characterized by clear negotiations, having specific locations where negotiations occur, and listening to the voice of employees. |
| 17 | This organization often uses bargaining, negotiations, and suggestion boxes for communicating. |
| 18 | Communication success is based on identifying common interests and creating mutually beneficial relationships. |
| | **Dialogue strategy** |
| 19 | Communication in this organization is based on free exchange of participants' ideas and meaning. |
| 20 | Communication in this organization refers to dialogue, interaction, and facilitation. |
| 21 | The aims of communication in this organization are to identify specific problems, assess alternative solutions, and select the most appropriate solutions. |
| 22 | Communication in this organization is characterized by informative messages for both parties, listening the voice of employees, and interactive policy making. |
| 23 | This organization often uses small-scale brainstorming, e-mail, consultation, and specialized friendly meetings for communicating. |
| 24 | Communication success is based on facilitating the communicative interactions of people, both inside the organization (employees) and outside (customers and other stakeholders). |