Joep P. Cornelissen[1] and Phil Harris[2]

Interdependencies between Marketing and Public Relations Disciplines as Correlates of Communication Organisation

Leeds University Business School Manchester[1]

Metropolitan University[2]

The academic literature on corporate and marketing communication organisation is characterized by a comparatively large amount of conceptual work, with little detailed empirical analysis to support the theoretical perspectives offered. Following an established line of inquiry in organisational research; an information-processing perspective on organisational structure and design, the article develops and tests the hypothesis that interdependencies between marketing and public relations disciplines are correlated with choices for organisational arrangements. The findings of an exploratory analysis of organisations in the UK suggest, however, that in the majority of cases there is a lack of fit between information processing requirements brought about by the interdependencies between the marketing and public relations disciplines and the information processing capacity accompanying the actual design choices and organisational arrangements made. The practical implications of these findings for practitioners are discussed, and recommendations for further research are made.

Introduction

Recent years have seen an increased interest in the subject of the organisation and management of an organisation's corporate and marketing communication activities through work, primarily of a conceptual and

---

[1] Dr Joep Cornelissen, Leeds University Business School, Maurice Keyworth Building, University of Leeds LS2 9JT, United Kingdom

[2] Dr Phil Harris, Reader in Political Marketing and Public Affairs, the Centre for Corporate and Public Affairs, the Manchester Metropolitan University, Aytoun Street, Manchester M1 3GH, Phone: 0044-161-2473727, Email: p.harris@mmu.ac.uk

prescriptive nature, on corporate branding, corporate marketing and corporate identity management (Balmer, 1998), and on integrated communications, integrated marketing, and integrated marketing communications (Duncan and Moriarty, 1997). Perhaps also reflecting practitioner calls for new management approaches to corporate and marketing communications in the face of a drastically changed marketing and communications landscape (e.g. fragmentation of audiences, media proliferation, the decline of mass media advertising) (Gronstedt, 1996), the problem of the integration of the goal-directed efforts and activities of practitioners involved in an organisation's public relations and marketing programs has become more significant and salient than before (Van Riel, 1995; Cornelissen and Lock, 2000). Although organisations can be seen to approach this problem of co-ordination in a variety of ways, the structural design and location of communications within organisations in particular has found much discussion within prior research. Such organisational research perennially seeks to understand variations in the internal structuring of corporate and marketing communication disciplines within organisations. To date, this interest has taken numerous theoretical forms; contingency propositions about the technical and environmental conditions associated with structures (e.g. Kotler and Mindak, 1978; Schneider, 1985), more sociological observations about the power and role of senior managers in determining structural dimensions of communication organisation (e.g. Grunig, 1992; Lauzen, 1991, 1993), and more recent theoretical prescriptions which see structures as moving alongside a continuum of configuration-types (e.g. Duncan and Caywood, 1996; Kitchen and Schultz, 1999). The present article develops an alternative theoretical approach to the structuring of marketing communications and public relations, a so-called information-processing perspective on organisational structure and design (Daft and Lengel, 1984, 1986), and empirically tests the hypothesis that inter-functional dependencies between marketing (e.g. advertising, promotions, direct marketing, branding) and public relations disciplines (e.g. issues management, investor relations, public affairs, internal communications, media relations) and associated activities are correlated with particular structural design choices and organisational arrangements. Before outlining and discussing the conceptualisation, research design and study findings in more detail, the article briefly summarises prior conceptual and empirical research on communication organisation.

Corporate and Marketing Communication Organisation

Overview of Theoretical Perspectives

The organisational practice and context of marketing and public relations has been a recurrent concern for theorists and researchers (Kotler and

Mindak, 1978, Kitchen, 1993), who have been discussing and researching subjects of power and control, the division of work, the exchange of information between professionals (Gronstedt, 1996), as well as the organisation of the functional areas and activities involved. In regard to communication organisation, Cornelissen and Lock (2000) have recently documented the variety in theoretical approaches to this subject that have been taken in prior conceptual work, premised on either an environmental or contingency theory (e.g. Kotler and Mindak, 1978), or a strategic choice or power-control perspective (e.g. Grunig, 1992). The initial researches based upon contingency precepts looked at the structural variation of organisations by Hage-Hull typology (1981)[3] and its effect on the structure and practice of public relations. The researchers of this program of research concluded that this typology provided only a minimal explanation for the structuring of the public relations department and for the way in which public relations is practised (Grunig and Grunig, 1989; L. Grunig, 1992). Weak and insignificant links between environment and organisational structure (when tested through the Hage-Hull typology) subsequently led these researchers to suggest the power-control perspective as a more viable theoretical framework to research and explain structural variations of public relations (Grunig, 1992). The rationale here, authors as Dozier and Grunig (1992; p.407) have argued, is that the lack of contingent relations between environment and structure indicates the considerable latitude of choice amongst the dominant coalition of senior managers, permitting them to devise structures and organisational responses that in the light of environmental needs 'satisfice' rather than 'optimise' (see Child, 1997). It needs to be noted, however, that this argument for a power-control perspective has, when considered in the context of the structuring of communication disciplines, not been supported with detailed empirical analysis. In addition, it can even be argued that the claim for the demise of an environmental or contingency theory as a valid explanatory framework of communication organisation is premature, given the reliance on a single typology (Hage and Hull, 1981) with its evident limitations in operationalisation (Lauzen and Dozier, 1995; p.210).

  Although these two approaches, the contingency and power-control perspectives, might seem disparate, from a methodological perspective, they

---

[3] Hage and Hull (1981), firmly based in a contingency tradition, suggested a typology of organisational types based on the scale (repetitiveness of events and operations) and task complexity (technical sophistication or knowledge base inherent in that operation) that characterizes an organisation. The typology includes 'traditional' or 'craft' (small scale and a low knowledge base), 'mechanical' (large-scale, low complexity), 'organic' (small scale, high complexity), and 'mixed mechanical/organic' (large-scale, high complexity) organisations.

can be considered together as one dominant stream of research in their shared focus on the conditions that influence structural arrangements of corporate and marketing communications. In this stream of research, dimensions of communication organisation are posited as the dependent variables with researchers examining the technological, market, cultural and historical factors that influence particular organisational arrangements (see Cornelissen and Lock, 2000). The other stream of research, although hardly supported by systematic empirical research, focuses on the communication effects of particular ways of structuring communications, thus positing dimensions of communication organisation as independent or mediating variables that influence certain communication strategies and behaviours or outcomes for organisations (e.g. Duncan and Caywood, 1996; Grunig and Grunig, 1998). To illustrate, research in this stream, still primarily based upon case studies or anecdotal evidence (Duncan and Everett, 1993), has suggested particular organisational arrangements to enable effective, 'zero-based' corporate and marketing communication strategies (Gronstedt, 1996; Schultz and Schultz, 1998). In these works, the notion of organisational 'integration' (as cross functional co-ordination across functional areas or as a full consolidation and merger of communication disciplines and activities into a single administrative unit) in particular has been championed as a way of replacing static, overspecialised and myopic vertical structures (e.g. Gronstedt, 1996; Schultz and Schultz, 1998). Rooted in a broader trend within the management world "in the direction of decentralised, flexible networks" (Reed, 1992; p.227), such horizontal forms of organisation have been posited as cost-effective, continuously improving ways of enhancing profitability by responding more rapidly to shifting market demands, by enabling greater co-operation between marketing and public relations practitioners, and by capitalising on communication and business opportunities (e.g. Gronstedt, 1996; Schultz and Kitchen, 1999; Duncan and Moriarty, 1998).

Overview of Prior Empirical Research

The two streams that have been sketched out in the previous section have started to shed light on numerous aspects of public relations and marketing organisation, as well as their antecedents and consequences. Several commentators have started to critique this body of work for the limited research results that it has brought (Spicer, 1997; Cornelissen and Lock, 2000), but the information processing perspective of organisation design in this article highlights a particular area of concern. As revealed in the previous section, most research has focused on how technological, market, cultural and historical factors explain variations in communication organisation. So far, this body of research has produced little if any structural explanations. The research study by L. Grunig (1989, 1992) based upon contingency

precepts and using the mentioned Hage-Hull (1981) typology of organisational types found only a minimal explanation for vertical and horizontal structures of the public relations department. These findings led L. Grunig (1989, 1992) to question whether structure could be recognised or if the way public relations is practised is so idiosyncratic as to preclude structural analysis. Equally, the only empirical research to date from a power-control perspective (Lauzen and Dozier, 1992; p.216) has pointed to functional relationships between environmental factors (here: the range and changeability of publics) and the public relations manager role enactment, but has produced only weak support for a structural and determined influence of power-control concepts.

   Apart from the limitations in operationalisation referred to earlier, the article suggests that these prior researches have failed to give due attention to a set of factors that might be explanatory of the ways in which communications are organised, namely the inter-functional dependencies between public relations (e.g. issues management, investor relations, public affairs, internal communications, media relations) and marketing communication disciplines (e.g. advertising, promotions, direct marketing, branding) and associated activities, and have therefore arrived at little if any structural explanation. The article develops and empirically tests the hypothesis that inter-functional dependencies between marketing and public relations disciplines and associated activities are correlated with particular structural design choices and organisational arrangements. Apart from a potential explanatory power, the subject of interdependencies between the marketing and public relations functions has also been particularly pertinent in recent marketing and public relations research where writers such as Kitchen and Moss (1995) and Duncan and Caywood (1996) have argued for more 'integrated', co-ordinated and symbiotic relationships between the two functions. Nonetheless, despite a few general works on marketing organisation (e.g. Piercy, 1985; Workman, Homburg, and Gruner, 1998), very little research has been done directly on the inter-functional dependency of marketing with other functions in the organisation (Gummesson, 1991; p.65), public relations in particular (Kitchen, 1993), and its impact on organisational structure and design.

Conceptualisation of the Research Study

The present study attempts to remedy the lack of research on the inter-functional dependencies between public relations and marketing disciplines such as advertising, media relations, public affairs, branding and direct marketing, and their effect upon organisational structure and design. The link between inter-functional dependencies and organisation design has been

a widely researched subject within management research (e.g. Lawrence and Lorsch, 1967; Pfeffer, 1978; Daft and Lengel, 1986) and has, only relatively recently, found its way into marketing (Ruekert and Walker, 1987; Crittenden, Gardiner, and Stam, 1993) and public relations research (Lauzen, 1991, 1993; Van Leuven, 1991).

Following an information processing perspective of organisation structure and design, the study examines whether organisational design is correlated to inter-functional dependencies between communication disciplines and functions (as consolidated grouping of disciplines and activities; e.g. public relations) and, more particular, whether the degree and kind of interdependencies that exist between disciplines or functions influence the use of specific co-ordination mechanisms within organisations. To answer these research questions, the article builds upon and illustrates a comparatively well-established stream of research in organisation theory and organisational communication research (e.g. Daft and Lengel, 1986) linking the inter-functional characteristics of domain similarity and interdependence (task or resource dependence) between communication disciplines or functions to the departmental arrangement of communication disciplines and to formal co-ordination mechanisms. That is, following the works of Lawrence and Lorsch (1967), Daft and Lengel (1986), and Ruekert and Walker (1987) among others, the degree of differentiation of behaviour and orientations between the various disciplines, functional areas or units within companies (the extent to which each functional area has developed its own functional specialisation, skills, time horizon, goals, frame of reference and jargon) is inversely related to the degree of integration. And hence, a fair amount of inter-functional dependencies between communication disciplines, it can be suggested, leads to integration of these disciplines in the form of consolidation of sets of disciplines into administrative units (to focus activity and to minimise the costs associated with cross-unit interaction) or formalised patterns of cross-functional behaviour. For example, the interdependencies between the marketing and public relations functions in activities under the banner of 'marketing public relations' (the use of publicity and press oriented communication techniques for marketing purposes) may lead to organisational attempts at "bringing public relations, marketing and other related functions into closer alignment with one another" (Van Leuven, 1991; p.283).

Construct Specification and Proposition Development

The study was designed to provide an overview of the organisation of communication work in large companies; and to evaluate the descriptive validity of the information-processing perspective of communication organisation. Amidst the devices of administrative design that an

organisation might employ, such as the allocation of responsibilities for decision-making, the study focuses as mentioned on the information processing requirements brought about by the inter-functional dependencies between communication disciplines or departments, and the formal organisational arrangements put in place by companies to meet them. The logic referred to here is that the inter-functional dependencies between disciplines or functional areas such as marketing and public relations in a company lead to information processing requirements, and in turn are, or should be, related to the amount and type of formal co-ordination between them. From this perspective, organisational structuring and design involves a "process of grouping activities, roles, or positions in the organisation to co-ordinate effectively the interdependencies that exist…the implicit goal of the structuring process is achieving a more rationalised and co-ordinated system of activity" (Pfeffer, 1978; p.25, italics added).

The inter-functional dependencies between communication disciplines and functional areas are evident in the domain similarity and resource dependence between them (Lawrence and Lorsch, 1967; Lorsch, 1970; Daft and Lengel, 1986; Ruekert and Walker, 1987). Domain similarity is defined as the degree to which two different individuals or departments share similar goals, skills or tasks. Resource dependence is the dependence of a member of one functional area on obtaining resources from another area to accomplish his or her objectives (see Table 1). The study focuses on the amount and type of formalisation and co-ordination established between functional areas to streamline interaction and information processing, that evolve as a result of the inter-functional dependencies between them. When looking at the amount of formalisation and co-ordination, it can be postulated that the degree of structural flexibility, interaction and co-operation hinges on domain similarity and resource dependence between functional areas or departments (Ruekert and Walker, 1987). The following four propositions can therefore be distinguished:

P1: The greater the resource dependence of personnel of a communication department on personnel of another unit, or the greater the dependence of personnel of this unit on personnel of the department, the greater the level of resource, work, and assistance-flows.

P2: The amount of communication between personnel of a communication department and personnel in another unit is related positively to the degree of resource dependence between the two parties.

P3: The amount of transaction flows between personnel of a communication department and personnel in another unit is related

positively to the degree of domain similarity between them.

P4: The amount of communication between personnel of a communication department and personnel in another unit is related positively to the degree of domain similarity between the two parties.

The study also argues that, in case of such high levels of interaction, companies use rules and standard operating procedures to increase the efficiency of repetitive interactions. The degree to which rules or standard operating procedures are used to govern the interaction between two individuals in different departments is referred to as formalisation (see Table 1). As Ruekert and Walker (1987) argue, such rules are inflexible and carry administrative costs, and are therefore not used for every interrelationship between functional areas. Formalisation thus tends to be greatest where such costs can be spread over a large number of transactions between departments. Hence, formalisation of the relationship between departments is thus related to the amount of transactions, as well as the amount of communication between functional areas or departments.

P5: The extent to which relationships between personnel in a communication department and those in another functional area are formalised is related positively to the amount of resource, work, and assistance flows between these parties.

P6: The extent to which relationships between personnel in a communication department and those in another functional area are formalised is related positively to the amount of communication between these parties.

Contemporary writings in marketing and public relations research (e.g. Van Leuven, 1991; Grunig and Grunig, 1998) have also suggested that communication disciplines with high levels of inter-functional dependencies between them should be taken together and consolidated into administrative units (see Table 1). A particular suggestion made in this regard is for companies to not only structurally integrate the different marketing communication disciplines (advertising, direct marketing, publicity, sales promotions), but also, beyond that, to align and integrate the whole marketing communications function with public relations into one 'integrated' communications function (e.g. Kotler and Mindak, 1978; Kitchen, 1993; Gronstedt, 1996). Kotler and Mindak (1978; p.20), for example, already argued that "new patterns of operation and interrelation can be expected to appear in these functions [marketing and public relations]" with the two

functions "rapidly converging" in their concepts and methodologies.

Following the above argument, the study also explored whether a relatively higher level of interaction, either in the form of transactions or communication, between areas or disciplines of communication is related to a grouping of these disciplines into one and the same department to foster and manage interdependencies (e.g. the technical sophistication or specific knowledge base that areas share, or the common mission of communication disciplines in addressing a particular sub-environment or public, see Grunig and Grunig, 1991) or to minimise the costs associated with cross-unit interaction.

P7: The grouping of communication disciplines into departments is associated with the amount of resource, work, and assistance flows between them.

P8: The grouping of communication disciplines into departments is associated with the amount of communication between them.

As mentioned, the study not only looked at the amount of formalisation and co-ordination between functional areas or departments, but also considered whether the use of a particular co-ordination mechanism is related to conditions of resource dependence and domain similarity between functional areas or departments. A series of organisation and management studies (Daft and Lengel, 1984, 1986) has suggested that the internal media of communication and co-ordination have to be matched to the information processing requirements caused by the inter-functional dependencies of areas or departments in the form of inter-functional differentiation and resource dependencies. That is, a high degree of resource dependence between functional areas causes uncertainty as the action of an unit requires another to adapt, in turn requiring the distribution and sharing of a large amount of information through media of a lower 'richness' such as plans and reports. A high degree of differentiation, which comes down to a low degree of domain similarity, is seen as causing ambiguity to be resolved by arriving at a common definition of the situation, that is by having 'rich media' (e.g. face-to-face, telephone) offering the possibility to discuss multiple frames of reference and to process complex, subjective messages (see Figure 1 below). 'Rich' media are those means of communication, as Figure 1 outlines, that lend themselves for ambiguity reduction and for processing complex, subjective messages, as it brings practitioners together to discuss their different perspectives and frames of reference. Media of a 'lower richness' (see Figure 1) are more appropriate for uncertainty reduction and the processing of large amounts of data by practitioners as a considerable

amount of information can be recorded on them. Hence, Daft and Lengel (1986) suggest that the degree of domain similarity (and hence the need for processing information to reduce ambiguity) and resource or task dependencies (and hence the need for processing information to reduce uncertainty) determine the amount and richness of the information needed and the communication structure to adopt for an adequate adjustment between functional areas or departments.

P9: The use of 'rich' media is negatively related to the degree of domain similarity between departments.

P10: The use of media of a 'lower' richness is positively related to the degree of resource dependence between departments

	Low	
Low	1. Low domain similarity, Low Interdependence Structure: a. Rich media to resolve differences b. Small amount of information Examples: occasional face-to-face or telephone meetings, personal memos, planning, self-contained units	2. Low Domain Similarity, High Interdependence Structure: a. Rich media to solve differences b. Large amount of information to handle interdependence Examples: full time integrators, task forces, matrix structure, special studies and projects, confrontation
Domain similarity	3. High Domain Similarity, Low Interdependence Structure: a. Media of lower richness b. Small amount of information Examples: rules, standard operating procedures, reports, budgets	4. High Domain Similarity, High Interdependence Structure: a. Media of lower richness b. Large amount of information to handle interdependence Examples: plans, reports, update data bases, formal information systems, pert charts, budgets, schedules
High	Low Interdependence between departments High	

Source: Adapted from Daft and Lengel, 1986: 565

Figure 1. The Relationship between Inter-functional Dependencies (Domain Similarity and Resource Dependence) and Types of Co-ordination Media

Research Design

The research study consisted of a survey-questionnaire. The sample was compiled from the Hollis Europe and Dun and Bradstreet databases. Large companies (number of employees >500) have been sampled in the manufacturing, financial, retail, regulated utilities, chemicals, and technology

and engineering sectors within the United Kingdom (UK). One of the key considerations here was that large companies are likely to have fully developed external communication functions (see Kotler and Mindak, 1978; Grunig, 1992); while in small to medium-sized companies external communication activity might not have evolved into various full disciplines and/or departments, and might even fall together as the responsibility of one or a few persons (Kotler and Mindak, 1978; p.13-14).

Table 1. Constructs, Definitions and Relevant Citations

Construct	Definition of Construct	Selected References
Resource dependence	Measure of the need of one functional area or department for resources (assistance, equipment, services) of another area to complete its tasks	Ruekert and Walker (1987), Lauzen (1991, 1993)
Domain similarity	Measure of degree to which two different individuals or departments share the same goals, skills or tasks	Ruekert and Walker (1987), Lauzen (1991, 1993)
Transaction flows	Measure of amount and type of transactions between the functional areas or departments	Ruekert and Walker (1987)
Communication (amount)	Measure of amount of communication between functional areas or departments	Ruekert and Walker (1987), Maltz and Kohli (1996)
Communication (type)	Measure of the type of communication medium used (based upon the richness of the medium)	Daft and Lengel (1984, 1986)
Formalisation	Measure of the degree of formalisation of the interaction between functional areas or departments	Ruekert and Walker (1987)
Departmental arrangement	The company's plan for grouping areas or disciplines into administrative units	Piercy (1985), Van Leuven (1991)

The purpose of the survey was to test the propositions and also to consider whether there is empirical support for the information processing perspective of communication organisation. Hence, to ensure variation on key constructs a sample of 289 large companies in various sectors had been compiled of the selected databases that met the criterion of size (number of employees >500). Each manager of the sampled companies was mailed a

copy of the four-page questionnaire and a cover letter explaining the study goals. Of the 289 in the original sample, 67 managers responded to be unable to participate (due to time constraints or company guidelines), reducing the eligible sample to 222. Of the 222, 85 responded to the four-page questionnaire, for an overall response rate of 38.3%. Of these 85 respondents, 55 are senior managers or directors of public relations or corporate affairs, while the remaining 30 have a different job title and responsibility (e.g. marketing, investor relations) (Table 2). The authors argue here, however, that although variation might exist between job titles and associated job responsibilities, objective attributes of a company – here the organisational relationship between communication departments - can be answered adequately by a member of that company closely involved with any or all of these areas of communications (cf. Blau and Schoenherr, 1971).

Table 2. Departments Respondents (N=85)

	Frequency	Percent
Corporate affairs	55	64.7
Press office	5	5.9
HRM	2	2.4
Marketing	12	14.1
Marketing communications	1	1.2
Public affairs	3	3.5
Managing director's office	1	1.2
Administration	1	1.2
Sales	1	1.2
Finance	1	1.2
Corporate planning	1	1.2
Customer services	1	1.2
Investor relations unit	1	1.2
Total	85	100.0

The study developed sum scales for each of the multi-item constructs mentioned above to test the propositions (Appendix 1). These propositions have been tested through the use of correlational analysis, as, firstly, many of the propositions examined represent statements of association between two constructs. Although it is possible to suggest causal relationships for at least a number of these propositions, there is reason to believe that causation may be circular or mutual among some of them. For example, Lorsch (1970; p.5) argued that organisational differentiation (the reverse of domain similarity) involves "the differences in cognitive and emotional orientations amongst

managers in different functional departments", but also, and thereby emphasizing the correlation, "the difference in formal structure amongst these departments". Similarly, formalisation can be seen as the result of relatively high levels of interaction between departments, it can, however, also be seen as instigating such interaction. And, secondly, given that many of these propositions had not been tested thoroughly in previous research, simple correlational analysis is deemed most appropriate for this kind of exploratory analytical study. Correlational analysis is considered useful here in specifying the form and degree of imperfect or at least relatively unexplored relationships among variables and constructs (Nunnally and Bernstein, 1994; p.120).

For each of the scales used in the study, Cronbach α coefficients have been calculated as a test of the reliability of the measures. Cronbach's coefficient α is seen as a valid indicator of the internal consistency of instruments or scales that do not have right-wrong (binary) marking schemes, thus can be used for questionnaires using scales such as rating or Likert (Oppenheim, 1992). It takes into account both the number of questions or items and the average correlation among questions on a test (Black, 1999). Reliability analysis of the measures in study two reveals that the α coefficient for all scales are .6061 or higher. Hence, acceptable to high levels of internal consistency have been found (Nunnally and Bernstein, 1994). The measures here are thus reliable according to the traditional paradigm of measure development suggested by Churchill (1979). Table 3 is a summary of measurement scale characteristics for all scales.

Table 3. Summary of Scale Characteristics (N=85)

Construct	Number of items	Theoretical scale range	Actual scale range	Scale mean	Std. Deviation	Reliability (Cronbach-α)
Antecedents						
Domain similarity	4	4-20	4-20	9.8025	3.8224	.6913
Resource dependence- of own department	3	3-15	5-15	10.0494	2.4744	.6061
Resource dependence- of other department	3	3-15	5-15	11.3457	2.5257	.7597
Interaction						
Communication frequency	7	7-35	9-35	28.4321	5.5157	.8150
Transaction flows	3	3-15	4-15	10.6420	2.7491	.6347
Co-ordination						
Formalisation	4	4-20	4-20	12.0864	3.9345	.8244

To focus the inquiry, the study looked at the inter-functional dependencies, and the amount and types of interaction, formalisation and co-ordination

between what are typically the two main external communication departments within a company: marketing and public relations (or corporate affairs or corporate communications) (Kotler and Mindak, 1978; Broom, Lauzen, and Tucker, 1991). The aim was to focus sets of questions on the organisational relationship between the companies' two main external communication departments and to statistically analyse the scores on the measures of this relationship. In the survey, subjects were asked to indicate which department was formally responsible for particular communication functions (e.g., issues management, advertising, public affairs), and then presented with sets of questions on the organisational relationship between the two main departments (usually public relations or corporate affairs and marketing) responsible for a company's external communication programmes. The set of propositions, where communication disciplines figure as the unit of analysis (instead of departments) (P7-8) were examined through semi-structured, in-depth interviews with two corporate affairs and two marketing communications managers in four large companies within different sectors in the UK (nuclear industry, retail, airport, financial/banking). The deletion of these propositions from the main survey study, while explored through a series of semi-structured interviews with corporate affairs and marketing communications managers, makes that findings on these propositions should be regarded only as illustrative and as suggestive for further research.

The interview approach used elements of semi-structured interviewing techniques (Lindlof, 1995) through a topic guide (see Appendix 2). Semi-structured interviewing calls for a specific list of questions, given in a specific order, whereas, in comparison, unstructured interviewing would be completely open-ended, allowing the participants to lead the conversation where they want. A topic guide, in line with the analytical framework of the study, created a menu of questions to be covered, but left the exact order and articulation to the interviewer's (the lead author) discretion. The strengths of such a semi-structured approach are that it increases the comprehensiveness of the data and makes data collection systematic for each respondent (and each case), and logical gaps in data can be anticipated and closed where the interview remains fairly conversational and situational.

Results and Analysis

In this section, the focus is on the substantive interpretation of the results and the emergent findings. Table 3 showed that, generally, there is a reasonable amount of inter-functional dependencies (domain similarity and resource dependence) between the two main communication departments in the 85 companies surveyed. The following sub-sections report on the correlations

between the inter-functional dependencies of disciplines and departments on the one hand and the amount and type of co-ordination established in companies on the other.

Inter-functional Dependencies and the Amount of Interaction and Co-ordination

First, focusing on the relationship between inter-functional dependencies and the amount of interaction and degree of formalisation between departments, the results suggest positive relationships. The study found that the interaction, either in the form of transactions (resource, work and assistance flows) or communication, between the two main communication departments is positively related to inter-departmental characteristics in terms of the resource dependencies and domain similarity between these departments. Positive support was also found for the proposition that formalisation through the use of rules or standard operating procedures increases concomitant with an increase in interaction between managers in the two departments. Of the 6 propositions in Table 4, 4 are supported by the data based on interactions between the two main communication departments.

Table 4. Correlations between Sum Scale Measures: Interaction between the Two Main Communication Departments (N=85)

	Proposition	Correlation-coefficient
1.	Own department's resource dependence on another unit is positively related to:	
	- transaction flows (P1)	.216 (.053)
	- amount of communication (P2)	.516 (.00) *
2.	Other unit's resource dependence on department is positively related to:	
	- transaction flows (P1)	.477 (.00) *
	- amount of communication (P2)	.589 (.00) *
3.	Domain similarity of units is positively related to:	
	- transaction flows (P3)	.292 (.008) *
	- amount of communication (P4)	.181 (.109)
4.	Formalisation is positively related to:	
	- transaction flows (P5)	.338 (.002) *
	- amount of communication (P6)	.391 (.00) *

Note: Significant relationships are interpreted as those where correlation coefficients (r) lead to a p value, which is less than 0.05. The table shows the correlation coefficients (r) for each proposition with the corresponding significance levels (p) in parentheses. Statistically significant results are designated with an asterisk.

Inter-functional Dependencies and the Grouping of Communication Disciplines into Administrative Units

Table 5 provides an overview of the administrative grouping of communication disciplines into departments across the 85 companies surveyed.

Table 5. Departmental Arrangement of Communication Disciplines (N=85)

Department Discipline	Corporate affairs	Marketing	Press office	Marketing communications	Separate unit	Other departments	Total
Media relations	53	13	10	1	-	8	85
Promotions	8	53	3	4	-	13	81
Employee relations	40	6	2	-	3	34	85
Public affairs	56	11	-	-	8	5	80
Government relations	47	6	-	-	9	10	72
Corporate design	48	23	2	3	2	6	84
Community relations	44	8	2	-	6	20	80
Consumer relations	9	31	-	3	17	13	73
Direct marketing	4	56	-	-	1	13	74
Branding	27	45	-	-	-	8	80
Sponsorship	39	25	1	3	-	12	82
Event management	37	24	1	1	2	13	78
Issues management	56	7	2	-	-	13	74
Crisis management	52	6	3	1	-	21	83
Investor relations	37	5	2	-	8	23	75

Note: In some companies, communication disciplines are not formally recognized to be practised (and allocated as responsibility to a particular department), as shown in the total figures.

The strong 'functional' organisation into public relations (encompassing the disciplines of media relations, employee communications, public affairs, community relations, issues management, crisis management, investor relations) and marketing (responsible for promotions, consumer relations, direct marketing, branding) departments across the majority of the surveyed companies appears to suggest that, although there may be increasing overlap between the functional areas of marketing and public relations (and hence between the disciplines that fall within each domain) (Kitchen, 1993), both

functional areas are still sufficiently distinct (as indicated in the survey results of significant differences in the skills of practitioners, the work performed by the unit, the operating goals of the unit, and the sources from which the departments obtain their funding) to warrant a departmental separation.

The data presented in Table 5 further suggest that such consolidation of disciplines into corporate affairs and marketing departments may be related to the interdependencies between disciplines in terms of domain similarity (reflecting the difference between 'corporate' and 'marketing' objectives or missions) and task or resource dependencies, as well as to the resultant interaction between disciplines. In regard to the latter, the data might be seen to indicate that disciplines with relatively higher interdependencies are grouped together to minimise the costs associated with cross-unit interaction. With the purpose of gathering further data on the determinants of a company's communication organisation, sets of semi-structured interviews have been conducted with the purpose of exploring the propositions (P7-8) that the higher the level of transactions or communication between areas or disciplines, the more likely it is that these areas are grouped together into a single administrative unit or department. Virtually all answers of the interviewed corporate affairs and marketing communications managers provided support for both propositions. Anecdotal evidence on close working relationships between practitioners responsible for communication disciplines, based upon similarities in objectives and tactics and also resource and task dependencies, suggests that the resulting high levels of interaction between them is a determinant of the departmental arrangement of communications in a company. For example, in one of the companies, operating in the nuclear industry, communication disciplines are functionally separated into marketing and public relations departments. In the case of the public relations department (encompassing financial public relations, government relations and regulatory affairs, media relations, publications and corporate advertising, corporate community involvement and employee communications), the frequent and variable interaction across all of these areas, as corporate issues cross disciplinary boundaries, has led to a grouping of these disciplines into a single department.

> "Traditionally, we have been organised very much on a kind of stakeholder basis, where our people take responsibility for different areas of stakeholders, and recently we have been trying to get a bit more formalisation into the process. For one, this has meant a further consolidation of communications and stakeholder management into separate corporate affairs [public relations] and marketing units" (Head of Government Relations).

Similarly, as the head of corporate affairs of a leading retail group in the UK explains, while public relations and marketing professionals are stimulated to "think outside their own box and see how they can cooperate and deliver results for one another", the "critical mass of activity" in both functional areas and the "still significant specialist differences" of professionals working within them, makes a departmental separation the preferred option.

> "This [departmental separation] does not mean that marketing and public relations should be two worlds divided. Each has its own domain and remit, but, as a company, you need to install enough platforms, co-ordination and networking mechanisms to have them working together" (Head of Corporate Affairs).

Inter-functional Dependencies and the Type of Co-ordination

In addition to the propositions (P1-6) outlined above involving correlations between sum scales of constructs, the study also explored whether there is a relationship between domain similarities and resource dependencies between the two main communication departments on the one hand and the use of specific co-ordination mechanisms on the other. As mentioned, Daft and Lengel (1986) have argued in a contingent manner that the internal media of communication and co-ordination have to be matched to the information processing requirements caused by the structural characteristics of functional areas or departments, that is, the inter-departmental differentiation and resource dependence between them. The study performed correlations between the sum scores of resource dependence and domain similarities between the two main communication units in a company on the one hand and the use of specific co-ordination mechanisms and modes of communication on the other. Correlations produced weak support for the propositions (P9-10). Tables 6, 7 and 8 show the results. Firstly, for the relationship between domain similarity and the use of particular co-ordination mechanisms, the correlations showed no negative correlation between 'rich' media such as group meetings, the use of 'integrators' and personal face-to-face or phone discussions, and domain similarity. Equally, correlations of domain similarity with media of a 'lower richness' such as standard operating procedures and communication through written letters proved not as predicted and were also not significant. Moreover, only one of the propositions (the relationship between domain similarity and the use of impromptu one-to-one meetings) showed a statistically significant result here. Secondly, data of the relationship between resource dependencies and the use of specific co-ordination mechanisms showed generally more positive results. Resource dependencies appear to be

positively related to the use of media of a 'lower richness' such as standard operating procedures and communication through written letters. However, statistical support was also found here for the relationship between resource dependencies and the use of 'rich' media. The conclusion thus arrived at on the basis of these correlations is that although domain similarity and resource dependencies between departments are determinants of the amount of communication (see Table 3 above) between communication departments; these factors appear not to correlate with and hence predict the use of the particular type of communication and co-ordination used.

Table 6. Correlations between Domain Similarity and the Use of Particular Co-ordination Mechanisms (N=85)

Proposition	Correlation-coefficient
1. Domain similarity is associated with:	
(a) communication through written letters	.144 (.203)
(b) communication through formal group meetings	.190 (.092)
(c) communication through scheduled one-to-one meetings	.014 (.904)
(e) communication through impromptu one-to-one meetings	.313 (.005) *
(f) communication through scheduled phone conversations	-.053 (.641)
(g) communication through impromptu phone conversations	.202 (.073)
(h) communication through e-mails	.142 (.214)
(i) use of standard operating procedures	.139 (.220)
(j) use of cross-departmental teams	.137 (.225)
(k) use of person department as 'integrator'	.061 (.595)
(l) use of person other unit as 'integrator'	.057 (.616)

Note: Significant relationships are interpreted as those where correlation coefficients (r) lead to a p value, which is less than 0.05. The table shows the correlation coefficients (r) for each proposition with the corresponding significance levels (p) in parentheses. Statistically significant results are designated with an asterisk.

Table 7. Correlations between Resource Dependencies of own Department and the Use of Particular Co-ordination Mechanisms (N=85)

Proposition	Correlation-coefficient
1 Resource dependence of own department is associated with:	
(a) communication through written letters	.298 (.007) *
(b) communication through formal group meetings	.506 (.00) *
(c) communication through scheduled one-to-one meetings	.305 (.006) *

(e) communication through impromptu one-to-one meetings	.331 (.003) *
(f) communication through scheduled phone conversations	.384 (.00) *
(g) communication through impromptu phone conversations	.410 (.00) *
(h) communication through e-mails	.256 (.023) *
(i) use of standard operating procedures	.267 (.016) *
(j) use of cross-departmental teams	.211 (.058)
(k) use of person department as 'integrator'	.134 (.235)
(l) use of person other unit as 'integrator'	.095 (.402)

Note: Significant relationships are interpreted as those where correlation coefficients (r) lead to a p value, which is less than 0.05. The table shows the correlation coefficients (r) for each proposition with the corresponding significance levels (p) in parentheses. Statistically significant results are designated with an asterisk.

Table 8. Correlations between Resource Dependencies of other Department and the Use of Particular Co-ordination Mechanisms (N=85)

Proposition	Correlation-coefficient
1 Resource dependence of other unit is associated with:	
(a) communication through written letters	.456 (.00) *
(b) communication through formal group meetings	.517 (.00) *
(c) communication through scheduled one-to-one meetings	.427 (.00) *
(e) communication through impromptu one-to-one meetings	.278 (.012) *
(f) communication through scheduled phone conversations	.451 (.00) *
(g) communication through impromptu phone conversations	.512 (.00) *
(h) communication through e-mails	.347 (.002) *
(i) use of standard operating procedures	.264 (.017) *
(j) use of cross-departmental teams	.330 (.003) *
(k) use of person department as 'integrator'	.059 (.601)
(l) use of person other unit as 'integrator'	.104 (.358)

Note: Significant relationships are interpreted as those where correlation coefficients (r) lead to a p value, which is less than 0.05. The table shows the correlation coefficients (r) for each proposition with the corresponding significance levels (p) in parentheses. Statistically significant results are designated with an asterisk.

Discussion

Taken together, the above conceptual ideas and research findings begin to suggest how companies manage and organize the inter-functional dependencies between communication disciplines or departments, and handle the dual information needs for uncertainty and equivocality

reduction. The study provides insights into how communication disciplines are actually organised, but also points the way to alternative arrangements that, normatively conceived, might be more effective. In particular, the lack of fit between information processing requirements brought about by the interdependencies between the two main communication departments and the information processing capacity accompanying the actual use of particular co-ordination mechanisms and media, offers room for organisational arrangements that improve and facilitate the interaction, information processing and co-operation between communication departments (see Daft and Lengel, 1986).

Managerial Implications

The concept of a contingency perspective has emerged at various points in the above analysis. This viewpoint is theoretically respectable in the light of the empirical support presented, and it is at least realistic in recognising that there are no universal panaceas or answers to practising managers' questions regarding the organisation and structuring of communication disciplines. Hence, as the article has argued, there is value in laying out the types of contingencies, whether in inter-functional dependencies between disciplines or other environmental and organisational factors (Dozier and Grunig, 1992; Cornelissen, Lock, and Gardner, 2001) that may be important. A first prescription that can be suggested therefore is that the way in which communication disciplines are organised is situational and dependent upon the interdependencies in strategies and tasks performed by and associated with particular disciplines. And while it follows here that practising public relations and marketing managers can identify the types of inter-functional dependencies (in terms of domain similarity and resource dependence) between communication disciplines in their organisations and match organisational mechanisms thereto (as P1-6 and P9-10 have indicated), the study, based upon structurational precepts, also suggested that this relationship is circular. That is, while levels of domain similarity and resource dependencies between disciplines can be seen to lead to particular organisational arrangements, such arrangements in turn also impact upon and contribute to the amount and type of inter-functional dependencies between disciplines. A second implication of the study is that it provides practitioners with constructs that are exact, relevant and, perhaps most importantly, can be manipulated. Apart from providing a better understanding of communication organisation, the study might thus also contribute to the implementation of that understanding by having developed empirically informed theory and a management model (Figure 1) that bridges the gap between academic understanding and management practice.

Conclusion

As mentioned in the introduction to this article, prior empirical research has found little if any structural explanations for dimensions of communication organisation, leaving many of the conceptual propositions and claims without empirical support. In an attempt to remedy this state of affairs, the article combined a critique of mainstream conceptualisations of communication organisation with a detailed empirical study of the co-ordination of communication activities through organisational forms within large companies. The information processing perspective developed and endorsed in this article has found empirical support through an exploratory analytical study of 85 companies in the United Kingdom, and its descriptive validity as a theory of communication organisation is now in need of further examination through, for instance, extensions and replications of the study to other societal contexts and industries.

The conceptual development and empirical analysis presented in this article contribute to the development of an empirically based theory of communication organisation in three respects. First, the article has explicitly linked mainstream management and organisation theory with communication organisation research, as a means of contextualising and evaluating alternative forms of organisation and adjudicating normative and prescriptive views of communication organisation (see also Cornelissen and Lock, 2000). Second, the article has developed an information processing perspective of (corporate and marketing) communication organisation and design, including a set of propositions and a specification of constructs into reliable measures. Third, the article has provided a detailed empirical analysis of dimensions of communication organisation, i.e. formalisation, departmental arrangement, and the use of co-ordination mechanisms, within large companies, and has provided empirical support for the thesis that these dimensions of communication organisation are related to the inter-functional dependencies between communication disciplines and departments.

References

Balmer, J.M.T. (1998), "Corporate identity and the advent of corporate marketing", *Journal of Marketing Management*, **14**, pp.963-996

Black, T.R. (1999), *Doing quantitative research in the social sciences: An integrated approach to research design, measurement and statistics*, London, Sage Publications

Blau, P.M. and Schoenherr, R.A. (1971), *The structure of organisations*, New York, Basic Books

Broom, G.M., Lauzen, M.M. and Tucker, K. (1991), "Public relations and

marketing: Dividing the conceptual domain and operational turf", *Public Relations Review*, **17**, pp.219-225

Child, J. (1997), "Strategic choice in the analysis of action, structure, organisations and environment: Retrospect and prospect", *Organisation Studies*, **18**, (1), pp.43-76

Churchill, G.A. (1979), "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, **16**, pp.64-73

Cornelissen, J.P. and Lock, A.R. (2000), "The organisational relationship between marketing and public relations: Exploring paradigmatic viewpoints", *Journal of Marketing Communications*, **6**, (4), pp.231-245

Cornelissen, J.P., Lock, A.R. and Gardner, H. (2001), "The organisation of external communication disciplines: An integrative framework of dimensions and determinants", *International Journal of Advertising*, **20**, (1), pp.67-88

Crittenden, V.L., Gardiner, L.R. and Stam, A. (1993), "Reducing conflict between marketing and manufacturing", *Industrial Marketing Management*, **22**, pp.299-309

Daft, R.L. and Lengel, R.H. (1984), "Information richness: A new approach to manager information processing and organisation design", In: Staw, B. and Cummings, L.L. (Eds.), *Research in organisational behaviour*, Greenwich, Conn, JAI Press

Daft, R.L. and Lengel, R.H. (1986), "Organisational information requirements, media richness and structural design", *Management Science*, **32**, (5), pp.554-571

Dozier, D.M. and Grunig, L.A. (1992), "The organisation of the public relations function", In: Grunig, J.E. (Ed.), *Excellence in public relations and communication management* pp.395-417, Hillsdale, NJ, Lawrence Erlbaum Associates

Duncan, T. and Everett, S. (1993), "Client perceptions of integrated marketing communications", *Journal of Advertising Research*, **33**, (3), pp.30-39

Duncan, T. and Caywood, C. (1996), "Concept, process, and evolution of IMC", In: Thorson, E. and Moore, J. (Eds.), *Integrated communication: Synergy of persuasive voices*, pp.13-34, Mahwah, NJ, Lawrence Erlbaum Associates

Duncan, T. and Moriarty, S. (1997), *Driving brand value: Integrated marketing to drive stakeholder relationships*, New York, McGraw-Hill

Duncan, T. and Moriarty, S.E. (1998), "A communication-based marketing model for managing relationships", *Journal of Marketing*, **62**, April, pp.1-13

Ehling, W.P., White, J. and Grunig, J.E. (1992), "Public relations and marketing practices", In: Grunig, J.E. (Ed.), *Excellence in public relations and communication management*, pp.357-383, Hillsdale, Lawrence Erlbaum Associates

Gronstedt, A. (1996), "Integrated communications at America's leading total quality management corporations", *Public Relations Review*, **22**, pp.25-42

Grunig, J.E. (1992), "Communications, public relations and effective organisations: an overview of the book", In: Grunig, J.E. (Ed.), *Excellence in public relations and communication management,* pp.1-28, Hillsdale, Lawrence Erlbaum Associates

Grunig, J.E. and Grunig, L.A. (1989), "Toward a theory of the public relations behavior of organisations: Review of a program of research", In: Grunig, J.E. (Ed.), *Excellence in public relations and communication management,* pp.27-63, Hillsdale, Lawrence Erlbaum Associates

Grunig, J.E. and Grunig, L.A. (1991), "Conceptual differences in public relations and marketing: The case of health-care organisations", *Public Relations Review*, **17**, (3), pp.257-278

Grunig, J.E. and Grunig, L.A. (1998), "The relationship between public relations and marketing in excellent organisations: evidence from the IABC study", *Journal of Marketing Communications*, **4**, pp.141-162

Grunig, L.A. (1989), "Horizontal structure in public relations: An exploratory study of departmental differentiation", In: Grunig, J.E. and Grunig, L.A. (Eds.), *Public relations research annual,* Volume **1**, pp.175-196, Mahwah, NJ, Lawrence Erlbaum Associates

Grunig, L.A. (1992), "How public relations/communication departments should adapt to the structure and environment of an organisation…and what they actually do", In: Grunig, J.E. (Ed.), *Excellence in public relations and communication management,* pp.467-481, Hillsdale, NJ, Lawrence Erlbaum Associates

Gummesson, E. (1991), "Marketing-orientation revisited: the crucial role of the part-time marketer", *European Journal of Marketing*, **25**, (2), pp.60-75

Hage, J. and Hull, F. (1981), "A typology of environmental niches based on knowledge technology and scale: The implications for innovation and productivity", *University of Maryland: Centre for the study of innovation, entrepreneurship, and organisation strategy, working paper nr.1*

Kitchen, P.J. (1993), "The developing use of public relations in fast-moving consumer goods firms", *Doctoral dissertation*, Keele University, UK

Kitchen, P.J. and Moss, D.A. (1995), "Marketing and public relations: The relationship revisited", *Journal of Marketing Communications*, **1,** (2), pp.105-119

Kitchen, P.J. and Schultz, D.E. (1999), "A multi-country comparison of the drive for IMC", *Journal of Advertising Research*, January/February, pp.21-38

Kotler, P. and Mindak, W. (1978), "Marketing and public relations; should they be partners or rivals?", *Journal of Marketing*, **42**, pp.13-20

Lauzen, M.M. (1991), "Imperialism and encroachment in public relations", *Public Relations Review*, **17**, (3), pp.245-255

Lauzen, M.M. (1993), "When marketing involvement matters at the manager level", *Public Relations Review*, **19**, pp.247-259

Lauzen, M.M. and Dozier, D.M. (1992), "The missing link: The public relations manager role as mediator of organisational environments and power consequences for the function", *Journal of Public Relations Research*, **4**, (4), pp.205-220

Lawrence, P.R. and Lorsch, J.W. (1967), *Organisation and environment: Managing differentiation and integration*, Boston, Division of research, Graduate school of business administration Harvard University

Lindlof, T.R. (1995), *Qualitative communication research methods,* Thousand Oaks, Sage

Lorsch, J.W. (1970), "Introduction to the structural design of organisations", In: Dalton, G.W., Lawrence, P.R. and Lorsch, J.W. (Eds.), *Organisational structure and design*, Homewood, Ill, Irwin and Dorsey

Maltz, E. and Kohli, A.K. (1996), "Market intelligence dissemination across functional boundaries", *Journal of Marketing Research*, **33**, (1), pp.47-61

Nunnally, J.C. and Bernstein, I.H. (1994), *Psychometric theory,* 3rd edition, New York, McGraw-Hill

Oppenheim A.N. (1992), *Questionnaire design, interviewing, and attitude measurement*, 2nd edition, London, Pinter Publishers

Pfeffer, J. (1978), *Organisational design*, Arlington Heights, Harlan Davidson

Piercy, N. (1985), *Marketing organisation: An analysis of information processing, power and politics*, London, George Allen and Urwin

Reed, M. (1992), *Rethinking organisation: New directions in organisation theory and analysis*, London, Sage Publications

Ruekert, R.W. and Walker, O.C. (1987), "Marketing's interaction with other functional units: A conceptual framework and empirical evidence", *Journal of Marketing*, **51**, pp.1-19

Schneider, (aka Grunig), L.A. (1985), "The role of public relations in four organisational types", *Journalism Quarterly*, **62**, (3), pp.567-576

Schultz, D.E. and Schultz, H.F. (1998), "Transitioning marketing communication into the twenty-first century", *Journal of Marketing Communications*, **4**, (1), pp.9-26

Spicer, C.H. (1997), *Organisational public relations: A political perspective*, Mahwah, NJ, Lawrence Erlbaum Associates

Van Leuven, J. (1991), "Corporate organizing strategies and the scope of public relations departments", *Public Relations Review*, **17**, pp.279-291

Van Riel, C.B.M. (1995), *Principles of corporate communication*, London, Prentice Hall

Workman, J.P., Homburg, C. and Gruner, K. (1998), "Marketing organisation: An integrative framework of dimensions and determinants", *Journal of Marketing*, **62**, pp.21-41

About the Authors

Dr Joep Cornelissen is a Lecturer in Marketing at Leeds University Business School. He received his Ph.D. from the Manchester Metropolitan University (United Kingdom), and previously taught at the Amsterdam School of Communications Research. His research on corporate and marketing communications strategy, integrated marketing communications and corporate identity has been published inter alia in the British Journal of Management, Psychology&Marketing, Journal of Advertising Research, International Journal of Advertising, Journal of Marketing Management, Journal of Business Communication, and the Public Relations Review.

Dr Phil Harris is a Reader in Political Marketing and Public Affairs, and Co-Director of the Centre for Corporate and Public Affairs, the Manchester Metropolitan University. He is a past Chairman of the Academy of Marketing as well as a fellow and member of the academic Senate of the Chartered Institute of Marketing. His current research is in lobbying, public affairs, and political marketing, and has been published inter alia in the European Journal of Marketing and the Journal of Marketing Management.

Appendix 1. Measures Used to Capture Constructs

Construct	Measure used
Domain similarity	To what extent does this other unit or department (1) Have employees with similar professional skills as those required of personnel in your department (2) do the same kind of work as your department does (3) have operating goals similar to your department's goals (4) obtain its funding from the same source as your department does (5-point scale ranging from 'to an extent' to 'to great extent')
Resource dependence of respondent's department on other unit	For you to accomplish your goals and responsibilities, how much do you need (1) the assistance of personnel in this other unit or department (2) equipment, materials and supplies provided by this other unit or department (3) the services of the other unit/department's specialists and/or expertise (5-point scale ranging from 'not at all' to 'very much')
Resource dependence of other unit on respondent's department	For this other unit to accomplish its goals and responsibilities, how much does it need (1) the assistance of personnel in your department (2) equipment, materials and supplies provided by your department (3) the services of your department's specialists and/or expertise (5-point scale ranging from 'not at all' to 'very much')
Transactions: resource, work, and assistance flows	During the past six months, how much were you involved with this other unit for each of the following reasons: (1) to receive or send work? (2) to receive or send resources? (3) to receive or send technical assistance? (5-point scale ranging from 'not at all' to 'very much')
Amount of communication	Over the past three months, how often have people in your unit communicated or been in contact with people in this other unit or department about work-related matters in each of the following ways: (1) written letters, memos or reports of any kind? (2) formal group meetings? (3) scheduled one-to-one meetings (face-to-face)? (4) impromptu face-to-face conversations (e.g. in the hall)? (5) scheduled one-to-one phone conversations? (6) impromptu one-to-one phone conversations? (7) email/Intranet? (5-point scale ranging from 'not at all' to 'very frequently')
Formalisation	To co-ordinate activities with this other unit during the past six months, to what extent: (1) have the terms of the relationship between you and this other unit been explicitly verbalised or discussed? (2) Have the terms of the relationship between you and this other unit been written down in detail? (3) have standard operating procedures been established? (4) are formal communication channels followed? (5-point scale ranging from 'to no extent' to 'great extent')

Appendix 2. Topic Guide and Selected Questions From the Interviews

The following list with questions was used for the semi-structured interviews with the purpose of gathering data on the organisation of communication disciplines (including P7-8):

1. How are communication disciplines grouped into administrative units/departments? And what are the determinants of these departmental arrangements?
2. What co-ordination mechanisms are established within and across these disciplines and functional areas? And what are the reasons for using these co-ordination mechanisms?
3. How do communication professionals responsible for different disciplines and functional areas interact with one another and with other functional areas in the company? And what types of (formal) structures and mechanisms exist to facilitate this interaction?
4. Which factors are seen as affecting the interaction between professionals responsible for different disciplines or functional areas?