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Explaining Outcome – The role of utilizing measurement insights for planning and reporting

A quantitative analysis of Swedish communicators.

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Master thesis

Measuring communication – usage of findings as the key

Even though a large body of literature suggest that communication outcome should be implemented, empirical research identify an unmistakably large lack of implementation of outcome. This study can show that practitioners using data, derived from measuring communication activities, future-oriented, as a basis for future planning of communication outcome tend to be implemented to a higher degree.

Communication outcome is the umbrella term for measurement practices that evaluate the *effect* of communication activities. Effect in terms of target groups' knowledge, understanding, attitude and intention to act in certain ways. What may explain communication outcome implemented in practice have occupied scholars for quite some time, however this study contributes to this literature by serving an explanation not identified before.

Using insights, collected by measuring the progress of communication activities, as a basis for future strategic planning of communication activities tend to correlate with implementing outcome. It seems like communication outcome is suitable when findings from measurements are used with the ambition to look forward; and utilize insight for future planning of communication.

Why measurements are used for planning purposes (contra used for retrospective purposes) can in turn be explained by level of knowledge among practitioners, whether they perceive to be lacking resources and their perception towards measurement standards. In summary, do the usage of measurement findings play an important role in understanding why practitioners implement measurement practices the way they do.

This study uses a quantitative method, and the empirical data collected based of 75 Swedish communication practitioners answering a survey. The data was then statistically analyzed and the conclusions summarized above was made.

Abstract

Explaining Outcome – The role of utilizing measurement insights for planning and reporting. A quantitative analysis of Swedish communicators.

The relevance of M&E insights being utilized for reporting, contra planning purposes, for predicting level of outcome implementation have been neglected in previous literature. However, this study can show that when measurements and evaluations is used for future planning of communication activities, level of outcome implementation increase largely.

This study can also predict the level of which M&E used for reporting and planning purposes. Level of Knowledge, Perceived lack of budget and Perception of standards are independent variables being identified to explain the level of M&E being utilized for reporting and planning purposes.

Empirical data of this study is based on a quantitative survey (75 respondents) filled out by Swedish communication practitioners and statistical analyzes.

Keywords: Strategic communication management, Measurement & Evaluation, strategic planning, communication outcome, statistical analysis, M&E insights.

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Sammanfattning

Explaining Outcome – The role of utilizing measurement insights for planning and reporting. A quantitative analysis of Swedish communicators.

Hur data från mätning och utvärdering av kommunikation används, bakåt- eller framåtsyftande, har inte tidigare använts som en relevant förklaring till graden av outcome-mätning. Dock kan denna studie visa att när mätning och utvärdering av kommunikation används för framtida strategisk planering av kommunikationsaktiviteter tenderar outcome att mätas i hög grad.

Den här studien kan också visa på faktorer som förklarar varför data och insikter från kommunikationsmätningar används dels bakåtsyftande, och dels framåtsyftande. Grad av kunskap, Upplevd brist på resurser och Syn på standarder verkar kunna förklara nivån av mätningar som används för legitimerande- (bakåt) och strategiska ändamål (framåt).

Studiens empirin bygger på en kvantitativ enkät (75 svarande) distribuerad till svenska kommunikationspraktiker, samt statistisk analys.

Nyckelord: Strategisk kommunikationsplanering, Mätning & utvärdering, communication outcome, statistisk analys, data från kommunikationsmätningar.

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Preface

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Love.
/Robert

1. Introduction

That the "strategic" in strategic communication refers to organizations' use of communication for achieving organizational goals is beyond doubt. "The purposeful use of communication by an organization to fulfill its mission", as Hallahan et al (2007) puts it, or "the practice of deliberate and purposive communication (…) on behalf of a communicative entity to reach set goals", stated by Holtzhausen & Zerfass (2015). And in a world of large investments on communication and hard business competition the pressure on communication practitioners to provide hard facts proving their contribution to overarching organizational goals increases (Macnamara, 2015; Zerfass, Verčič, Volk, 2017).

Measurement and evaluation (M&E) of communication has become a natural part of the strategic communication management rationale; setting goals, evaluating the level of success in achieving these goals and use the findings as a basis for formulating new goals. M&E can be conducted at different levels, however, always with the common aim of investigating the effect of communication work (Smith, 2013; Zerfass et al, 2017; Watson, 2012; Likely & Watson, 2013). Providing material for decision making based on measurements and evaluations is also a way for communication practitioners to gain legitimacy in organizations. Practitioners are increasingly under pressure to deliver not only successful and effective communication, but also to prove this by demonstrating that the goals set are achieved and that communication adds organizational value (Falkheimer, Heide, Simonsson, Zerfass, Vorhoeven, 2016; Likely & Watson, 2013).

An extensive body of research and normative theories on how to constructively implement measurements point in clear directions in terms of key indicators, methods and how to evaluate findings. There are recommendations and advice on the strategies; why and what to measure (Grunig, 2006; Likely & Watson, 2013; Macnamara, 2015), and on the tactics; when and how to measure (Michaelson & Stacks, 2011; Lindenmann, 1998; Paine, 2011). Though, despite this substantial body of

normative research. there is a notable lack of M&E implementation in practice. Some studies stating that not even 50 percent of the communication practitioners measure and evaluate (e.g. Pohl & Vandeventer, 2001), others state that it is rather the methods and indicators of actual implementation that are problematic (e.g. Zerfass et al, 2017). Nevertheless, the practical implementations of M&E are not realizations of the advice research serve. Rigorous directions from research on the one hand, and failing implementation on the other, that is the *M&E deadlock*.

One of the clearest conclusions normative research offers is the importance of measuring *communication outcome* (DPRG/ICV, 2011; AMEC, 2010; 2016; Lindenmann, 1993; 1998; 2003; Macnamara, 2015). Outcome is a far more advanced way of measuring communication performance than e.g. output and outgrowths, and is in essence concerning communication's *effect on stakeholders* (their cognitive, affective and conative changes). While advanced and highly recommended by previous literature, practical implementation of communication outcome is lacking. Contrary to normative research it is obvious that outcome is far less implemented in relation to how highly it is recommended by scholars (Lindenmann, 2003; Macnamara, 2015; Zerfass et al, 2017; Gregory, 2008), clearly highlighting the M&E deadlock paradox. This study intends to investigate why this is the case.

Understanding the barriers – why outcome is (and is not) implemented – is crucial in order to contribute to the scholarly ambition to overcome them; in order to support the struggle for the development of M&E among practitioners; to be able to prove communications' contribution to organizational performance; and thereby an important step in establishing the 'strategic' in strategic communication.

1.1. Purpose & Research questions

M&E is not practically implemented according to the advice of an extensive body of literature. Practitioners tend to measure communication by analyzing tonality in media coverage, web site statistics and the reach of campaign, putting far less interest in outcome measures such as surveying employees about attitude towards

organizational changes or conducting focus groups with potential consumers (Gregory & Watson, 2008; Baskin et al, 2010; Lindenmann, 2003). Obviously, there are barriers hindering the nature of measurements and evaluations in practice to be along the direction desired by normative research.

Previous research has offered several reasons for this, such as lacking capabilities and competence among practitioners, lacking interest and lack of budget (Baskin et al, 2010; Gregory, 2001; Macnamara, 2015; Xavier et al, 2006; Wright et al, 2009). However, this study will present a different potential explanation for lack of M&E implementation in accordance with normative research (degree of outcome implementation).

Previous literature suggests a distinction in how insights (findings) from M&E is utilized; for retrospective, contra future-oriented purposes. This dichotomy is referred to as 'M&E used for reporting' and 'M&E used for planning' (Zerfass et al, 2017; Macnamara, 2015; Bissland, 1990; Noble, 1999).

That insights should be used for future planning is an idea within the normative research of *strategic communication management* suggesting how M&E should be implemented in practice. In this stream of literature goal setting and measurements are key items in planning communication in a constructive way, and insights gained from measurements are relevant not only for the specific activity at hand, but should be used as a basis for strategically planning future activities. According to this view that is using M&E in a meaningful strategic manner (Zerfass et al, 2017; Smith, 2013; Macnamara, 2015; Bissland, 1990).

Insights being used for reporting is associated with a stream in literature having another view of why organizations implement M&E in practice. Contrary to strategic communication management literature it questions the actual value of goals and measurements in strategic (communication) planning (Mintzberg, 1993; Czarniawska, 2005; 2008). Internally presenting that goals set actually are achieved paints the picture of the communication function (as in organizational function) as a unit that progresses and contributes to organizational needs. Also, using key concepts like goal setting and measurements increases internal understanding of what communicators do and is crucial for adapting to business nomenclature (Falkheimer et al, 2016; Likely & Watson, 2013). Thereby is it stated that M&E is rather a tool for gaining legitimacy in organizations (Czarniawska, 2005; 2008; Vedung, 1995; Weheimer, 2005). So, in this view M&E are perceived to be a backward-looking

activity striving for establishing the level of success communication (activities) had. And M&E used for reporting indicates utilizing insights for reporting or documenting purposes (Zerfass et al, 2017; Macnamara, 2015; Noble, 1999).

This study will explore the role of using M&E for reporting and planning purposes for implementing communication outcome. Zerfass et al (2017) state that the consequences of M&E used for future planning are under-explored so far in literature, and it is save to save that neither have been done for the role of M&E used for reporting. In addition will the level of M&E used for reporting and planning be predicted.

Thereby the purpose is twofold; *investigating why M&E is used for reporting and for planning among Swedish practitioners, and how this usage M&E explain level of outcome implementation*. Three Research Questions will guide the study:

RQ1: What factors can explain why M&E is used for reporting?

RQ2: What factors can explain why M&E is used for planning?

RQ3: How can M&E used for reporting and M&E used for planning explain the level of which communication Outcome is implemented?

This study is a placed in a Swedish context. The reasons for that will be presented below.

A set of independent variables, that will predict the level of M&E used for reporting and for planning, is formed and hypotheses on the relationship are formulated. Then the relationship between M&E for reporting/planning and outcome implementation will be formulated through hypotheses.

The research model consisting of a set of hypotheses will be tested though statistical analysis based on empirical data from a quantitative survey among Swedish communication practitioners. In this two-step research model M&E for reporting and M&E used for planning will work as intermediate variables; dependent variable for a set of independent variables, thus independent variable for outcome implementation.

1.2. Disposition

This study will hereafter follow the basic approach of quantitative (variance) studies, also present in determining the essential disposition of this study. In the next section (*2. Background*), the first steps ~~the~~ towards overarching theory of this study is taken, by *conceiving theory* (Van de Ven, 2007). By reflecting on previous research's answers to why outcome is implemented (or lack thereof) plausible answers to the research questions are briefly discussed.

In '*3. Theoretical framework*' the deductive work of creating a research model is made. Theory is constructed and the plausible answers are specified through formulating hypotheses based on the knowledge available in previous literature.

Lastly the overarching theory will be evaluated. In '4. *Methodology*' the theoretical concepts are transformed into measureable operational indicators. The data created is presented in '*5. Findings*', and the level accuracy in the overarching theory will be determined, possibly justified, in '*6. Conclusions*'.

Lastly, the major findings of this study and the process through which it is generated will be discussed in '*7. Reflections and Implications*'.

1.3. Why a Swedish context?

In the 90's, the Swedish Public Relations Association (today PRECIS) developed the concept of Return of Communication (ROC) being a basis for further development of M&E research. ROC was later serving as inspiration for important parts of the M&E literature e.g. Zerfass (2008) and Lautenbach (2006). Because if its history of pioneer-spirit Sweden would perhaps be expected to implement advanced M&E. However, today, Sweden does not seem to have the same good tradition of using M&E constructively, generally, nor measuring outcome (oppose to output) specifically. In an interview a Swedish expert on analysis and evaluation, Ann-Sofi Krol, also a member of the executive board of the international Association for the

Measurement and Evaluation of Communication (AMEC) said "US and UK is further in the development of measurements and evaluations than us [Sweden]" (Sveriges kommunikatörer, 2016).

This is also confirmed by Falkheimer et al (2016) stating that there are major differences among Swedish organizations when it comes to M&E implementation; some hardly don not evaluate at all others seem to conduct different forms of result-oriented evaluations, as well as by Jalakas & Johansson's (2014) case study of the government agency Trafikverket identifying predominantly implementations of output M&E. Therefore, it might be interesting conducting a study exploring the factors affecting output and outcome implementation in a Swedish context.

2. Background

There are several reasons for this section. First, it works as an extension of the research problem concerning the M&E deadlock in general, and specifically the aspect of outcome implementation, in order to make the basic premise more precise avoiding misunderstandings. Also, it might be useful for tying it all together in the final reflections of this study.

This section is also a suitable setting for theoretically defining some central concepts (such as communication outcome, M&E used for reporting and M&E used for planning). Of course, their role in the deductive case will be defined in the Theoretical framework below.

Lastly, here plausible answers to the RQs will be (briefly) reflected on by discussing potential explanations to outcome implementation, or lack thereof. And also further elaborate on the scope and design of this study.

2.1. The emergence of strategic communication

Historically this research problem; communication measurement and evaluation at the operational, tactical (mid-)level, have been an issue of Public Relations (PR). And in some sense this subject may still be viewed as a public relation matter, for example is a valid part of the extensive body of literature (that will be described below) is in fact to be categorized as public relations literature (e.g. Lindenmann, 1998; 2003; Grunig, 1983; Smith, 2013, etc.).

Though, this should be seen in the light of the emergence of strategic communication. Within strategic communication M&E mean something else than it previ-

ously did in PR, for example that measurement of communication could be concerning other aspects such as communication activities explicitly concerning against internal groups (Falkheimer & Heide, 2014A; Zerfass et al, 2017; Smith, 2013).

It should be noted again that for this study is interested in M&E at activity level; sometimes referred to as the operational or tactical level. The normative research (presented shortly) is to a large degree at this mid-level (Falkheimer & Heide, 2014B), concerning *planned communication*. But still it is largely referred to as strategic communication management, even though it, looked at strictly theoretical, is then not concerning strategic communication but rather planned communication. Though, this study adapt to how the literature as referring to it and will consequently also discuss *strategic communication management* (Smith, 2013; Zerfass et al, 2017; Macnamara, 2015; Wright et al, 2009; Watson, 2012).

2.2. Normative research

It is at the heart of strategic communication to set objectives; following the definition of Hallahan et al.'s (2007) it is "the purposeful use of communication by an organization to fulfill its mission". Or a bit more recent way of phrasing it: "strategic communication is the practice of deliberate and purposive communication (…) to reach set goals", by Holtzhausen & Zerfass (2015). And in the competitive society of today, probably more now than ever, organizations invest large resources in communication to achieve these objectives, which implies a need for communication practitioners to show how their work progress in attaining overall objectives. This is usually done by breaking down overarching organizational directions into communication activities serving the overall organizational goals, and at this level are communication objectives set striving for an alignment with the overall goals (Falkheimer & Heide, 2014B; Smith, 2013; Holtzhausen & Zerfass, 2015; Macnamara, 2015).

For activities are communication objectives formulated and consequently also an idea about to how measure and evaluate the progress of the activity and whether

objectives have been attained (Smith, 2013; Zerfass et al, 2017; Macnamara, 2015; Watson, 2012). Objectives and M&E are crucial concepts in a strategic approach towards communication planning, also recognized in the Barcelona principles (the 2.0. version) which is developed by researchers in collaboration with the International Association for the Measurement and Evaluation of Communication (AMEC). Barcelona principle no. 1 is elegantly formulated like this: "Goal Setting and Measurement are Fundamental to Communication and Public Relations" (AMEC, 2015).

2.2.1. M&E in strategic communication management

So, goal setting and M&E are fundamental for strategic communication management. But also, breaking down (organizational) objectives and in stepwise processes of measurements and evaluations attempting to show the effects of communication in different aspect of communication activities. Insights derived from measurements can be used to demonstrate how activities add organizational value in by measuring in different steps (AMEC, 2016; DPRG/ICV, 2011; Likely & Watson, 2013).

This is shown by looking at several research-based concepts for communication management, where setting objectives and measurements and evaluation is a key follow-up (Smith, 2013; Watson, 2012).

In one of the most common approaches to strategic (communication) management Business scorecards (BSC), objective (and target) setting together M&E is in the very core of the idea. BSC is even built upon the basic principle of "If you can measure it, you can manage it" (Kaplan & Norton, 2004; Macnamara, 2005; Likely & Watson, 2013). BSC break down strategic priorities (normally) in the categories Financial, Customer, Internal and Learning & Growth, set objectives, create initiatives and measure the initiatives' contribution to the strategic priorities (Kaplan & Norton, 2004).

Also, in the fairly recent management framework Communication controlling focus lies heavily on identifying "value links between goals and measures" (Zerfass, 2010, p. 947). Communication controlling considers M&E to be a key

challenge for the communication sector overall and intends to define KPIs for communication and provide the latest updated information for allowing management to achieve results. This is done stepwise through analyzing Inputs, Outputs, Outcomes and Outflows where the idea is to study how the invested time and resources is add value through these steps (DPRG/ICV, 2011; Zerfass, 2010; Likely & Watson, 2013; Macnamara, 2005).

These research-based approaches for strategic planning show how M&E data from communication activities is utilized for achieving goals at different levels. But M&E is essential for strategic communication planning in yet another way.

It is often stated that strategic communication management contain four steps; *Formative research* (analysis), *Planning*, *Implementation* (execution) and *Evaluation* (e.g. Smith, 2013; Falkheimer & Heide, 2014B). In early normative research of communication planning Evaluation was seen as the final step in this chain, summarizing a specific activity and its level of success (Smith, 2013). However, in modern strategic planning insights from measurements and evaluations are recommended to be used as a foundation for formative research (the first step of the management process) in future activities (Zerfass et al, 2017; Macnamara, 2014; 2015; Likely & Watson, 2013). So in addition to measurement data utilized for showing how communication add value at different levels of the organization, M&E insights should be understood as a tool for formative research and monitoring communication strategy (Zerfass et al, 2017). And since this study focus on M&E at activity-level (operational, mid-level) perhaps this aspect concerning that measurement and evaluation insights can be used future-oriented, as a basis for future planning of activities is more important than how M&E can be used to add organizational value. Therefore, it will be further reflected on below.

This mindset of how M&E should be utilized for strategic planning of communication also imply that *communication outcome* preferably should be measured. Outcome concern communication effect among target groups, their level of knowledge, their attitude and intentions to take action, and while target groups tend to be the same for several communication activities over time, data regarding these effects is relevant for not only one specific activity, but for future activities as well (Zerfass et al, 2017; Lindenmann, 2003; AMEC, 2016).

What this entail will be reflected on more in detail shortly, however first an alternative perspective of why M&E is used in organizations will be discussed.

2.3. M&E as legitimacy tool

That goal setting and M&E is fundamental in strategic communication planning is undoubtable. Falkheimer et al even states that, M&E is "part and parcel of the prevailing understanding of strategic communication management" in a recent article (2016). However, an alternative view on why M&E is used in organizations can be found if looking beyond the strategic communication literature.

Czarniawska, who is a professor in business administration (at University of Gothenburg) and particularly have studied processes of organizing, question the actual value of M&E as ascribed by normative strategic communication research (2005; 2008). M&E is relevant for communication when goals are set, according to strategic communication management view insight from M&E is used to know if objectives have been attained or not, and thereby also work as a basis for future planning of communication activities (Zerfass et al, 2017; Falkheimer & Heide, 2014B). Though, Czarniawska state that goals do not work that way in practice. Things happen within (regarding) the activity, and in the surrounding world, causing goals to be in a constant change (Czarniawska, 2005). Thereby, evaluations intended to compare the effect of an activity with the expected one (the goal) is not applicable, since goals tend to change during the time of the activity. But still, evaluations are not worthless. Rather, states Czarniawska, they have ritual purposes – however cannot, and should not, be interpreted literally (2005; 2008).

Similarly, Vedung (1995) studied public organizations in Sweden concluding that evaluations rarely are used as intended. It is stated that evaluations in general (not specifically regarding communication) are mostly used in order to legitimize actions or changes being made in organizations. Almost never are they used as intended, i.e. as an instrument to improve (future-oriented).

Furthermore, the work of Canadian management professor Henry Mintzberg is relevant in this matter. In essence Mintzberg rejects the rational validity of strategic planning, stating that the assumed progression activities have as a result of planning is not real, why goal setting and M&E cannot by applied in a constructive way as it is built on false premises. The linear view of progress from formative research and

planning, to execution, to evaluation have no empirical support (Mintzberg 1993;1994). The reason why organizations strategically plan their business is to present oneself as legitimate; an organization with control of the state of things. However, that is rather an illusion of control and strategic planning should be perceived as a strive for legitimacy (Mintzberg, 1993; 1994).

In addition, certain parts of communication literature address the fact that M&E is primarily a tool for gaining legitimacy. In similar line of reasoning as Mintzberg, Wehmeier (2006) question the rationality strategic communication planning is built upon, concluding that communication management approaches such as Balanced Scorecards (above) is simply a myth in order to achieve social legitimacy.

Another perspective is that in larger investments of communication, the pressure on practitioners to prove their value increases (Macnamara, 2015; Zerfass et al, 2017). Grunig (2006, p. 157) even claims that public relations and communication "could not have a role in strategic management unless its practitioners had a way to measure its effectiveness", and Falkheimer et al show excerpts from qualitative interviews with Swedish practitioners stating that working with goal setting and M&E "is a way of producing legitimacy for our professions in the organization. We must talk the same language as the rest of the organization. It is an important step towards receiving legitimacy for what we do" (2016, p. 148). The reason for working with goals and measurements also seems to be, rather than interesting and relevant in itself, a way of gaining legitimacy by adapting to the language of colleagues in other functions of the organization (Falkheimer et al, 2016; Macnamara, 2007; Watson, 2012). Something that Likely & Watson name "application of business nomenclature" (2013, p. 150).

So, M&E of communication as a tool for organizations to gain legitimacy serve as an alternative view on why M&E is used in organizations. This in contrast to the normative research of strategic communication literature where M&E is a natural part of the strategic planning rationale. Though, it should be underlined that both of these might be applicable in parallel; M&E as normative strategic communication management suggests, and at the same time also use M&E to gain legitimacy (Smith, 2013; Zerfass et al, 2017; Macnamara, 2015; Falkheimer & Heide, 2014B).

2.4. Communication Outcome

The second dimension of normative research suggests that communication outcome should be implemented. What, in terms of methods and which items, to measure is of course dependent on which goals being set. And since the overall aim with planned communication is to "alter a target group's understanding, attitude or knowledge, and thereby change its behavior" (Falkheimer & Heide, 2014A, p. 126), it is this kind of objective strategic communication planning set.

Also, if looking at the majority of the research-based approaches they entail setting objectives on the *effects* of the communication being planned (Kaplan & Norton, 2004; DPRG/ICV, 2011; AMEC, 2016; Smith, 2013). "Effects" do oftentimes equal effects on stakeholders; their cognitive, affective and conative changes (Ray, 1973; Smith, 2013; Falkheimer & Heide, 2014A). There are several formulas for this kind of hierarchy of objectives. The most well-known is probably is the AIDA model, concerning effects of Awareness, Interest, Desire and Action. However, regardless of which model is used, it is the effects on stakeholders (cognitive, affective and conative changes) that is being aimed for when setting communication objectives – and thereby also, those effects that should be measured (Smith, 2013; Lindenmann, 2003, Michaelson & Stacks, 2011; Likely & Watson, 2013).

In the scholarly discourse on M&E measuring the effects on stakeholders is referred to as *communication outcome*. As it is recommended to set objectives on the effects (on stakeholders) of communication initiatives, consequently research recommends that it is communication outcome that should be measured and evaluated (e.g. Lindenmann, 1993; 1998; 2003; Macnamara, 2015).

An omnipresent distinction in M&E literature is the one between communication outcome and output. In contrast to the latter, measuring communication output focuses on the immediate and short-term results of communication activities (Lindenmann, 1998; 2003; 2006; Gregory, 2001; Hon & Grunig, 1999; Watson, 1997; Wright et al, 2009).

Communication outputs is regarding how well the organization present itself to others, which entails the exposure it receives in own, earned or bought media (Lindenmann, 1998; 2003; DPRG/ICV, 2011; Macnamara, 2015). That includes total number of placements and publicity in media; stories, articles or mentions, number

or impressions; those who had opportunity to be exposed to you your messages, and assessment of the content; the tone and favorability (Lindenmann, 2003; DPRG/ICV, 2011; AMEC, 2016; Macnamara, 2015). In summary, these are items not indicating the effect on stakeholders but rather tells something about the activities' themselves, the actual impact cannot be measured by looking at e.g. total number of placements in media coverage. Thereby, research does not recommend a solely implementation of output M&E, and Lindenmann up frontally states that "more often than not, outputs represent what is readily apparent to the eye" (2003, p. 5).

Measuring communication outcome is studying whether an activity had any effect in terms of opinion, attitude or behavior change among those target groups at which communication was directed. Simply "effects that your communication has on your audiences" as AMEC (2016) puts it, which implies knowledge or acquisition of knowledge, levels of trust towards stakeholders, attitudes in terms of preferences or intentions, or behavioral dispositions (Lindenmann, 1998; 2003; AMEC, 2016; DPRG/ICV, 2011; Macnamara, 2015).

The research-based concept of Communication controlling (above), identifies outcome M&E as a key component for establishing what kind of value communication created for organizations (DPRG/ICV, 2011; Zerfass, 2010). This approach differentiates direct outcome as "the effect of communicative offers on how stakeholders perceive an organization" (DPRG/ICV, 2011, p. 14), and indirect outcome viewed as "the opinions, attitudes, behavioral dispositions and the actual behavior of stakeholder groups whose cooperation is critical for the success" (DPRG/ICV, 2011, p. 14).

The AMEC institute, in their research-based Integrated Evaluation Framework (IEF), in a similar manner as the Communication controlling concept view communication outcome M&E as a crucial item for evaluating the contribution for organizational outcome, or impact, which is referred to as what "are caused, in full or in part, by your communication" (AMEC, 2016). In other words, research seems to be united around the fact that measuring communication outcome is crucial in M&E, and that is the recommendation for strategic communication practitioners. Macnamara even states that communicators pressure to specifically "evaluate their work, particularly in terms of outcomes and ROI" (2007, p. 1).

Concluding that outcome M&E is recommended doesn't mean communication output is uninteresting, or worthless measuring. Focusing on output indicators and achievements at this level doesn't prove anticipated influence on targeted stakeholders, but "they mark an essential step on the way to exerting this influence", as the position paper of the DPRG/ICV points out (2011, p. 14). Also, looking at the Barcelona principles 2.0., the 2nd is formulated "Measuring Communication Outcomes is Recommended Versus Only Measuring Outputs". It suggests that output is not irrelevant, however, outcome is more relevant for M&E in practice and consequently the level of outcome implementation is in focus for this study.

2.5. Empirical research of practical implementation

2.5.1. M&E overall

Even though, research recommends usage of M&E, and outcome M&E specifically, the implementation is lacking. This is the case for Europe and America in general, and seems to be the case in the Swedish context as well.

Already in 1983 Grunig identified the lack of actual implementation of the recommendations research made on how to measure and evaluate communication and public relations. In fact, he stated, practitioners do use M&E at all:

"Lately, I have begun to feel more and more like the fundamentalist minister railing against sin; the difference being that I have railed for evaluation. Just as everyone is against sin, so most public relations people I talk to are for evaluation. People keep on sinning, however, and PR people continue not to do evaluation research."

(Grunig, 1983, p. 28)

And still, almost 20 years later, Pohl & Vandeventer (2001) reports that less than half of the practitioners studied plan for formal evaluation methods. Michaelson & Stacks (2011), stated that practitioners continuously fail to conduct research

for M&E, and Xavier et al (2006) claims that practitioners are unable to neither utilize the diversity of M&E methods, nor understand how to apply them. The exact level of M&E implementation is unknown, and probably not possible to prove in precise numbers, but rigorous research indicates, however, that as united scholars are in recommending M&E practices for strategic communicators – as poor is the implementation of these methods (Macnamara, 2015; Michaelson & Stacks, 2011; Pohl & Vandeventer, 2001; Gregory & Watson, 2008).

2.5.2. Outcome implementation

The general tendency is that outcome implementation is lacking in implementation compared to other practical measures (Gregory, 2001; Pohl & Vandeventer, 2001; Watson, 1997; Macnamara, 2015). With slightly different methodological approaches several scholars have identified major emphasis on output M&E in practice. Gregory (2001) is critically analyzing award-winning communication programs showing, actually opposed to what is aimed for in formulated objectives, a high emphasis on output items and predominantly measurements of media coverage. Volume and tonality of coverage in the media is also shown to be the most common implementation according to Walker (1994), using a document analysis of (again) award-winning campaigns.

The pattern continues even for survey studies among practitioners. Baskin et al (2010) reports that media content analysis is the most commonly used tool in M&E, and analyzing media clippings and 'penetration of key messages' in target media is almost twice as frequently implemented as outcome related practices such as attitude surveys or focus groups with stakeholder groups. Zooming in at a medium and how M&E is practiced, Wright & Hinson (2012) can show that 54 percent of corporate communication practitioners do external analyzes on what is said about their brand in social media (i.e. analyzes of monitoring and content analysis), while only 26 percent said that they study the actual effect of communication in social media for the creation, change and reinforcement of outcome indicators as attitude and behavior.

For the case of Sweden, where this study is placed, not much is generally known about practitioners' M&E implementation. Falkheimer et al (2016) state that use of implementation of M&E differs vastly among Swedish organizations, "some organizations do hardly even any evaluations, while others regularly perform different result-oriented assessments on users/customers to check issues such as trust" (p. 148).

If research on Swedish practitioners' M&E implementation in general is poor, even less is written regarding the level of outcome measurements specifically. However, some interesting notions have been made. Jalakas & Johansson (2014) made a case study of the governmental agency Trafikverket. Analyzing from at the basic distinction of output and outcome the study showed a dominantly higher implementation of output measures; interest in media coverage and items like intranet or website statistics. Any other study investigating the specific implementation of outcome vs. output in a Swedish case study, nor attempting to study it among a big general population, has not been found.

In summary; this – normative research recommending how M&E should be implemented, on the one hand – lack of implementation (in general, and regarding outcome specifically), on the other hand, that is the *M&E deadlock*. Previous research has noted several potential explanations for why this is the case. Those previous explanations, and the further scope of this study, will be reflected on in the next section.

2.6. Potential explanations

Previous research has identified several factors that affect the nature of M&E implementation. *Level of knowledge*, *Lack of resources* and *Perception of standards* have all been stated to affect how measurements are practically implemented, there are argument why these would specifically predict the level of outcome implementation.

Knowledge is a factor recognized to be one of the most important for understanding why practitioners act as they do. In this case, since outcome is a more advanced M&E practice than e.g. output measures a higher level of knowledge;

capability and competence is required (Macnamara, 2015; Zerfass et al, 2017; Xavier et al, 2016; Baskin et al, 2010).

Lack of resources is probably the most well-cited factor for explaining the nature of M&E. Regardless of the actual costliness of measurements, practitioners tend to argue that the reason they do not evaluate their work with communication is because they do not have the time or resources (Macnamara, 2015; Gregory & Watson, 2008; Baskin et al, 2010).

Perception of standards concern to what degree practitioners believe in standard approaches presented to them, such as recommendations of outcome measurements. If not perceiving standards to be relevant or not even perceiving them as established standards it is unlikely that they would implemented them (Michaelson & Stacks, 2011; Stacks & Michaelson, 2014; Macnamara, 2015; Paine, 2011).

2.6.1. Utilizing of M&E insights (for reporting and planning)

In order to contribute to existing knowledge about why communication outcome is implemented, this study will approach outcome implementation in another manner than previous research. How M&E is utilized in organizations; used for reporting and used for planning, is expected to have a role in predicting level of outcome implemented. *M&E used for reporting*, contra *M&E used for planning* is a distinction recognized is previous literature (e.g. Macnamara, 2015; Zerfass et al, 2017; Bissland, 1990; Noble; 1999), though never used for predicting the level of outcome implementation in this sense.

M&E for planning is associated with strategic communication management, where M&E insights are used future-oriented in a strategic manner (Zerfass et al, 2017). M&E for reporting is associated with the view of M&E as a tool for legitimacy, where M&E insights are used retrospectively and the communication activity at hand is in focus, rather than future planning (Zerfass et al, 2017; Macnamara, 2015; Smith, 2013). Thereby is this M&E employment, or utilizing of measurement insights, associated with the two streams in literature (above) aiming for explaining why M&E is and should be implemented overall.

Essentially, M&E used for reporting contra planning are differentiated in their core focus; *reporting* is concerned with M&E used for establishing the level of success for a specific communication activity, documenting activity results and assessing whether goals has been attained. *Planning* perceive M&E to be future-oriented and is concerned with findings or insights from measurements to work as a basis for future revising or planning of activities (Zerfass et al, 2017; Macnamara, 2015; Bissland, 1990; Noble, 1999).

M&E for reporting and planning will be used as two separate variables, and it should be noted that even though the core interest of these two concern two slightly different aspects of M&E they are likely to be positively correlated. As mentioned above, it is very well possible to use measurements in accordance to the normative recommendation of strategic communication literature, while *also* use goal setting and M&E to gain legitimacy in organizations. The same way is it possible to use M&E for planning though at the same time for documenting and reporting purposes (Zerfass et al, 2017; Falkheimer et al, 2016; Likely & Watson, 2013).

There are several reasons why M&E employment is relevant for level of outcome implementation. Macnamara (2015) note a potential conflation of the reporting contra planning purposes of M&E as a potential obstacle for M&E implementation. So exploring how reporting/planning affect outcome implementation might be interesting in that sense. Also, Zerfass et al (2017) state that the benefits of a strategy/planning-view of M&E is under-explored in literature, while also finding empirical support that "the value of data for managing strategic communication seems to be overlooked by many communication departments today" (p. 12). That being parallel to the M&E deadlock indicating that outcome is lacking in implementation, however the role of M&E as a planning activity in explaining level of outcome have been neglected in previous research.

2.6.2. M&E used for reporting

M&E for reporting refer to the *employment of M&E insights utilized for backwards looking, reporting purposes* (Macnamara, 2015; Zerfass et al, 2017). This

way of perceiving M&E have a retrospective view on the process of communication planning focusing specifically on the activity at hand, rather than how measurement data can be used for future planning. Within the four phases of Formative research, Planning, Implementation and Evaluation, evaluation is simply perceived to be the final step assessing the result of the activity (Falkheimer & Heide, 2014B; Zerfass et al, 2017; Smith, 2013). This summarizing or documenting view is characterized by *looking backwards*, meaning that insights of measurements are utilized to establish the level of success communication activities had, specifically in terms of whether goals have been achieved (Macnamara, 2015; Zerfass et al, 2017; Noble, 1999).

2.6.3. M&E used for planning

M&E for planning refer to the *employment of M&E insights utilized for forward looking purposes to be used for future strategic planning* (Macnamara, 2015; Zerfass et al, 2017). While the reporting-variable being having a retrospective view of measurements, M&E used for planning is future-oriented dimension of M&E. Regarding the four phases within strategic communication planning evaluation is perceived to bridge over to formative research of future communication activities (Falkheimer & Heide, 2014B; Zerfass et al, 2017). The idea is that the M&E insights should be used *looking forward*, in a strategic manner informing further planning processes of information regarding stakeholders; e.g. levels knowledge, attitude and intentions of behavior among target groups. This is crucial for continuously adjusting strategy within the organization (Macnamara, 2015; Zerfass et al, 2017; Bissland, 1990).

2.6.4. Explaining M&E insights utilized for reporting and planning

Level of M&E used for reporting/planning is central in this study, and as RQ 1 and 2 suggests the initial phase of this study intends to predict the level of which M&E is used for reporting and for planning. Since level of knowledge, lack of

budget and perception of standards have been identified as affecting the nature of M&E (e.g. level of outcome implementation), the role of these factors in predicting M&E employment will be explored. Or more specifically; knowledge and lack of resources is expected to affect the level of M&E used for reporting, while knowledge, lack of budget and perception of standards is expected to affect the level of M&E used for planning. The nature of the expected relationship and the specific hypotheses of the model as a whole will be presented in the next section.

3. Theoretical framework

This section will provide a *deductive* case for the set of variables whose relationships will be studied through the statistical analysis. In a two-step model, a total of seven hypotheses will be tested. How they are formulated and why will be described in this section.

In the first step two hypotheses for level of M&E used for reporting and three for level of M&E used for planning is set. And in the second step, two hypotheses for the level of outcome implementation is set. The nature of the expected relationships will be presented below.

3.1. Explaining M&E used for reporting

Knowledge and Perceived lack of resources are expected to affect the level of which M&E is used for reporting. Why and in what way is described in this section.

3.1.1. Knowledge (of normative research)

Grunig's statement in 2014 "the one variable that consistently explains why public relations people do what they do is their level of knowledge" (para 4), suitable summarizes that an interesting factor when trying to understand why practitioners do or do not measure is always knowledge. But also several others have noted that this factor probably can predict M&E implementation.

Zerfass et al (2017) are noting that European practitioners overall do not hold the required skills for conducting robust M&E. The sample of practitioners show modest capabilities when it comes to applying methods and techniques for measurements and knowledge of how to evaluate and document the effects and impact of communication is rare. The level of knowledge is according to Zerfass et al

(2017) far from a satisfying standard, concluding that "lack of expertise indeed poses a major obstacle to evaluation and measurement practices" (p, 13).

Put in a different way, low levels of knowledge; capabilities, expertise and skills how to conduct M&E, among communication practitioners seem to give poor implementation of M&E, while higher levels of knowledge give M&E implementation to a higher degree, and in more constructive ways (Zerfass et al, 2017; Xavier et at, 2006; Macnamara, 2015; Baskin et al, 2010).

Another perspective on M&E knowledge is however mentioned by Zerfass et

al (2017, when proposing what kind of barriers future research supposedly should investigate. Rather than hands-on skills and capabilities in how to, e.g. conduct survey measurements on attitude changes among employees, Zerfass et al (2017) suggests that it might be a matter of understanding the different parts and aspects of M&E and what kind of findings these measurements yield.

Normative research is mostly occupied with strategic communication management theory with recommendations to use M&E for planning purposes, rather than for reporting. So, if having high level of knowledge of normative research on M&E, practitioners are likely to prioritize what normative research primarily suggests, i.e. using M&E for planning purposes (see below). But also, this research neglects M&E used for reporting (legitimizing) purposes why practitioners knowledgeable in strategic communication management are likely to use M&E for reporting to a lower degree.

The values of the Knowledge variable can range from low level of knowledge (of normative research) to high level of knowledge.

H1: Knowledge will be negatively correlated with M&E used for reporting.

The less knowledge of what normative research suggests the higher the level of M&E used for reporting is excepted to be.

And the higher the level of knowledge is, the level of M&E for reporting will decrease.

3.1.2. Perceived lack of resources

"Lack of resources" is one of the most omnipresent predictors of M&E implementation in previous literature (e.g. Macnamara, 2015; Baskin et al, 2010; Zerfass et al, 2010; Gregory & Watson, 2008). Lindenmann (1998; 2003) do state that M&E, and especially more advanced types of measurements, may take quite a lot of time and resources, though on the other side Lindenmann (2001) stated that accurate measurements "doesn't have to put you in the poorhouse" (p. 1). But regardless of the actual costliness of different kinds of M&E practices, "practitioners generally argue that they do not evaluate their work because they have neither the money nor the time to do so" (Grunig, 1983, p. 28). The more practitioners perceive that they lack time and resources, the less likely it is that M&E will be implemented overall, neither for reporting- nor planning purposes (Baskin et al, 2010; Gregory & Watson, 2008, Macnamara, 2015).

In previous literature this variable is sometimes referred to as "Lack of resources" or Lack of budget" (e.g. Macnamara, 2015, Baskin et al, 2010). However, since the core of the argument lies in whether practitioners *perceive* that they lack time or resources – not whether they actually do – this study underline that it is the *perception* lacking resources that is crucial.

Scale is ranging from low; lack of resources perceived to be small (low), to high; lack of resources perceived to be large (high).

H2: Perceived lack of resources will be negatively correlated with M&E used for reporting.

The more practitioners perceive to be lacking of resources to implement M&E practices, the less likely it is to be implemented. That is the case also for M&E for reporting; the less resources are perceived to be lacking for M&E, the more it M&E will be used for reporting. And the more resources are perceived to be lacking (for M&E implementation) the less will M&E used for reporting.

3.2. Explaining M&E used for planning

Knowledge, Perception of standards and Perceived lack of resources are expected to affect the level of which M&E is used for planning. Why and in what way is described in this section.

3.2.1. Knowledge

Normative research is mostly characterized by strategic communication management theory occupied with advice to use M&E for planning purposes. So, if having high level of knowledge of normative research on M&E, practitioners are likely to prioritize what normative research primarily suggests, i.e. using M&E for planning purposes. Contrary to above (M&E for reporting), high level of knowledge about normative research is likely to give high level of M&E used for planning.

The values of the Knowledge variable can range from low level of knowledge (of normative research) to high level of knowledge.

H3: Knowledge will be positively correlated with M&E used for planning.

The more knowledge of what normative research suggests the higher the level of M&E used for planning is excepted to be.

And the lower level of knowledge among practitioners, the level of M&E for planning will decrease.

3.2.2. Perception of standards

Lack of standards for M&E as an obstacle for implementation have been have been identified in previous studies (e.g. Macnamara, 2015; Michaelson & Stacks, 2011). More than half of practitioners consider standards for M&E necessary for constructive implementation as they ensure established methods are used (Michaelson & Stacks, 2011). Standards in this sense refer to united and common evaluative measures and methods for conducting these measures in order to study

the performance of communication work. Usage of a standardized set of indicators also allows organizations to benchmark towards other similar organizations, or make comparisons of their own performance over time (Michaelson & Stacks, 2011; Stacks & Michaelson, 2014; Paine, 2011).

If practitioners believe there is a lack of standardized measures they are likely to not engage in M&E activities, since they perceive there are not any constructive ways of doing it. It is reported that 66 percent perceive that "lack of standards as the biggest problem with PR measurement" (Ragan/NASDAQ OMX Corporate Solutions, 2013). And the fact that practitioners perceive standards to be lacking, and thereby there are no constructive and suitable ways of implementing M&E, seem to be a barrier for M&E implementation overall, but also the characteristics of those measurements and evaluations being conducted (Macnamara, 2015; Michaelson & Stacks, 2011).

In the context of strategic communication management using M&E for planning can very well be seen as a standard. So depending on whether practitioners perceive standards for M&E valid and relevant M&E for planning is expected to be used.

The values of this variable range from 'M&E standards perceive not to exist' on a sliding scale towards 'M&E standards is perceived to exist'.

H4: Perception of standards will be positively correlated with M&E used for planning.

The more standards of M&E are perceived to exist and be relevant for the practitioner, the more will M&E be used for planning. And vice versa.

3.2.3. Perceived lack of resources

"Lack of resources" is one of the most omnipresent predictors of M&E implementation in previous literature (e.g. Macnamara, 2015; Baskin et al, 2010; Zerfass et al, 2010; Gregory & Watson, 2008). Lindenmann (1998; 2003) do state that M&E, and especially more advanced types of measurements, may take quite a lot of time

and resources, though on the other side Lindenmann (2001) stated that accurate measurements "doesn't have to put you in the poorhouse" (p. 1). But regardless of the actual costliness of different kinds of M&E practices, "practitioners generally argue that they do not evaluate their work because they have neither the money nor the time to do so" (Grunig, 1983, p. 28). The more practitioners perceive that they lack time and resources, the less likely it is that M&E will be implemented overall, neither for reporting- nor planning purposes (Baskin et al, 2010; Gregory & Watson, 2008, Macnamara, 2015).

Scale is ranging from low; lack of resources perceived to be small (low), to high; lack of resources perceived to be large (high).

H5: Perceived costliness will be negatively correlated with M&E used for planning.

The more practitioners perceive to be lacking of resources to implement M&E practices, the less likely it is to be implemented. That is the case also for M&E for reporting; the less resources are perceived to be lacking for M&E, the more it M&E will be used for reporting. And the more resources are perceived to be lacking (for M&E implementation) the less will M&E used for reporting.

3.3. Explaining Outcome implementation

3.3.1. M&E used for reporting

Utilizing M&E for reporting purposes usually is associated with measuring in a retrospective and documenting manner, looking backwards (Zerfass et al, 2017; Macnamara, 2015; Noble, 1999), while communication outcome in itself is more suitable for when M&E data is utilized for future planning (see further discussion below). However, there are no conceptual support in literature that M&E used for reporting would cause less outcome implementation.

Put differently; as mentioned above M&E for reporting and M&E for planning is expected to be positively correlated since using measurements retrospectively for summarizing and assessing level of success can be done in parallel to M&E for planning purposes. In practice M&E insights can be used to establish how successful activities was and also be used as a basis for future planning, and both of these might cause increasing level of outcome implementation.

The scale is ranging from, low values; M&E used for reporting at a lower degree, while high values; M&E for reporting at higher degree.

H6: M&E used for reporting will be positively correlated with Outcome implementation.

Higher degree of M&E used for reporting is expected to give higher levels of outcome implementation, and vice versa.

3.3.2. M&E used for planning

Normative research suggesting that M&E insights to be used future-oriented, for future strategic planning of communication activities, also recommend outcome M&E; the effect among target audiences (Macnamara, 2015; Zerfass et al, 2017; AMEC, 2016; DPRG/ICV, 2011; Lindenmann, 2003).

This is because using data from measurements and evaluation of an activity have to be relevant for the planning of other activities in order to be meaningfully utilized for future planning of communication. Measuring outcome is measuring the effect among audiences; changes in their cognitive, affective and conative components, and since these changes in target groups most likely will be relevant continuously in planning communication activities outcome measures are highly suitable for M&E is intended to utilize insights as a basis for future strategic planning (Zerfass et al, 2017; Macnamara, 2015; Lindenmann, 1998; 2003; Likely & Watson, 2013).

The scale is ranging from, low values; M&E used for planning at a lower degree, while high values; M&E for planning at higher degree.

H7: M&E used for planning will be positively correlated with Outcome implementation.

The higher degree M&E is used for planning purposes, the more is outcome expected to be implemented, and vice versa.

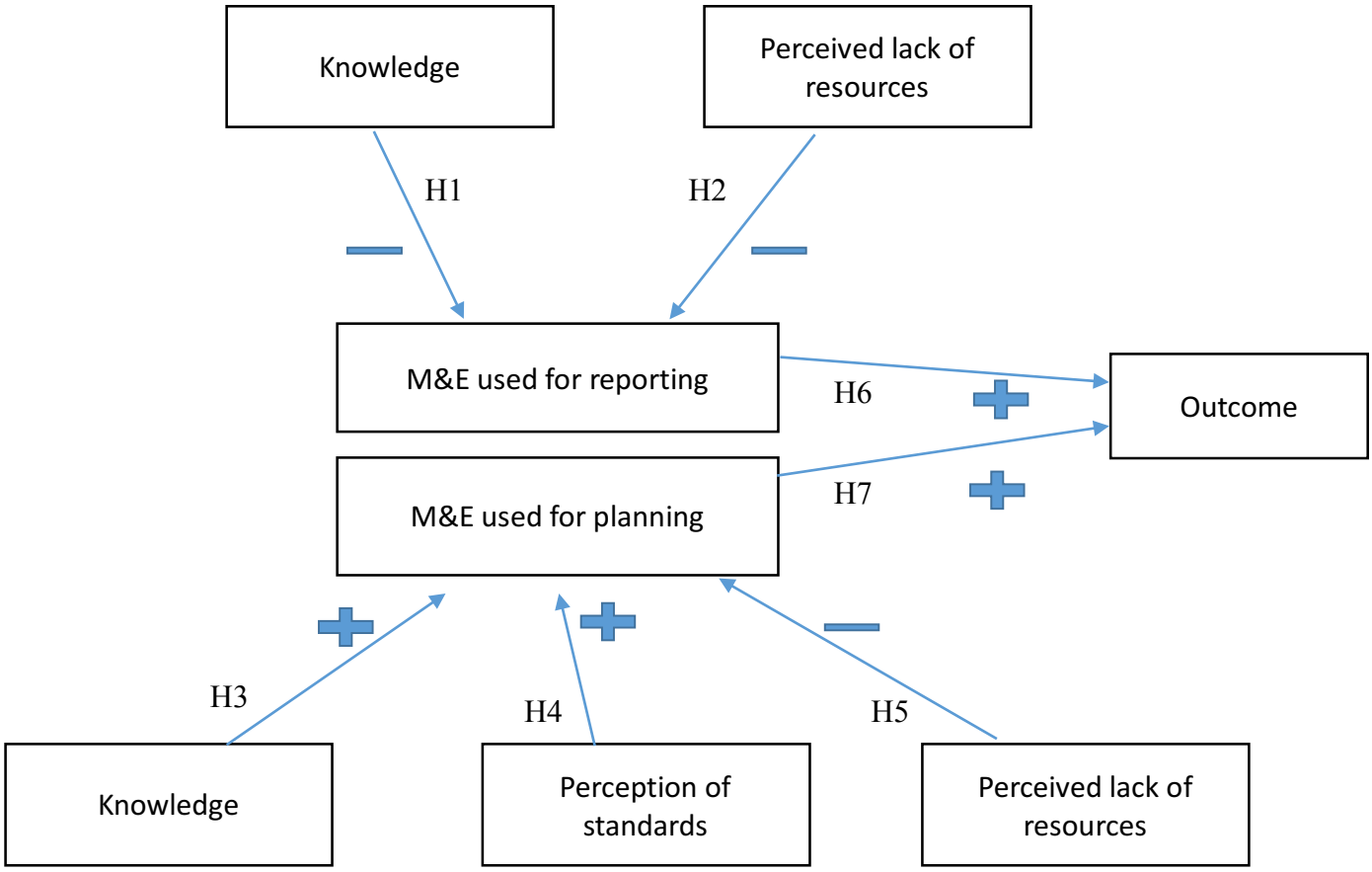
3.4. Synthesis and Research model

Constructing hypotheses regarding the Knowledge variable in this manner; expecting a negative correlation with M&E for reporting while a positive correlation for planning, would suggest that M&E for reporting and M&E for planning would be negatively correlated. And as noted several times, they are not conceptually understood as negatively correlated. However, the reason for using Knowledge this way is simple the theoretical basis; since Knowledge refer to knowledge about normative research, and normative research is occupied with recommendations to utilize M&E in a planning way rather than for reporting, having high level of knowledge about normative (agreeing with it, see operationalization below) would suggest that M&E for reporting would not be prioritized.

M&E used for reporting and M&E used for planning is not mutually exclusive, they are perceived as positively correlated, however they still two different variables. A set of different relationships is expected to predict the variance in these two, though of course the same relationship concerning Perceived lack of budget.

Figure 1 show the research model of this study. It is in two steps, with M&E used for reporting and M&E used for planning as intermediate variables.

Figure 1: Research model.



The model is visualizing the hypotheses being derived from theory. And it is through this model the theory (through falsifying or confirming hypotheses by the data collected) meet reality, or a part of it.

These theoretical concepts (5 independent variables, 2 intermediate variables and 1 dependent variable) will now be transformed into a quantitative survey of measureable indicators. How they are operationalized is described and reflected in the next chapter.

Those hypotheses expecting a relationship of negative correlation are high-lighted visually with a minus-sign, while negative correlations are indicated with a plus-sign.

4. Methodology

To answer the research questions; what explains M&E used for reporting/planning, and how these two can explain outcome implementation among Swedish practitioners, a set of variables will be tested.

Or rather, it is the seven hypotheses making up the research model (visualized in Figure 1) being tested. And in order to do so the deductive research model and the theoretical concepts it consists of will be operationalized into measureable items. A quantitative survey will be conducted, and in the following sections it is described and reflected on how the theoretical key concepts is transformed into operational indicators in this survey questionnaire.

In this section the strategy for data collection investigating these research questions will be described and reflected upon. Here aiming for showing the reasoning behind the operational choices of this study and why this way is the best possible way, when the preferences and practical considerations is taken into account.

4.1. Science philosophical assumptions

This study relies on a *post-positivistic* view on science (also referred to as postempiricism). Based in the underlying empiricism, the idea that observations are the core in scientific efforts. Thereby, founded in the positivist view that science is the way to understand and find the truth about reality, post-positivism assume that knowledge can be collected by scientific observations (Prasad, 2005; Van de Ven, 2007). However, in contrast to positivism human knowledge is not based on totally solid foundations, but rather qualified human conjectures. Also applying *critical realism*, this study is based on the (ontological) belief that there is a reality that can be studied through science, independently of our (humans') thoughts about it. Contrary to a positivist holding, post-positivistic critical realism perceives all scientific

observations done as imperfect and thereby researchers cannot gain knowledge about reality with total certainty (Prasad, 2005; Bryman, 2015).

4.2. Operationalization: A quantitative survey

The research model and its hypotheses is tested through an online survey responded by Swedish communication practitioners. The operationalization of these variables are, as for the methodology overall, developed with a strive for cumulatively, however the operational indicators are of course carefully developed in line with the purpose of this very study. In the reasoning below the operationalization and the arguments for why is described. Survey as a whole, as it was received by the respondents can be found in Appendix 1.

4.2.1. Scale design

In general, the survey-questions of this questionnaire will use a 5 point Likert scale. That is suitable since the survey intend to measure the attitude, or opinions towards actions and phenomenon (Wrench, 2013). Also, looking into previous researchers' way of designing surveys studying M&E implementation in a similar way the 5 point Likert scale is predominantly used (e.g. Zerfass et al, 2017; Wright & Hinson, 2012; Xavier et al, 2005).

A practical matter, though, is the obvious fact that the respondent is a human being with other work to do, a certain attention span and no formal obligation whatsoever to answer the questionnaire – simply, it's not a computer or a robot filling out this survey. Therefore, it's important to make sure the respondent stays alert and answer real and honest statements throughout the whole questionnaire. To avoid autopilot answering due to a boring or too long questionnaire and jaded respondents. It is a very practical issue, but of great importance for validity; I need to make sure all respondents answer what they really think and perceive, otherwise the survey design will not capture what it intends to (Wrench, 2013). To deal with

this potential validity problem survey question no. 18 have a semantic differential instead of a 5 point Likert; using a 7 point scale.

The scales are generally coded with high values indicating strongly agreement with the statement, while low values indicate less agreement; 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree (see Appendix 1). Though, for the reason of attempting to make the respondent stay alert survey question no. 12, 13, 14, 15 are coded in a reverse manner; low points indicate high agreement while high values indicate low agreement.

4.2.2. Dependent variables

The dependent variable, level of outcome M&E implementation, is operationalized with two survey questions; "When measuring and evaluating communication activities I focus on…" and "Which items are normally measured by your organization to evaluate your communication efforts?" (no. 3 and 4 in the survey). For both of them there is a set of statements and the respondent will indicate high values for agreeing with the statement, and low values for disagreeing with the statement. A 5 point Likert scale is used.

Half of the statements are items associated with outcome implementation, formed inspired by previous literature's operational definitions of communication outcome and output. Indicators such as "Our customer's level of knowledge about our messages", "If our communication changed peoples' attitudes or opinions" and "Our audience's intention to behave in a certain way", and are clearly related to measuring communications' effect on stakeholders. Also different kind of cognitive effects are highlighted, such as knowledge, attitude or intention of behave (Lindenmann, 1998; 2003; Smith, 2013; AMEC, 2016).

The second question have 3 statements associated with outcome. This question is inspired from Zerfass et al's (2017), question "Which items are monitored or measured by your organization to assess the effectiveness of communication management/public relations?" attempting to study the characteristics of M&E implementation in practice. "Stakeholder attitudes and behavior change", "Satisfaction of internal groups" and "Knowledge of key messages" are the 3 operational indicators for outcome implementation.

These two survey questions totally concern 14 statements, where half of them (7) are outcome statements that will be used for statistical analysis. When analyzing the data, the idea is that the outcome variables will be summed together into a summative index studying level of outcome implementation. Naturally an internal reliability test will be done to check whether the index is useful (Pallant, 2010).

4.2.3. Intermediate variables

4.2.3.1. M&E used for reporting

In survey questions no. 24-27 M&E used for reporting and planning are studied. The development of both of these operational indicators are inspired by the operationalization in Zerfass et al (2017). No. 24 "In my organization, measurements and evaluations are used to establish the level of success communication activities had" and no. 26 "I consider the findings of measurements valuable for reporting communication activities' level of success" are statements measuring to what extent M&E is used for reporting; where insights is utilized for reporting level of success an activity have (backwards).

4.2.3.2. M&E used for planning

Question no. 25 and 27 studies whether M&E and findings is used for future strategic planning; "In my organization, the findings of measurements are used as material for future strategic planning of communication", and "I consider the findings of measurements valuable for reporting communication activities' level of success". High values indicates agreement in the statements, and low values indicates disagreement. 5 point Likert scales are used at all of these four variables.

4.2.4. Independent variables

4.2.4.1. Knowledge

With the line of reasoning above (*3.2.2 Knowledge*), this Knowledge-variable attempt to measure the actual cognitive knowledge among communication practitioners – rather than perceived knowledge. Zerfass et al (2017) is studying knowledge (or "measurement skills") of practitioners, by asking "How would you rate your personal capabilities in the following areas?". Though, this study tries to avoid studying practitioners' perceived level of knowledge, and aims for testing the actual knowledge among them.

Therefore, two survey questions were constructed (no. 10 and 11); "How would you rate the importance of the following measurement activities?" and "When measuring our communication activity's impact on our stakeholders I value skills in…". A set of statements was formulated for both of the questions. Also, for both of them a 5 point Likert scale, where high values indicate agreeing in the statements while low values indicate disagreeing, was used.

Question no. 10 have 10 statements, where half of them is associated with measuring communication outcome and the other half is associated with output. These statements were developed in line with typical indicators for outcome and output M&E, stated in previous research (DPRG/ICV, 2011; Lindenmann, 1993; 1998; 2003; AMEC, 2016; Jalakas & Johansson, 2014). The same logic is used in question no. 11, having 6 statements, half outcome statement and half output.

By answering these two questions respondents indicate how important they perceive output contra outcome M&E; how these are valued. And since normative theories of research conclude outcome to be more important than output implementation – the level of output contra outcome M&E becomes an indicator of the level of knowledge among practitioners. To be exact: the level of knowledge of research recommendations of outcome and output implementation.

Indicating high values on outcome statements (such as "Analyze your potential costumers' preferences" or "Quantitative surveys on attitude among target audiences") and low values on output statements (such as "Analyze website statistics of

visitors and their behavior on your website" or "Content analysis of your organizations appearance in media coverage") means that respondents agrees in how research value these items. Thereby, this variable is intended to measure the knowledge of the respondents, and it should be said, to underline again, that this knowledge refers to knowledge about research recommendations about outcome and output M&E implementation.

This is an attempt to approach the knowledge-variable in a bit different way, in order to study the actual cognitive knowledge. Zerfass et al (2017) concludes that future research should continue investigating barriers hindering successful M&E implementations and states that "practitioners possibly do not know that they should conduct evaluation at the outflow level or whether they believe communication impact at the output level is equivalent to organizational success." (Zerfass et al 2017, p. 14). Maybe lack of knowledge about the major relevance of measuring outcome simply is an important predictor for why is not implemented.

Also, Xavier et al (2006) reported that lack of knowledge was not an important obstacle for M&E implementation compared to lack of time and resources. Though, as stated by themselves "their [practitioners] individual knowledge of research practices was not tested" (p. 7). This study's operationalization of knowledge (about research's recommendation) is a way of testing the knowledge.

4.2.4.2. Perception of M&E standards

Survey question no. 12-15 is studying perception of M&E standards. Statements such as "Today there are no established methods and techniques for measuring communication activities" and "It is not possible to ever unite around a common approach for measuring communication activities" is intended to study the degree of which practitioners believe that there are standardized ways of measuring communication.

Question no. 14 ("I have learned standard approaches and techniques for measuring communication activities and apply them in my work with strategic communication") stand out a bit compared to the other three since it is formulated without a negative (negation), while the others are. As mentioned above, the 5 point Likert

scale is reversed on these four variables meaning that high values indicate disagreement with the statement, while low values indicate agreement. That implies that high values on question no. 14 mean you do not believe in M&E standards, while the case is opposite for the other three variables since the statement is formulated with a negative.

Since the scale is coded in another direction compared to the rest of the variables, all of these four variables will be reversed. Details (e.g. the names of the new variables) will be presented in the Findings-section below.

4.2.4.3. Perceived lack of resources

Perceived lack of resources to implement M&E (survey no. 16-18) ask three types of questions; "Measuring and evaluating communication activities takes a lot of time and resources", "In my organization we do not have enough time or resources to measure communication the way we would have wanted" and "Please indicate how costly you consider the following measurement and evaluation activities". The last one (no. 18) entails 4 statements where respondents are supposed to fill out, on a 7-point semantic differential scale, the degree they perceive different M&E activities as costly (high values) or cost efficient (low values). Question no. 16 and 17 have 5 point Likert scale where high values means agreeing with statement while low values means disagreeing.

It should be noted that this variable study the *perception* of lacking resources to implement M&E, or perceived lack of budget. Not in any way whether practitioners actually do lack in resources to implement M&E or not.

4.2.5. Background variables

Some background questions were also added, in order to control for spurious correlations; regarding the respondents' organizational context in terms of size and

type of organization. Also, since this matter is related to strategic communication a control question about whether the head of communication have a seat in the execute board was added. In addition, the respondents are also asked to indicate their gender and education level.

Gender have two values (male coded as 1, female coded as 2). Type of organization have the values company, governmental organization, non-profit organization (based on the categories of Zerfass et al's, 2017). Organizational size has in terms of number of employees, based on European Union's categorization of small and medium sized enterprises (EU Commission, 2017) and the institution Statistics Sweden's (2017) categorizations of large sized enterprises, the following values:

- Micro: 1-10
- Small 11- 50
- Medium-sized 51- 250

- 251-1 000
- 1 001-5 000
- 5 001-10 000
- 10 001 ->

Whether the organizations' head of communication is a part of the executive board is a yes/no question (Yes coded as 1, No coded as 2). Education level have the values High school, Vocational education, 3 years, or less, university, 4 year, or more, university and No formal education.

4.3. Pre-study evaluation

In order to test the survey before distributing it to the sample what is referred to as Cognitive Laboratory Interviews was conducted (Fowler, 2009). 5 Swedish communication practitioners filled out the survey, and afterwards an interview was held separately with each of them. The interviewee gave his/her perceptions on the logic of the survey, wordings and expressions of questions and their answers was compared to the aim of each and every one of the questions. The interviews all together resulted in a few minor changes in phrasings and wording of statements and questions in the survey, however no major changes were made.

Still, this kind of pre-study evaluation was valuable. Especially since the creation of output contra outcome indicators (both at the independent variable; level of output/outcome implementation, and regarding the 'knowledge'-variable) requires the researcher's (mine) subjective judgement in determining these operational indicators from statements and formulations in previous research. To as high extent as possible, of course, the indicators in this survey are developed accumulatively; in this case meaning that the work of similar studies have been guiding the procedures (Zerfass et al, 2017; Macnamara, 2015, etc.). In the ambition of being as transparent as possible, however, it should be said that there is always a risk of subjectivity; simply, another researcher might would have developed these operational indicators in other manners.

For this reason, also, it was of crucial importance to ensure that the operationalization is not too subjective by conducting a pre-evaluation interview with an expert; in this case executive board member of the AMEC institute.

4.4. Data collection

The total population of this study is Swedish communicators in a position possible to conduct M&E implementation. Since M&E is a part of strategic communication, a survey question attempting to make sure it is practitioners able to measure and evaluate as a part of strategic communication answering the survey was added as survey-item no. 1 (see Appendix 1). It was a mandatory Yes/No statement formulated "In my position I can work with communication in a strategic way". If replying No to this question the respondent had to leave the survey, if a Yes-reply was filled out the respondent could continue to the further questions. Again, this in order to make sure the population, i.e. practitioners with possibilities to actually implement M&E, was captured.

The total number of respondent filling out and submitting the survey (n) was 75.

4.4.1. Sample strategy

In order to hand out surveys to a probability sample of this population a list of all Swedish practitioners (with possibilities to implement M&E) would have been a necessary. From there a random sample would have been drawn aiming for a representativeness. The problem is no such list exists.

Therefore, in order to get access to a sample of Swedish communication practitioners the survey was distributed by Sweden's biggest network for communicators "Sveriges kommunikatörer". They have over 7 000 members in companies, governmental organizations and NGOs to whom the survey was distributed.

The sampling strategy was a non-probability sample with self-selection. Sveriges kommunikatörer distributed the survey for their members through their weekly newsletter, at their website and via their social media platforms.

This is not in any way ideal for a quantitative survey study, however for practical reasons it was most likely the best (or perhaps the only) alternative available. Also, comparing the procedure with similar studies examining M&E implementation it is clear that many share this kind of non-probability sampling (e.g. Xavier et al, 2005; 2006; Walker, 1994; Wright & Hinson, 2012). Using a similar way of reasoning, Zerfass et al (2017, p. 15) even states that "This study has several limitations. It is not representative for the studied population as the exact number of public relations professionals in Europe is not known, so a probability sampling is impossible". So, neither this study can claim that results are representative for a larger population of communicators and the sampling strategy will harm the potential of generalizability (this will be reflected upon in *7. Reflections and Implications*). Though, of practical reasons "beyond the researcher" it might still have been the best possible solution.

4.5. Validity

Validity is the degree of which you (operationally) study what you intend to (theoretically) study; the coherency between the theoretical and operational definitions (Wrench, 2013; Bryman, 2015).

This have been reflected upon continuously throughout the study. Though an additional point worth addressing regarding validity is how the operation indicators are formulated, how the survey-items are phrased. In essence this is of course a question of whether respondents to interpret the survey-items the way intended. In other words; what the connection between the theoretical concepts and the operational indicators look like, whether what really is studied equals what is intended to be studied (Wrench, 2013).

Even though the operationalization, development of indicators, is inspired by other scholars' operational use of the same (or similar) variables (e.g. Zerfass et al, 2017; Lindenmann, 1998; 2003; Baskin et al, 2010) and pre-evaluative interviews was made in order to gain validity there are potential problems in this matter.

One example is the M&E used for reporting-variable which is operationalized as the indicator "In my organization, measurements and evaluations are used to establish the level of success communication activities had". This phrasing is in line with the theoretical definition of M&E insights utilized for reporting or retrospective purposes, and also very similar to the way Zerfass et al (2017) approach this variable. But still, there is a possibility that "establish the level of success communication activities had" is not explicitly enough point in the reporting and backwards-looking manner intended.

5. Findings

Statistical analyses of the data (n=75) collected show several interesting significant correlations, serving plausible predictions for M&E used for reporting, M&E used for planning and Level of Outcome implementation. It should be briefly stated also that correlation does not equal causation, not even when using advanced statistical analyzes cause-and-effect-relationships can be identified for sure (Wrench, 2013; Pallant, 2010).

This chapter will initially show some descriptive statistics and frequencies of the so called background variables. Thereafter, the section will consist of three headings, one for each RQ; Predicting M&E used for reporting (RQ1), Predicting M&E for planning (RQ2) and Predicting Outcome implementation (RQ3). For all these sections, a natural process of the statistical analyzes will follow; firstly, showing some univariate analyzes (descriptive statistics and frequencies) of the dependent variable, thereafter descriptives and bivariate analyzes and lastly a multiple regression analysis testing the predictability of the independent variables when controlled for simultaneously.

This pattern is repeated in the three sections approaching the RQs in the most systematic and clearest way possible.

5.1. Sample demographics

The so called "background-variables" are included in the analysis, not because they are theoretically interesting, but rather in order to check for potential effects based on the demographics of the sample and the nature of the organizations practitioners operate in. This is to discover possible significant correlations concerning e.g. the type of organization or gender of the respondents rather that those independent variables theoretically interesting for this study. That is crucial for avoiding making

conclusions based on spurious correlations. Therefore, these will be included when testing correlations at bivariate level and also in the multiple regression analyzes.

Also, these five variables can initially here show crucial info about the sample. The distribution of the demographics (gender and education of the practitioners) and also the nature of the practitioners' organization (whether the head of communication have a seat at the executive board, the type of organization and its size).

Table 1: Frequencies & Descriptives for Background variables.

Variable	Values	Frequency	Percentage	N	Mean	Median	Std. Deviation
Is the head of communication a part of the executive board in your organization?				74	1,38	1	0,49
	Yes	46	62,2 %				
	No	28	37,8 %				
Gender				74	1,54	2	0,50
	Male	34	45,9 %				
	Female	40	54,1 %				
Type of organization				75	1,61	1	0,75
	Company	41	54,7 %				
	Governmental organization	22	29,3 %				
	NGO	12	16,0 %				
Organization size (no. of employees)				75	3,91	4	1,89
	1-10	7	9,3 %				
	11-50	16	21,3 %				
	51-250	11	14,7 %				
	251-1 000	9	12,0 %				
	1 001-5 000	16	21,3 %				
	5 001-10 000	7	9,3 %				
	10 000 or more	9	12,0 %				
Education				75	3,60	4	0,70
	High school	1	1,3 %				
	Vocational education	3	4,0 %				
	3 year, or less, university	24	32,0 %				
	4 year, or more, university	44	58,7 %				
	No formal education	3	4,0 %				

Comment: Percentage refer to the *valid percent* SPSS show, that does not include the missing cases.

A few notions can be addressed: there are slightly more respondents that identify themselves as female. A majority of the respondents have university education (3 years or less). In fairly many of the organizations (62 percent) does the head of communication take part in the executive board. And most of the respondent work is companies.

To be able to use the nominal scaled background variables for further bivariate and multiple regression analysis these are recoded. Type of organization was transformed into three binary variables for Company, Governmental organization and NGO[1]. Organization size was transformed into three binary variables; Small (1-250 employees), Medium-sized (251- 5000 employees) and Large organizations (5 001 employees or more)[2]. The Education variable was transformed into a binary variable, indicating whether the respondent has any university education or not (the values '3 years, or less' and 4 years, or more')[3].

The two remaining background variables; whether the head of communication is a part of the executive board, and gender, are binary already and can be used as quantitative variables in further analyzes.

5.2. Predictors for M&E used for reporting

In order to answer RQ1; what can explain why M&E is used for reporting, a set of analyzes was conducted. Initially univariate analyzes in order to study the frequencies of the dependent (intermediate) variable M&E used for reporting and the independent variables and check for outliers. Then bivariate analyzes of M&E used for reporting together with the independent variables. Lastly, a multiple regression

[1] The new variables were named "DUM_comp1" (Company), "DUM_gov_org1" (governmental organization) and "DUM_NGO" (Non-governmental organization).
[2] The new variables were named "DUM_Org.size_SMALL" (1-250 employees), "DUM_org.size_MID" (251-5000 employees) and "DUM_org.size_LARGE" (5001 employees or more).
[3] The new variable was named "DUM_uni_ed" (has university education).

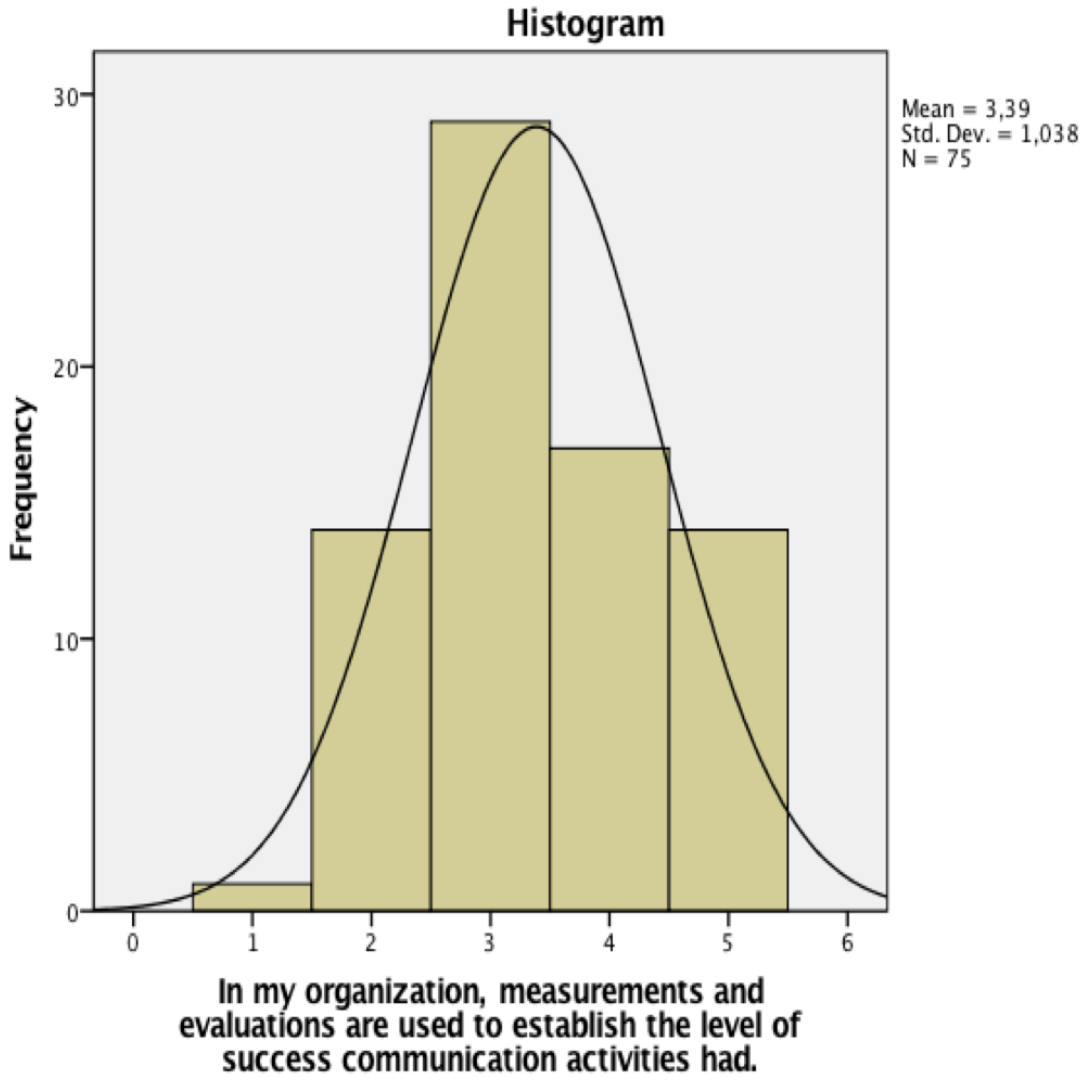
analysis was conducted in order to test the predictability of the independent variables.

However, first some descriptive statistics of the dependent (intermediate) variables will be shown.

Table 2: Frequencies & Descriptives of M&E used for reporting.

Variable	Values	Frequency	Percentage	N	Mean	Median	Std. Deviation	Min	Max
In my organization, measurements and evaluations are used to established the level of success communication activities had.				75	3,39	3	1,04	1	5
	Not at all	1	1,3 %						
	To a little extent	14	18,7 %						
	To some extent	29	38,7 %						
	To a great extent	17	22,7 %						
	To a very great extent	14	18,7 %						

Figure 2: Frequencies, M&E used for reporting.



It should be noted that the concept M&E used for reporting here is operationalized with the variable "In my organization, measurements and evaluations are used to established the level of success communication activities had". That is because in the dataset there were two operational indicators for M&E for reporting; the one just mentioned above and "I consider findings of measurements valuable for reporting communication activities' level of success". And the latter had fewer significant bivariate correlations with the independent variables and could not be predicted via a multiple regression, while the former worked better in that regard. And more importantly, it also was accurate in relation to the theoretical definition.

So, to clarify: henceforth referring to M&E used for reporting means respondent level of agreement on the variable "In my organization, measurements and evaluations are used to established the level of success communication activities had".

As visualized in Figure 2, M&E used for reporting is fairly normally distributed. No signs are shown that it would not be possible to continue with this variable for more advanced analyzes.

5.2.1. Bivariate analyzes: M&E used for reporting

As a step towards testing the predictability of the independent variables in a multiple regression, univariate and bivariate analyzes was made. So after showing descriptive statistics for the independent variables a correlation matrix of the correlation between all the independent variable and M&E used for reporting.

Table 3: Descriptives, independent variables for M&E used for reporting

Variable	N	Mean	Std. Deviation	Min	Max
Knowledge	71	46,92	8,80	24	60
Perceived lack of resources					
M&E perceived costly	75	3,63	0,89	2	5
Not enough time/resources	75	3,67	1,29	1	5
Costliness of 'measuring communication effect of audiences'	75	4,75	1,78	1	7
Costliness of 'conducting surveys, focus groups, interviews'	73	5,25	1,63	1	7
Costliness of 'measuring organizations' media appearance'	74	3,05	1,70	1	7
Costliness of 'analyzing web & social media statistics'	74	1,99	1,22	1	6

The frequencies of the independent variables can be found in Appendix 4. They are not perfect normally distributed but a bit skewed (some to the right, some to the left), though no outliers could be identified in any of the variable.

As Table 3 shows, Knowledge is a summative index, while for the concept Perceived lack of resources all the 6 operational variables the theoretical concept consists of are used.

The *Knowledge* variable is a summative index that intend to represent to what degree respondents are knowledgeable about normative research. As reflected upon above (4.3.4.1. Knowledge) it consists of 8 survey statements concerning communication outcome items, and 8 statements concerning other measurement items (predominantly communication *output*). One of the clearest recommendations of normative research is that outcome is substantially more important for M&E than output (Lindenmann, 1998; 2003; Macnamara, 2015; DPRG/ICV, 2011; AMEC, 2016), and on these 16 survey statements respondent was asked to fill out the level of importance they perceived for each of the statements. That would indicate the level of which they put importance in output and outcome measures, and indirect the level of which they were knowledgeable about normative research.

The output statements were likely to co-variate and outcome statements were likely to co-variate, which is also confirmed by a factor analysis (extracting 2 factors, specifically looking for these patterns) showing a pattern in respondents' answers. One factor had loadings on all of the 8 output coefficients and a second factor had loaded on all the 8 outcome coefficients (see Appendix 2).

Therefore, all output coefficients' scales were reversed in order to construct one variable measuring knowledge; degree of importance put in outcome contra output measures. Thereby, how much respondents agrees and disagrees with the recommendations within normative research, and consequently how knowledgeable they are about this.

On the (16) coefficients studying knowledge (about research recommendations), a Cronbach Alpha showed an internal reliability of 0,852, and these 16 were computed into a summative index. High values on this index shows indicate high perceived importance of outcome M&E and at the same time low perceived importance of output M&E (in other terms: high knowledge about normative research). And low values on this summative index indicate high perceived importance of output M&E, and low perceived importance of outcome M&E (in other terms: low knowledge about normative research).

However, there are no ambition to aggregate the 6 variables Perceived lack of resources-variables. These will all be included in bivariate analysis and multiple regression analysis.

The correlations for M&E used for reporting and the independent variables are shown in the Table 4. Attached are clarifications for the abbreviations.

Table 4: Correlation matrix, M&E used for reporting.

	1	2	3	4	5	6	7	8	9
1 REP	1,00	-,420**	0,145	-,266*	-0,041	0,077	-0,120	-0,189	-,235*
2 KNOW		1,00	-0,229	-,236*	-,307**	-0,228	0,068	,327**	,371**
3 PC(1)			1,00	,472**	,490**	,448**	-0,150	-0,119	-0,137
4 PC(2)				1,00	,458**	0,176	-0,131	-0,046	-0,012
5 PC(3)					1,00	,525**	-0,059	-0,127	-0,202
6 PC(4)						1,00	-0,226	-0,209	-0,016
7 PC(5)							1,00	,338**	0,120
8 PC(6)								1,00	0,187
9 BV(1)									1,00

Comment: *p<0,05, **p<0,01

Abbreviations for Table 4.

1 REP	M&E used for reporting
2 KNOW	Knowledge
Perceived lack of resources	
3 PC(1)	M&E perceived costly
4 PC(2)	Not enough time/resources
5 PC(3)	Costliness of ‘measuring communication effect of audiences’
6 PC(4)	Costliness of ‘conducting surveys, focus groups, interviews’
7 PC(5)	Costliness of ‘measuring organizations’ media appearance’
8 PC(6)	Costliness of ‘analyzing web & social media statistics’
Background variable	
9 BV(1)	University education

Bivariate analysis showed some significant correlations. Between M&E for reporting and independent variables; Knowledge and 'Not enough resources'. Also, the only significant background variable 'University education' is included in the correlation matrix and will be included in the multiple regression.

Though, the correlation at bivariate level was tested for all five background variables (Appendix 5). The other four background variables were not significant why there is no point including them in the multiple regression analysis.

5.2.2. Multiple regression analysis: M&E used for reporting

In order to test the predictability of the independent variables when controlling for them at the same time, a multiple regression analysis was conducted.

In three models, adding one concept stepwise; first Knowledge, then adding Perceived lack of resources and finally controlling for University education.

Table 5: Multiple regression analysis, M&E used for reporting

	Model 1	Model 2	Model 3
Knowledge	–	–	–
	0,05**	0,06**	0,06**
	(0,01)	(0,01)	(0,01)
Perceived lack of resources			
M&E perceived costly		0,39*	0,38*
		(0,15)	(0,15)
Not enough time/resources		–	–
		0,40**	0,40**
		(0,10)	(0,10)
Costliness of 'measuring communication		– 0,06	– 0,06
effect of audiences'		(0,08)	(0,08)
Costliness of 'conducting surveys, focus		– 0,05	– 0,04
groups, interviews'		(0,08)	(0,08)
Costliness of 'measuring organizations'		0,08	– 0,08
media appearance'		(0,07)	(0,07)
Costliness of 'analyzing web & social		0,01	0,01
media		(0,09)	(0,10)
statistics'			
University education			– 0,08
			(0,40)

Constant	5,71** (0,62)	6,99** (0,91)	7,00** (0,92)
N	71	71	71
R2 (Adjusted R square)	0,16	0,34	0,33

Comment: *p<0,05, **p<0,01

Knowledge is significant at the .99-level even when controlling for the other variables, however have a weak correlation coefficient. Even though level of Knowledge seems to be statistically significant it can only contribute to predicting M&E used for reporting with –0,06**. That indicates a negative relationship, meaning that lower level of knowledge correlates with higher degree of M&E used for reporting (and vice versa), still a fairly weak prediction.

Model 2 indicates that 'M&E perceived costly' have a strong positive (0,39*) correlation and 'Not enough time/resources' have a strong negative correlation (–0,40**) with the dependent variable. The correlation remains strong and significant for these two Perceived lack of resources-variables, even when controlling for University education, which non-significant.

In summary, the model has three significant correlation coefficients. Knowledge do contribute predicting the dependent variable, being significant and having a negative coefficient of –0,06**. 'M&E perceived costly' have a much stronger (positive) correlation coefficient of 0,38* indicating that practitioners perceive M&E as costly (it takes a lot of time and resources) and still increasingly use it for reporting. Also, 'Not having enough time/resources' is negatively correlated with the dependent variable (at –0,40**) indicating that the more respondents perceive they do not enough resources to measure the way they would have wanted, the less is M&E used for reporting.

The adjusted R square in the final model shows that 33 percent of the variance in the dependent variable can be predicted by the model. Though, in the second model (without University education) it is slightly higher (34 percent). However, in both cases it shows a high predictability of the model as a whole.

Normal PP-plot and Scatterplot (is a bit tilted) show some patterns in the residual indicating there might be relevant predictors missing (see Appendix 6).

Multicollinearity is avoided, no correlations above 0,8 (Pallant, 2010). See Appendix 6. ANOVA reports significance for each and every of the 3 models (see Appendix 6).

5.3. Predictors for M&E used for planning

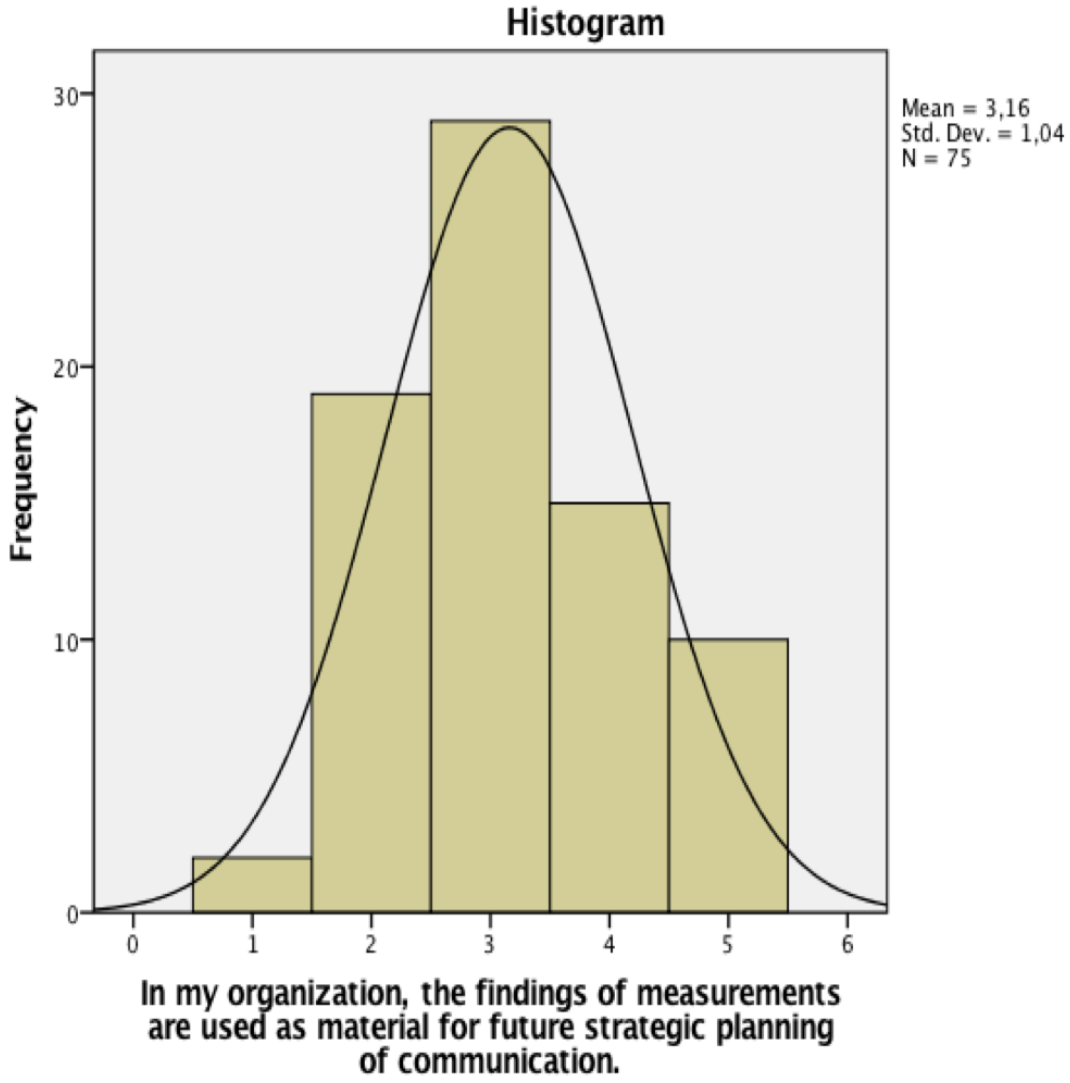
In order to answer RQ2; what can explain why M&E is used for planning, the same set of analyzes as above (for M&E used for reporting) was conducted. Firstly, univariate analyzes studying the frequencies of the dependent (intermediate) variable M&E used for planning and the independent variables and check for outliers. Then bivariate analyzes of M&E used for planning together with the independent variables. Lastly, a multiple regression analysis was conducted in order to test the predictability of the independent variables simultaneously.

However, first some descriptive statistics of the dependent (intermediate) variables will be shown.

Table 6: Frequencies & Descriptives of M&E used for planning.

Variable	Values	Frequency	Percentage	N	Mean	Median	Std. Deviation	Min	Max
In my organization, the findings of measurements are used as material for future strategic planning of communication.				75	3,16	3	1,04	1	5
	Not at all	2	2,7 %						
	To a little extent	19	25,3 %						
	To some extent	29	38,7 %						
	To a great extent	15	20,0 %						
	To a very great extent	10	13,3 %						

Figure 3: Frequencies, M&E used for planning.



It should be noted that the concept M&E used for planning here is operationalized with the variable "In my organization, the findings of measurements are used as material for future strategic planning of communication". That is because in the dataset there were two operational indicators for M&E for planning; the one just mentioned above and "I consider findings of measurements valuable for future strategic planning of communication". And the latter had fewer significant bivariate

correlations with the independent variables and could not be predicted via a multiple regression, while the former worked better in that regard. And more importantly, it also was accurate in relation to the theoretical definition.

So, to clarify: henceforth referring to M&E used for planning means respondent level of agreement on the variable "In my organization, the findings of measurements are used as material for future strategic planning of communication".

As visualized in Figure 3, M&E used for planning is fairly normally distributed, only a bit skewed to the right. No signs are shown that it would not be possible to continue with this variable for more advanced analyzes.

5.3.1. Bivariate analysis: M&E used for planning

As a step towards testing the predictability of the independent variables in a multiple regression, univariate and bivariate analyzes was made. So after showing descriptive statistics for the independent variables a correlation matrix of the correlation between all the independent variable and M&E used for planning will be presented.

Table 7: Descriptives, independent variables for M&E used for planning.

Variable	N	Mean	Std. Deviation	Min	Max
Knowledge	71	46,92	8,80	24	60
Perception of standards					
Today no established standard	75	2,80	1,03	1	5
Looked for standards, but could not find any	75	3,12	1,13	1	5
Learned standards and apply them	75	3,37	1,02	1	5
Not possible to unite around standards	75	2,93	1,12	1	5
Perceived lack of resources					
M&E perceived costly	75	3,63	0,89	2	5
Not enough time/resources	75	3,67	1,29	1	5
Costliness of 'measuring communication effect of audiences'	75	4,75	1,78	1	7
Costliness of 'conducting surveys, focus groups, interviews'	73	5,25	1,63	1	7
Costliness of 'measuring organizations' media appearance'	74	3,05	1,70	1	7
Costliness of 'analyzing web & social media statistics'	74	1,99	1,22	1	6

The Knowledge variable is used as a summative index, in the same manner as above. And again, Perceived lack of resources is used de-aggregated, the 6 variables representing the theoretical concept Perceived lack of resources are intended to be used for further analysis. The same thing regard Perception of standards; the 4 variables representing the theoretical concept will be used for further analysis.

The scale of the four variables derived from the theoretical concept Perception of standards ('Today no established standard', Looked for standards, but could not find any', Learned standards and apply them' and 'Not possible to unite around standards') have been reversed. This is because these were coded with increasing disagreement in the statements at high values while decreasing disagreement (increasing agreement) at low values (see Appendix 1). And since this is contrary to all other variables used (which have agreement in the statement at high values), these four variables are recoded into new variables[4] with scales where high values indicate increasing agreement in the statements made.

[4] The new names of the variables are the following: "Today there are no established methods of techniques for measuring communication" is now "REV_today_no_standard". "I have been looking for standardized ways of measuring communication activities but could not find any" is now "REV_not_find_standard". "I have learned standard approaches and techniques for measuring communication activities and apply them in my work with strategic communication" is now "REV_standards_learned_applied". "It is not possible to ever unite around a common approach for measuring communication activities" is now "REV_impossible_unite_standard".

Table 8: Correlation matrix, M&E used for planning.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 PLAN	1,00	,278*	–,375**	–,570**	,514**	–,234*	-0,126	-,545**	-,328**	-0,181	-0,005	0,012	-,349*
2 KNOW		1,00	–,301*	–,402**	,344**	–,600**	-0,229	-,236*	-,307**	-0,228	0,068	,327**	-,383*
3 PoS(1)			1,00	,652**	-,391**	,412**	,245*	0,225	,320**	,304**	–,300**	–0,100	,385*
4 PoS(2)				1,00	-,543**	,349**	,331**	,419**	,353**	0,199	–0,212	0,011	,273
5 PoS(3)					1,00	-,320**	–,367**	–,407**	–,289*	–,257*	0,154	0,059	–0,16
6 PoS(4)						1,00	0,207	,228*	0,222	0,189	–,258*	–,270*	,399*
7 PC(1)							1,00	,472**	,490**	,448**	-0,150	-0,119	0,09
8 PC(2)								1,00	,458**	0,176	-0,131	-0,046	0,19
9 PC(3)									1,00	,525**	-0,059	-0,127	0,19
10 PC(4)										1,00	-0,226	-0,209	,284
11 PC(5)											1,00	,338**	-0,08
12 PC(6)												1,00	-0,02
13 BV(1)													1,00

Comment: *p<0,05, **p<0,01

Abbreviations for Table 8.

1 PLAN	M&E used for planning
2 KNOW	Knowledge
Perception of Standards	
3 PoS(1)	Today no established standard
4 PoS(2)	Looked for standards, but could not find any
5 PoS(3)	Learned standards and apply them
6 PoS(4)	Not possible to unite around standards
Perceived lack of resources	
7 PC(1)	M&E perceived costly
8 PC(2)	Not enough time/resources
9 PC(3)	Costliness of ‘measuring communication effect of audiences’
10 PC(4)	Costliness of ‘conducting surveys, focus groups, interviews’

11 PC(5)	Costliness of ‘measuring organizations’ media appearance’
12 PC(6)	Costliness of ‘analyzing web & social media statistics’
Background variable	
13 BV(1)	Is the head of communication a part of the executive board in your organization?

Tell that the background variables was included in the bivariate analysis. However, only one was significant…

Bivariate analysis showed several significant correlations. Between M&E for planning and independent variables Knowledge, many of the Perception of standards-variables and several of the Perceived lack of resources-variables. Also, the only significant background variable ‘Head of communication in the executive board (?)’ is included in the correlation matrix and will be included in the multiple regression.

Though, the correlation at bivariate level was tested for all five background variables (Appendix 5). The other four background variables were not significant why there is no point including them in the multiple regression analysis.

5.3.2. Multiple regression analysis: M&E used for planning

In order to test the predictability of the independent variables when controlling for them at the same time, a multiple regression analysis was conducted. This is done stepwise, in four models; first testing Knowledge, then controlling for Perception of standards, then Perceived lack of resources and finally the background variable (Head of communication in the executive board (?)).

Table 9: Multiple regression analysis, M&E used for planning

	Model 1	Model 2	Model 3	Model 4
Knowledge	0,03*	0,003	– 0,005	– 0,01
	(0,01)	(0,02)	(0,01)	(0,01)
Perception of standards				
Today no established standard		0,01	– 0,04	0,01
		(0,14)	(0,13)	(0,13)
Looked for standards, but could not find any		– 0,38**	– 0,33*	– 0,34**
		(0,13)	(0,13)	(0,12)
Learned standards and apply them		0,29*	0,25*	0,27*
		(0,12)	(0,11)	(0,11)
Not possible to unite around standards		0,01	– 0,01	0,03
		(0,12)	(0,11)	(0,11)
Perceived lack of resources				
M&E perceived costly			0,41**	0,38**
			(0,13)	(0,13)
Not enough time/resources			– 0,36**	– 0,33**
			(0,01)	(0,09)
Costliness of 'measuring communication			– 0,02	– 0,03
effect of audiences'			(0,07)	(0,07)
Costliness of 'conducting surveys, focus			– 0,09	– 0,05
groups, interviews'			(0,07)	(0,07)
Costliness of 'measuring organizations'			– 0,11	– 0,11
media appearance'			(0,06)	(0,06)
Costliness of 'analyzing web & social media			0,05	0,07
statistics'			(0,09)	(0,09)
Head of communication in executive board?				– 0,40
				(0,22)
Constant	1,62*	3,19**	4,31**	4,67**
	(0,66)	(1,16)	(1,25)	(1,25)
N	71	71	71	71
R2 (Adjusted R square)	0,07	0,34	0,49	0,51

Comment: *p<0,05, **p<0,01

Table 9 show that it is obvious that the significance of Knowledge disappears when controlling for the other variables, not being significant in any other model than Model 1.

Model 2 indicate that 'Looked for standards. but could not find any' have a strong (–0,38**) negative correlation and 'Learned standards and apply them' have a positive fairly strong correlation (0,29*) with the dependent variable.

The strength in the predictability of perception of standards decreases a bit, however, when controlling for perceived lack of resources. 'M&E perceived costly' have a strong positive correlation at 0,38**, while 'Not enough time/resources' show a strong negative correlation coefficient (–0,33**). These do both decline a

bit when the background variable is included, however it is not statistically significant.

Summarizing, 'Looked for standards, but could not find any' and 'Learned standards and apply them' together with 'M&E perceived costly' and 'Not enough resources' seems to be the best (and only significant) predictors for M&E used for planning, being a valuable notion when answering RQ2.

The adjusted R square show increasingly high level of predictability of the models. In model no. 4 above half (51 percent) of the variance in the dependent variable is predicted.

Normal PP-plot and Scatterplot (is a bit tilted) show some patterns in the residual indicating there might be predictors missing (see Appendix 6).

Multicollinearity is avoided, no correlations above 0,8 (Pallant, 2010). See Appendix 6. ANOVA reports significance for each and every of the 4 models (see Appendix 6).

5.4. Predicting Outcome implementation

Finally, attempting to predict the level of outcome implementation, the same procedures as above are used; initially some univariate analyzes (frequencies and descriptives) will be presented. Thereafter a bivariate analysis showing the association with outcome implementation and M&E used for reporting and M&E used for planning. Arriving at a multiple regression analysis predicting the level of outcome implementation.

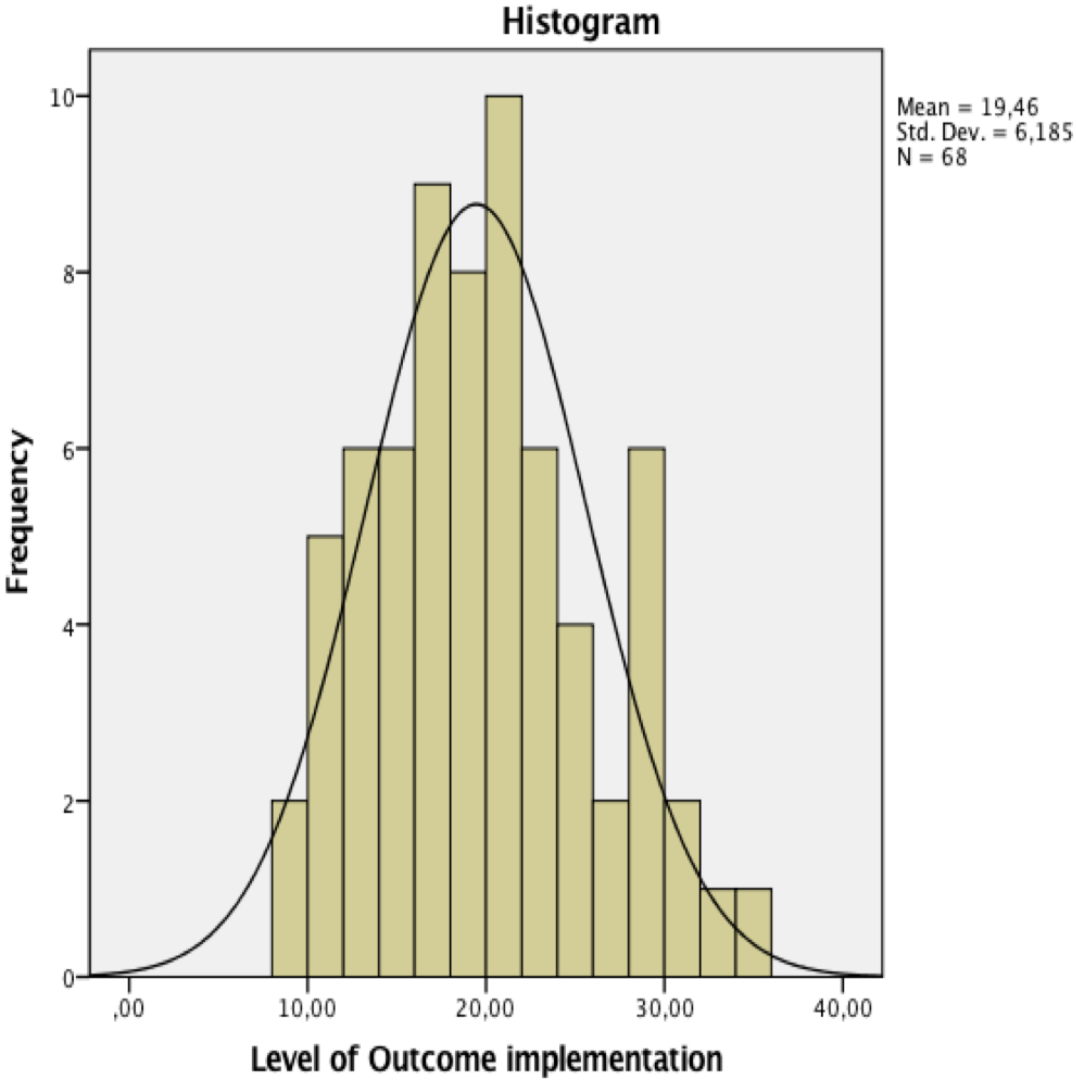
The variable Outcome implementation is a summative index consisting of the survey statements (7) regarding implementation of outcome in survey question 3 and 4.

These seven items were tested for internal reliability, showing a Cronbach's Alpha value of 0,865 (above the limit of 0,7, see Pallant, 2010), see Appendix 3. Then made into a summative index (named "SUM_outcome_impl1" in the dataset) indicating the level of outcome implementation.

Table 10: Frequencies & Descriptives of Outcome implementation.

Variable	Values	Frequency	Percentage	N	Mean	Median	Std. Deviation	Min	Max
Level of Outcome implementation.				68	19,46	19	6,18	9	35
	9	2	2,9 %						
	10	1	1,5 %						
	11	4	5,9 %						
	12	2	2,9 %						
	13	4	5,9 %						
	14	3	4,4 %						
	15	3	4,4 %						
	16	4	5,9 %						
	17	5	7,4 %						
	18	5	7,4 %						
	19	3	4,4 %						
	20	5	7,4 %						
	21	5	7,4 %						
	22	3	4,4 %						
	23	3	4,4 %						
	24	1	1,5 %						
	25	3	4,4 %						
	26	2	2,9 %						
	28	3	4,4 %						
	29	3	4,4 %						
	31	2	2,9 %						
	33	1	1,5 %						
	35	1	1,5 %						

Figure 4: Frequencies, outcome implementation.



As visualized in Figure 4, the variance in Outcome implementation is fairly normally distributed, only a bit skewed to the right. No signs are shown that it would not be possible to continue with this variable for more advanced analyzes.

5.4.1. Bivariate analysis: Outcome implementation

A bivariate analysis was made between the independent variables (M&E used for reporting and M&E used for planning) and the dependent variable.

Table 11: Correlation matrix, Outcome implementation.

	Outcome implementation	M&E for reporting	M&E for planning	Head of communication in executive board?	Company
Outcome implementation		0,39*	0,74**	– 0,39**	0,29*
M&E for reporting			0,57**	0,02	0,13
M&E for planning				–0,35**	0,14
Head of communication in executive board?					– 0,12
Company					

Comment: *p<0,05, **p<0,01

As Table 11 show that both M&E used for reporting and for planning has significant bivariate correlations with the dependent variable.

Also, the only significant background variables 'Head of communication in the executive board (?)' and Company was included in the correlation matrix and will be included in the multiple regression.

Though, the correlation at bivariate level was tested for all five background variables (Appendix 5). The other three background variables were not significant why there is no point including them in the multiple regression analysis.

5.4.2. Multiple regression analysis: Outcome implementation

In order to test the predictability of the independent variables simultaneously a multiple regression analysis is conducted.

Table 12: Multiple regression analysis, Level of outcome implementation.

	Model 1	Model 2	Model 3
M&E used for reporting	2,31**	– 0,26	– 0,08
	(0,68)	(0,61)	(0,61)
M&E used for planning		4,52**	3,99**
		(0,61)	(0,66)
Head of communication in executive board?			– 1,74
			(1,14)

Company			2,24* (1,01)
Constant	11,65** (2,40)	6,06** (1,92)	8,33** (2,66)
N	68	68	68
R2 (Adjusted R square)	0,14	0,53	0,57

Comment: *p<0,05, **p<0,01

Table 12 show that the significance of M&E used for reporting disappear when controlling for M&E used for planning. M&E for planning continues to be the most important predictor even when controlling for the background variables in model 3. Though, significance can be found for Company.

In summary, M&E used for reporting cannot be proven to predict the level of outcome implementation in lacking of significance. Though, M&E used for planning appear to be a major predictor for the variance in outcome implementation, showing a (positive) correlation coefficient of 3,99** in the third model. The more M&E is used for planning, the more outcome tends to be implemented (and vice versa). Also, there is statistical support proving that companies to a higher degree implement communication outcome.

The adjusted R square show very high level of predictability of the model, explaining 57 percent of the variance in the dependent variable at the third model. It should be highlighted also, that the R2 increased from 14 percent up to 53 percent when M&E used for planning was included in the model. That being an indication of how important this variable seems to be in predicting outcome implementation.

Furthermore, Normal PP-plot and Scatterplot show no patterns in the residual indicating that there is probably no predictors missing (see Appendix 6).

Multicollinearity is avoided, no correlations above 0,8 (Pallant, 2010). See Appendix 6. ANOVA reports significance for each and every of the 4 models (see Appendix6).

6. Conclusions

The findings show highly interesting predictions regarding M&E for reporting, M&E for planning and level of Outcome implementation. The nature of the relationships, whether hypotheses can be confirmed or not, and the conclusions that can be made based on the findings will be discussed in this section. This is done by explicitly answering the three research questions steering this study; *What factors can explain why M&E is used for reporting? (RQ1)*, *What factors can explain why M&E is used for planning (RQ2)* and *How can M&E used for reporting and M&E used for planning explain the level of which communication Outcome is implemented? (RQ3)*.

6.1. What explains M&E used for reporting (RQ1)

Findings indicate that the operational indicators Knowledge, 'M&E perceived costly' and 'Not enough resources (to measure communication the way we would have wanted)' have significant correlation coefficients for predicting level of M&E for reporting. The strength in the correlation differs from fairly weak (for knowledge) to fairly strong (for 'M&E perceived costly' and 'Not enough resources'), still these three items are the best predictors for M&E for reporting.

Thereby can the theoretical concepts Knowledge (of normative research) and Perceived lack of resources be understood as explaining why M&E is used for reporting. Level of knowledge about normative research have a negative correlation with M&E used for reporting, indicating that the higher level of knowledge of the recommendation of normative research practitioners have, the less is M&E insights utilized in a reporting manner. While lower levels of knowledge tend to give higher level of M&E used for reporting.

This indicates that if practitioners do not know about (or do not agree in) the recommendations done by normative research that is heavily occupied with strategic communication management suggesting M&E insights to be used future-oriented, for planning purposes (e.g. Zerfass et al, 2017), then practitioners tend to use M&E insights for retrospective (legitimizing) purposes.

That is in accordance with the expected relationship of the hypothesis (*Knowledge will be negatively correlated with M&E used for reporting)*, why H1 can be confirmed.

Regarding Perceived lack of resources, the result of the operational indicator 'Not enough resources (to measure communication the way we would have wanted)' suggests that practitioners perceive that they lack in resources to measure communication the way they would have wanted. It seems like they imagine a "better", or more desired, way of using M&E that they perceive they do not have enough resources to implement which would suggest that H2 (*Perceived lack of resources will be negatively correlated with M&E used for reporting*) can be confirmed.

However, the operational item 'M&E perceived costly' view another dimension of this concept; the positive correlation with M&E for reporting suggests that the more M&E is perceived to be costly, the more it is used for reporting. Put differently, it indicates that *even though* M&E is perceived costly it is implemented. It seems like practitioners are aware of the costliness however is M&E not perceived to be *too costly* to implement.

6.2. What explains M&E used for planning? (RQ2)

For M&E used for planning, the operational indicators 'Looked for standards, but could not find any', 'Learned standards and apply them', 'M&E perceived costly' and 'Not enough resources (to measure communication the way we would have wanted)' have significant correlation coefficients in predicting the dependent variable. All four items have fairly strong correlations.

Consequently, the theoretical concepts Perception of standards and Perceived lack of resources should be understood as explaining why M&E is used for planning. Knowledge (of normative research) was lacking significance as correlation

coefficient in the multiple regression analysis, why this study cannot statistically prove that the correlation is true. Thereby can H2 not be confirmed.

'Looked for standards, but could not find any' had a negative correlation with M&E for planning, and 'Learned standards and apply them' had a positive correlation, why it can be concluded that the more practitioners believe there are standars for communication measurement and do apply them, the more M&E is used for planning. Since using M&E insights for future planning of communication activities should be understood as a standard (within normative research), this finding is not surprising (Michaelson & Stacks, 2011; Zerfass et al, 2017).

That is in accordance with the expected relationship of the hypothesis (*Perception of standards will be positively correlated with M&E used for planning*), hence H4 can be confirmed.

The result for Perceived lack of resources is very similar to the correlations for M&E for reporting (above). 'Not enough resources (to measure communication the way we would have wanted)' suggests that practitioners perceive that they lack in resources to measure communication the way they would have wanted indicating that H5 (*Perceived lack of resources will be negatively correlated with M&E used for planning*) can be confirmed. Though, again 'M&E perceived costly' view another dimension of this concept; the positive correlation with M&E for planning suggests that when M&E is perceived to be costly, M&E is still used for planning. It seems like practitioners perceiving M&E as costly also are letting it be costly and still implement M&E for planning (and also reporting) purposes. It can be concluded that practitioners do not perceive M&E to be *too costly* to decrease in implementing it for reporting and planning purposes.

6.3. How can M&E for reporting/planning explain level of Outcome implementation? (RQ3)

The final part of the result concern the role of M&E used for reporting and planning in predicting the dependent variable; level of outcome implementation.

Findings show that M&E used for planning have a significant correlation coefficient for outcome implementation. It is a positive correlation indicating that when practitioners utilize M&E insights for planning purposes they also tend to implement communication outcome to a higher degree.

This is an expected, but nevertheless highly interesting, result that now can be supported by statistically significant findings of this study. Normative research suggesting that M&E insights to be used future-oriented, for future strategic planning of communication activities, also recommend implementing outcome measures; the communication effect among target audiences (Macnamara, 2015; Zerfass et al, 2017; AMEC, 2016; DPRG/ICV, 2011; Lindenmann, 2003). This is because using data from measurements and evaluation of an activity have to be relevant for the planning of other activities in order to be meaningfully utilized for future planning of communication. Measuring outcome is measuring the effect among audiences; changes in their cognitive, affective and conative components, and since these changes in target groups most likely will be relevant continuously in planning communication activities outcome measures are highly suitable for M&E is intended to utilize insights as a basis for future strategic planning (Zerfass et al, 2017; Macnamara, 2015; Lindenmann, 1998; 2003; Likely & Watson, 2013). And the present study can show that when practitioners implement the advice and recommendations of normative communication management literature (e.g. Smith, 2013; Watson, 2012; Zerfass et al, 2017; AMEC, 2015; 2016) suggesting insights to be utilized for planning, practitioners will also implement outcome M&E in practice.

The hypothesis (*M&E used for planning will be positively correlated with Outcome implementation*), H7, can thereby be confirmed.

M&E used for reporting cannot be proven to predict level of outcome implementation, in lack of statistical significance. Therefore, H6 cannot be confirmed.

However, it should be underlined that it can neither be concluded that it for sure does *not* predict outcome implementation, only that this study cannot prove that (nor how) it does.

Also, the findings suggest that respondents working at companies implement outcome measurements to a higher degree since the coefficient of *Organization type: Company* showed a positive (significant) correlation. Though, could no statistically significant results could be found for NGOs nor Governmental organizations (organization type).

7. Reflections and Implications

The purpose of this paper is twofold, and consequently the central conclusions of it should be seen mainly in two different dimensions. Partly, the role of M&E used for reporting (not statistically significant) and planning in predicting the level of outcome implementation among Swedish communication practitioners. Partly, what can explain M&E used for reporting and planning purposes.

In this section the findings and conclusions made in this study will be briefly reflected upon and critically discussed. In addition, some implications based on the conclusions will be reasoned about; of scientific (theoretical) and of managerial (practical) manner. Also, recommendations for future research will be made.

7.1. Reflections

Something should initially be noted regarding the knowledge generated from this study and what it can be useful for. The findings are based on a sample of 75 respondents, which would have to be considered a fairly low number of respondent for a sample with a total population of Swedish practitioners. The data is collected from a probability sample with self-selection which is not ideal for the possibility of generalize the findings among the population as a whole (Swedish communication practitioners). This is merely a consequence of practical matters (discussed in Methodology, above), and a realistic alternative to this procedure was hard to find. However still, since the sample strategy not being a non-probability one the possibility to prove that the result of this study is generalizable for the population as a whole is severely harmed (Wrench, 2013; Bryman, 2015).

The independent variable Knowledge is treated a bit different in this study compared to previous literature. That is a conscious choice; not because perceived knowledge or capability is uninteresting. However, simple because approaching Knowledge in another manner also might be interesting. It should be underlined

again that Knowledge throughout this study refer to knowledge about normative research.

Even though mentioned above already, it might be interesting to briefly reflect on whether the findings of this study actually are representing causation, or correlation; simply. Can we observe in which direction this correlation goes? The true answer is no, not even with advanced statistical methods we can *observe* or prove causation. However, using tools such as previous knowledge we can try to grasp which direction correlations go (Wrench, 2013; Bryman, 2015).

This is particularly relevant concerning the M&E for planning and outcome-relationship. This relationship is poorly studied in previous literature, also identified by Zerfass et al (2017) stating that the effects of future-oriented utilization of M&E is under-explored. The possibility that level of outcome implementation in reality is causing the degree of which M&E is used for planning should be opened up for.

Though perhaps the concept of sequentiality; the *time aspect* of different phenomenon might help understanding this relationship. If using M&E for planning purposes and idea about how objectives and measurements insights will be employed before you practically implement M&E. Returning to the phases of Formative research-Planning-Execution-Evaluation commonly used in strategic communication management, it can be argued that even though Evaluation is done lastly, chronologically, in this chain of events communication planners will most likely have an idea (or a plan) for how M&E data will be used before measuring (Falkheimer & Heide, 2014B; Zerfass et al, 2017).

So, the perception of M&E as a tool used for future planning is likely to be formed before, in time, M&E-practices (such as outcome) are implemented. Therefore, even though previous knowledge is poor in this regard this line of reasoning would suggest that M&E used for planning actually is causing level of outcome implementation.

7.2. Scientific implications

The most important contributions of this study is showing that the level of outcome implementation can be predicted by M&E used for planning. And that M&E used for planning can be predicted by the degree of which standards for M&E are perceived to be valid and relevant for practitioners, but also by the degree of which practitioners perceive to be lacking resources to implement M&E, and that M&E is perceived to be costly (but M&E for planning, nevertheless).

Due to lack of statistical significance it cannot be proven that M&E used for reporting is a valid predictor for outcome implementation. Even though, the findings indicating what explains why M&E is used for reporting (RQ1) is relevant (explaining 34 percent of the variance). It is concluded that level of knowledge (about normative research) and level of which practitioners perceive they lack resources to implement M&E.

The 'M&E perceived costly' variable (an operational indicator for the Perceived lack of resources-variable) might also be highlighted again. It is highly interesting that it had a positive correlation coefficient in predicting both M&E used for reporting and planning.

7.3. Managerial implications

If trusting that outcome actually is as important as stated by normative research, the conclusions of this study of course would have to suggest the industry to follow normative research of strategic communication management and consequently use measurements and evaluation for planning purposes.

Utilizing M&E insights for planning purposes seem to cause higher levels of outcome implementation. If perceiving M&E as a tool for planning; using measurement insights for future planning of communication activities, it will probably become clear that communication outcomes is the most suitable items to measure. Communication outcome regard the effects among target groups (their knowledge,

attitude and intentions of behavior), these (cognitive, affective and conative) components of the target groups are usually not only relevant for one specific activity but relevant monitoring over time and over several communication initiatives. So, by using M&E in future-oriented, strategy (rather than single activities) can be utilized and indirect strive for excellence in communication management.

7.4. Future research

Zerfass et al (2017) state that "the benefits of using measurement insights to plan future communication activities" is under-explored so far in literature. This study can present statistical evidence that using measurements for future planning of communication activities cause higher level of outcome implementation, and from the perspective of normative research recommending outcome implementation that should be seen as a benefit of M&E used for planning.

Though, in line with Zerfass et al's (2017) statement, of course, future research should continuously study the effects of using measurement insights for future planning.

Also, it is recommended to strive for exploring the role of M&E for reporting for the nature of measurements and evaluation. In lack of statistical significance this study could not present how M&E for reporting affect outcome implementation, hence future research might study that relationship.

Naturally, future research should also continue trying to understand why M&E is used for reporting and planning in organizations. Knowledge, Perceived lack of budget and Perception of standards have been identified as relevant predictors, however most likely are there other ways understanding why M&E insights is utilized for reporting and planning purposes among communication practitioners.

Lastly, future research should continue exploring outcome implementation and what can predict level of outcome being practiced. Research is clear in the sense that outcome is important, however what causes outcome can be explored more in detail. As mentioned several times above previous research has found that items such as level of knowledge and lack of budget seem to affect the nature of M&E.

However, it would be suitable using outcome implementation as a dependent variable explicitly, to see what role these independent variables have specifically for level of outcome implementation.

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Appendix

Appendix 1: Survey

Dear respondent,

My name is Robert Söderqvist, and I'm writing my master thesis in Strategic communication at Lund university. Together with Sveriges kommunikatörer I'm studying the use of measurements and evaluation among Swedish communicators, and that's the reason you have received this survey. To help us analyze how communicators in Sweden today measure and evaluate their communication.

This would be very valuable for my thesis work, for Sveriges kommunikatörer's work in this issue and for research and science on strategic communication. So if you have approximately 10-15 minutes to fill this survey out we would be very thankful.

The survey is totally anonymous, so please be as honest and accurate in your answers as possible. The total and aggregated results and conclusions of this study will be communicated via Sveriges kommunikatörer in June.

Thanks a lot in advance!

Yours sincerely,
Robert Söderqvist,
in collaboration with *Sveriges kommunikatörer*

1. In my position I can work with communication in a strategic way.

- ○ Yes
- ○ No

2. Is the head of communication a part of the execute board in your organization?

- ○ Yes
- ○ No

3. When measuring and evaluating communication activities I focus on...

	Never	Rarely	Sometimes	Often	Always
In which tone our organization is presented in media	○	○	○	○	○
Measuring the communication's effect on our stakeholders	○	○	○	○	○
The media presence of my organization overall	○	○	○	○	○
The "reach" of e.g. campaigns; the number of people who are exposed to our message	○	○	○	○	○
Our customer's level of knowledge about your messages	○	○	○	○	○
How well we've succeeded in presenting a good image towards our external stakeholders	○	○	○	○	○
If our communication changed peoples' attitudes or opinions	○	○	○	○	○
Our audience's intention to behave in a certain way	○	○	○	○	○

4. Which items are normally measured by your organization to evaluate your communication efforts?

	Never	Rarely	Sometimes	Often	Always
Stakeholder attitudes and behavior change	○	○	○	○	○
Clips from various media platforms and overall media response	○	○	○	○	○
Satisfaction of internal groups	○	○	○	○	○
Statistics on website or intranet use	○	○	○	○	○
Number of posts in social media	○	○	○	○	○
Knowledge of key messages	○	○	○	○	○

5. How often are you exposed to recent research and major findings in general, such as lectures with researchers or academic articles?

- ○ Never
- ○ Occasionally (once or twice altogether)
- ○ Regularly (once or twice a year)
- ○ Often (several times a year)
- ○ Very often (about weekly)

6. How often are you exposed to recent research on measurement and evaluation, through e.g. lectures with researchers or academic articles?

- ○ Never
- ○ Occasionally (once or twice altogether)
- ○ Regularly (once or twice a year)
- ○ Often (several times a year)
- ○ Very often (about weekly)

7. Do you consider yourself familiar with recent research and major findings in general?

- ○ 1. Not at all
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7.
- ○ 8.
- ○ 9.
- ○ 10. To a very great extent

8. Do you consider yourself familiar with recent research and major findings on measurement and evaluation?

- ○ 1. Not at all
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7.
- ○ 8.
- ○ 9.
- ○ 10. To a very great extent

9. To what extent do you apply research in your strategic work with communication?

- ○ 1. Not at all
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7.
- ○ 8.
- ○ 9.
- ○ 10. To a very great extent

10. How would you rate the importance of the following measurement activities?

	Not important	Somewhat important	Important	Very important	Extremely important
Count and follow up on the volume of media publicity	○	○	○	○	○
Evaluate the tone in media coverage, and whether it is in favor of your organization	○	○	○	○	○
Measure your stakeholders' knowledge about your messages	○	○	○	○	○
Study if there is an attitude change after a communication activity	○	○	○	○	○
Count on the total 'reach' of your messages through media (how many had opportunity to be exposed)	○	○	○	○	○
Measure your stakeholders' intentions to behave in a certain way	○	○	○	○	○
Measure the number of readers on intranet pages or news items	○	○	○	○	○
Measure the level of trust among internal groups	○	○	○	○	○
Analyze website statistics of visitors and their behavior on your website	○	○	○	○	○
Analyze your potential costumers' preferences	○	○	○	○	○

11. When measuring our communication activity's impact on our stakeholders I value skills in...

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Analysis of the number of people who have been exposed to your messages; calculations and statistics	○	○	○	○	○
Quantitative surveys on attitude among target audiences	○	○	○	○	○
Content analysis of your organizations appearance in media coverage	○	○	○	○	○
Analyzing statistics for website and intranet use	○	○	○	○	○
Focus groups together with costumers or potential costumers	○	○	○	○	○
Interviews with target audience groups	○	○	○	○	○

12. Today there are no established methods and techniques for measuring communication activities.

- ○ Strongly agree
- ○ Agree
- ○ Neither agree nor disagree
- ○ Disagree
- ○ Strongly disagree

13. I have been looking for standardized ways of measuring communication activities but did not find any.

- ○ Strongly agree
- ○ Agree
- ○ Neither agree nor disagree
- ○ Disagree
- ○ Strongly disagree

14. I have learned standard approaches and techniques for measuring communication activities and apply them in my work with strategic communication.

- ○ Strongly agree
- ○ Agree
- ○ Neither agree nor disagree
- ○ Disagree
- ○ Strongly disagree

15. It is not possible to ever unite around a common approach for measuring communication activities.

- ○ Strongly agree
- ○ Agree
- ○ Neither agree nor disagree
- ○ Disagree
- ○ Strongly disagree

16. Measuring and evaluating communication activities takes a lot of time and resources.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

17. In my organization we do not have enough time or resources to measure communication the way we would have wanted.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

18. Please indicate how costly you consider the following measurement and evaluation activities.

	Cost efficient						Costly
Measuring communications' effect on target audience.	○	○	○	○	○	○	○
Conducting surveys, focus groups and interviews.	○	○	○	○	○	○	○
Measuring my organizations' appearance in media.	○	○	○	○	○	○	○
Analyzing statistics on website and social media activity.	○	○	○	○	○	○	○

19. I would like to learn more about measurement and evaluation of communication.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

20. There is a need for further development of measurement and evaluation of communication in my organization.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

21. I think that measurement and evaluation is crucial for working strategically with communication.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

22. My perception is that measurement and evaluation should be put higher up on the agenda when discussing strategic communication in my organization.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

23. I think measurement and evaluation should be put higher up on the agenda in the communications business discourse.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

24. In my organization, measurements and evaluations are used to establish the level of success communication activities had.

- ○ Not at all
- ○ To a little extent
- ○ To some extent
- ○ To a great extent
- ○ To a very great extent

25. In my organization, the findings of measurements are used as material for future strategic planning of communication.

- ○ Not at all
- ○ To a little extent
- ○ To some extent
- ○ To a great extent
- ○ To a very great extent

26. I consider the findings of measurements valuable for reporting communication activities' level of success.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

27. I consider findings of measurements valuable for future strategic planning of communication.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

Gender

○ Male ○ Female

Type of organization

○ Company ○ Governmental organization ○ Non-profit organization

Organization size

- ○ 1-10 employees
- ○ 11- 50 employees
- ○ 51- 250 employees
- ○ 251-1 000 employees
- ○ 1 001-5 000 employees
- ○ 5 001-10 000 employees
- ○ 10 001 employees or more

Education

- ○ High school (gymnasium)
- ○ Vocational education
- ○ 3 year, or less, university
- ○ 4 year, or more, university
- ○ No formal education

Appendix 2: Factor analysis

Knowledge (of normative research)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,719
Bartlett's Test of Sphericity	Approx. Chi-Square	599,262
	df	120
	Sig.	0,000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4,796	29,974	29,974	4,796	29,974	29,974	4,480
2	3,209	20,057	50,030	3,209	20,057	50,030	3,748
3	1,648	10,301	60,331				
4	1,077	6,731	67,062				
5	1,013	6,332	73,394				
6	0,878	5,490	78,884				
7	0,721	4,508	83,392				
8	0,633	3,956	87,348				
9	0,406	2,536	89,884				
10	0,388	2,427	92,312				
11	0,297	1,855	94,167				
12	0,261	1,634	95,801				
13	0,217	1,356	97,158				
14	0,183	1,142	98,299				
15	0,159	0,995	99,294				
16	0,113	0,706	100,000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a]

	Component 1	Component 2
How would you rate the importance of the following measurement activities? - Count and follow up on the volume of media publicity		0,661
How would you rate the importance of the following measurement activities? - Evaluate the tone in media coverage, and whether it is in favor of your organization		0,493
How would you rate the importance of the following measurement activities? - Measure your stakeholders' knowledge about your messages	0,768	
How would you rate the importance of the following measurement activities? - Study if there is an attitude change after a communication activity	0,795	
How would you rate the importance of the following measurement activities? - Count on the total 'reach' of your messages through media (how many had opportunity to be exposed)		0,564
How would you rate the importance of the following measurement activities? - Measure your stakeholders' intentions to behave in a certain way	0,811	
How would you rate the importance of the following measurement activities? - Measure the number of readers on intranet pages or news items		0,644
How would you rate the importance of the following measurement activities? - Measure the level of trust among internal groups	0,472	
How would you rate the importance of the following measurement activities? - Analyze website statistics of visitors and their behavior on your website		0,606

How would you rate the importance of the following measurement activities? - Analyze your potential costumers' preferences	0,714	
When measuring our communication activity's impact on our stakeholders I value skills in… - Analysis of the number of people who have been exposed to your messages; calculations and statistics		0,771
When measuring our communication activity's impact on our stakeholders I value skills in… - Quantitative surveys on attitude among target audiences	0,716	
When measuring our communication activity's impact on our stakeholders I value skills in… - Content analysis of your organizations appearance in media coverage		0,718
When measuring our communication activity's impact on our stakeholders I value skills in… - Analyzing statistics for website and intranet use		0,823
When measuring our communication activity's impact on our stakeholders I value skills in… - Focus groups together with costumers or potential costumers	0,678	
When measuring our communication activity's impact on our stakeholders I value skills in… - Interviews with target audience groups	0,806	

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 4 iterations.

Appendix 3: Internal reliability tests

Summative index, Knowledge

Case Processing Summary

		N	%
Cases	Valid	71	94,7
	Excluded[a]	4	5,3
	Total	75	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
0,852	16

Outcome implementation

Case Processing Summary

		N	%
Cases	Valid	68	90,7
	Excluded[a]	7	9,3
	Total	75	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
0,865	7

Appendix 4: Frequencies and descriptives

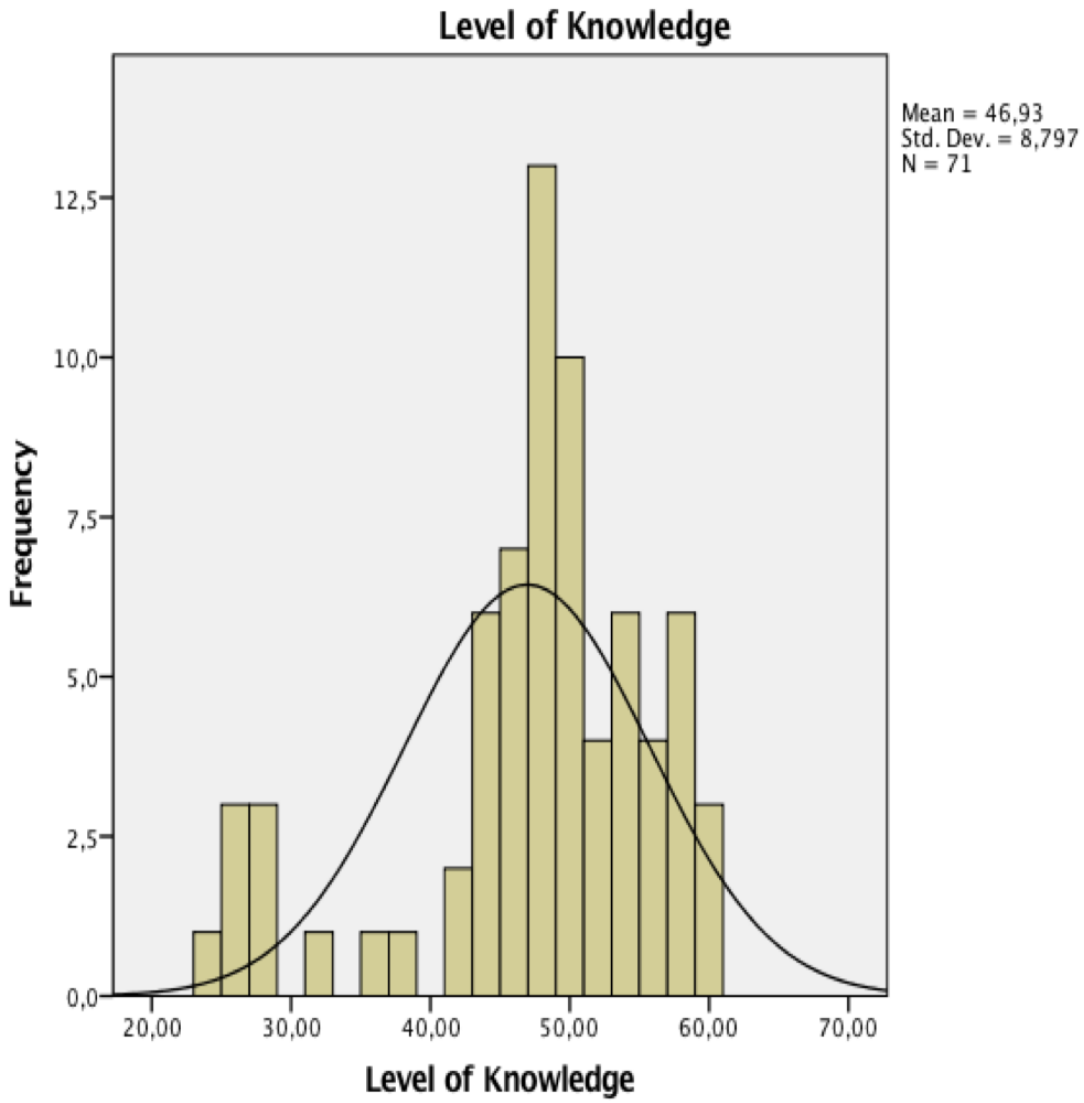
Statistics

		Level of Knowledge	REV_today_no_standard	REV_not_find_standard	REV_standards_learned_applied	REV_impossible_unite_standard	Measuring and evaluating communication activities takes a lot of time and resources.	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.
N	Valid	71	75	75	75	75	75	75	75	73	74	74
	Missing	4	0	0	0	0	0	0	0	2	1	1
Mean		46,9296	2,8000	3,1200	3,3733	2,9333	3,63	3,67	4,75	5,25	3,05	1,99
Std. Error of Mean		1,04397	0,11855	0,13009	0,11820	0,12922	0,102	0,149	0,205	0,191	0,197	0,142
Median		48,0000	3,0000	3,0000	4,0000	3,0000	4,00	4,00	5,00	6,00	3,00	1,50
Std. Deviation		8,79663	1,02667	1,12658	1,02368	1,11904	0,882	1,288	1,779	1,631	1,695	1,222
Minimum		24,00	1,00	1,00	1,00	1,00	2	1	1	1	1	1
Maximum		60,00	5,00	5,00	5,00	5,00	5	5	7	7	7	6

Knowledge

Level of Knowledge

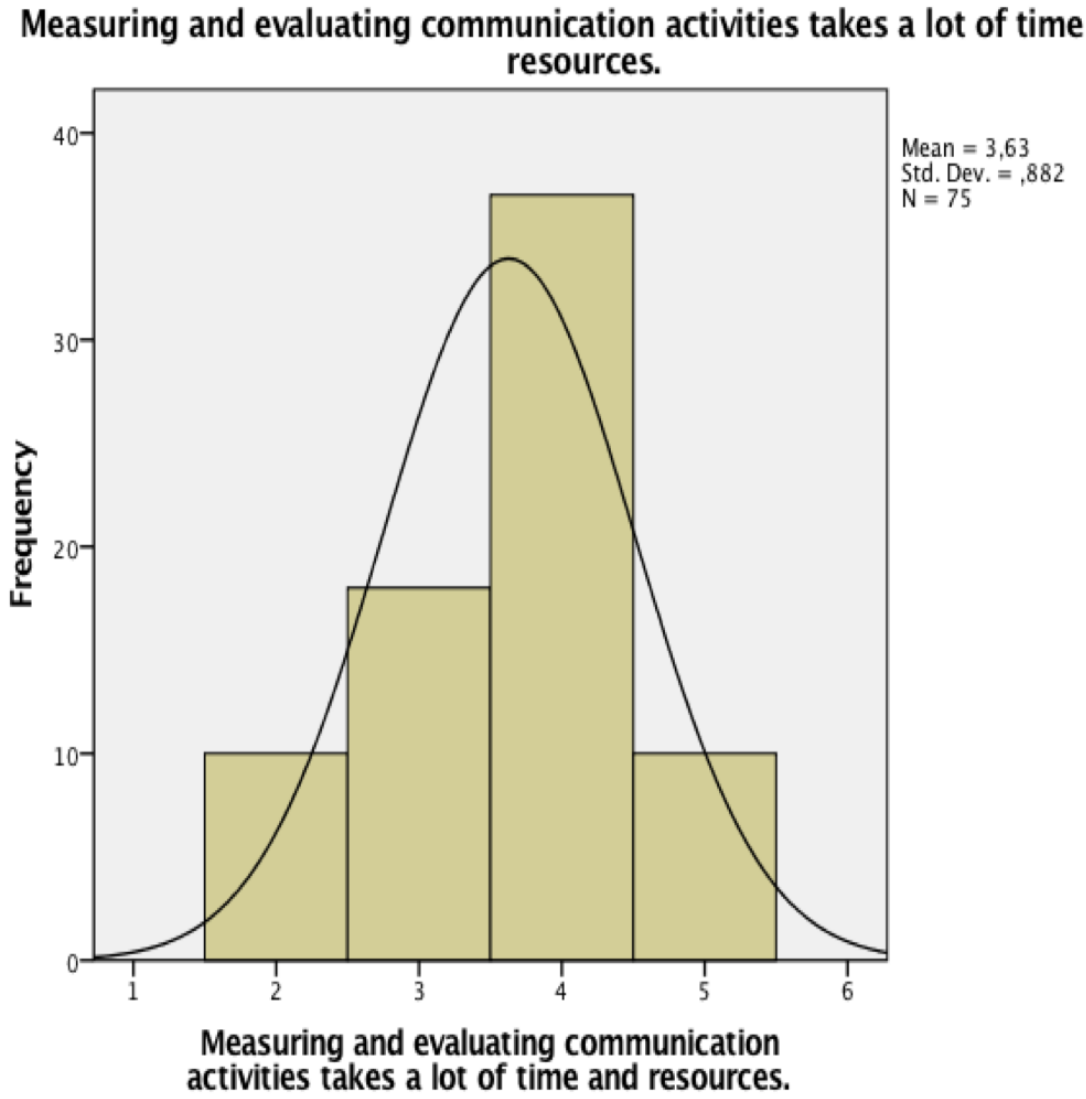
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	24,00	1	1,3	1,4	1,4
	25,00	2	2,7	2,8	4,2
	26,00	1	1,3	1,4	5,6
	27,00	1	1,3	1,4	7,0
	28,00	2	2,7	2,8	9,9
	31,00	1	1,3	1,4	11,3
	36,00	1	1,3	1,4	12,7
	38,00	1	1,3	1,4	14,1
	42,00	2	2,7	2,8	16,9
	43,00	2	2,7	2,8	19,7
	44,00	4	5,3	5,6	25,4
	45,00	3	4,0	4,2	29,6
	46,00	4	5,3	5,6	35,2
	47,00	6	8,0	8,5	43,7
	48,00	7	9,3	9,9	53,5
	49,00	8	10,7	11,3	64,8
	50,00	2	2,7	2,8	67,6
	51,00	3	4,0	4,2	71,8
	52,00	1	1,3	1,4	73,2
	53,00	4	5,3	5,6	78,9
	54,00	2	2,7	2,8	81,7
	55,00	3	4,0	4,2	85,9
	56,00	1	1,3	1,4	87,3
	57,00	3	4,0	4,2	91,5
	58,00	3	4,0	4,2	95,8
	59,00	2	2,7	2,8	98,6
	60,00	1	1,3	1,4	100,0
	Total	71	94,7	100,0	
Missing	System	4	5,3		
Total		75	100,0		



Perceived lack of budget

Measuring and evaluating communication activities takes a lot of time and resources.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	10	13,3	13,3	13,3
	Neither agree nor disagree	18	24,0	24,0	37,3
	Agree	37	49,3	49,3	86,7
	Strongly agree	10	13,3	13,3	100,0
	Total	75	100,0	100,0	

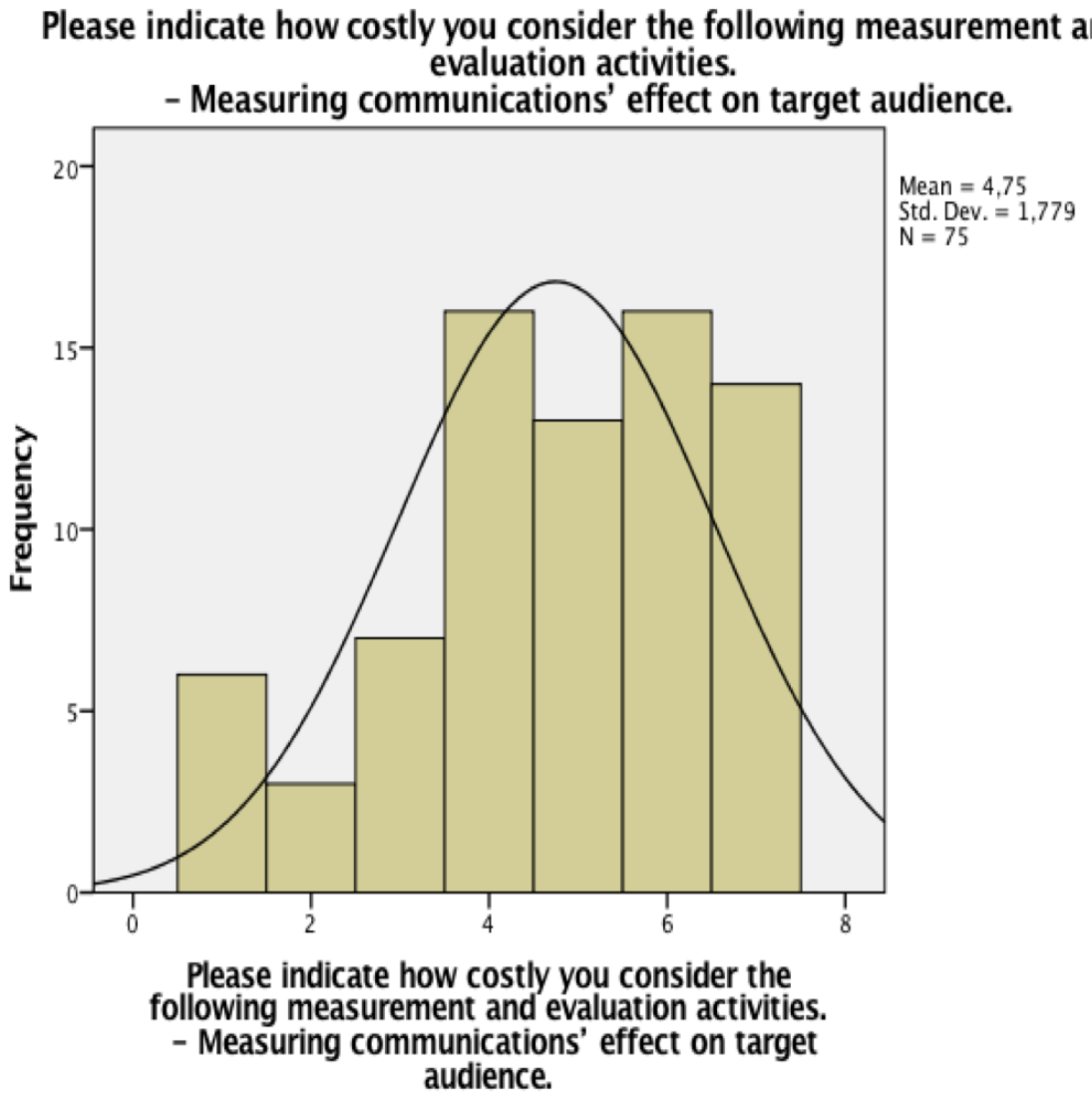


In my organization we do not have enough time or resources to measure communication the way we would have wanted.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	6,7	6,7	6,7
	Disagree	14	18,7	18,7	25,3
	Neither agree nor disagree	6	8,0	8,0	33,3
	Agree	26	34,7	34,7	68,0
	Strongly agree	24	32,0	32,0	100,0
	Total	75	100,0	100,0	

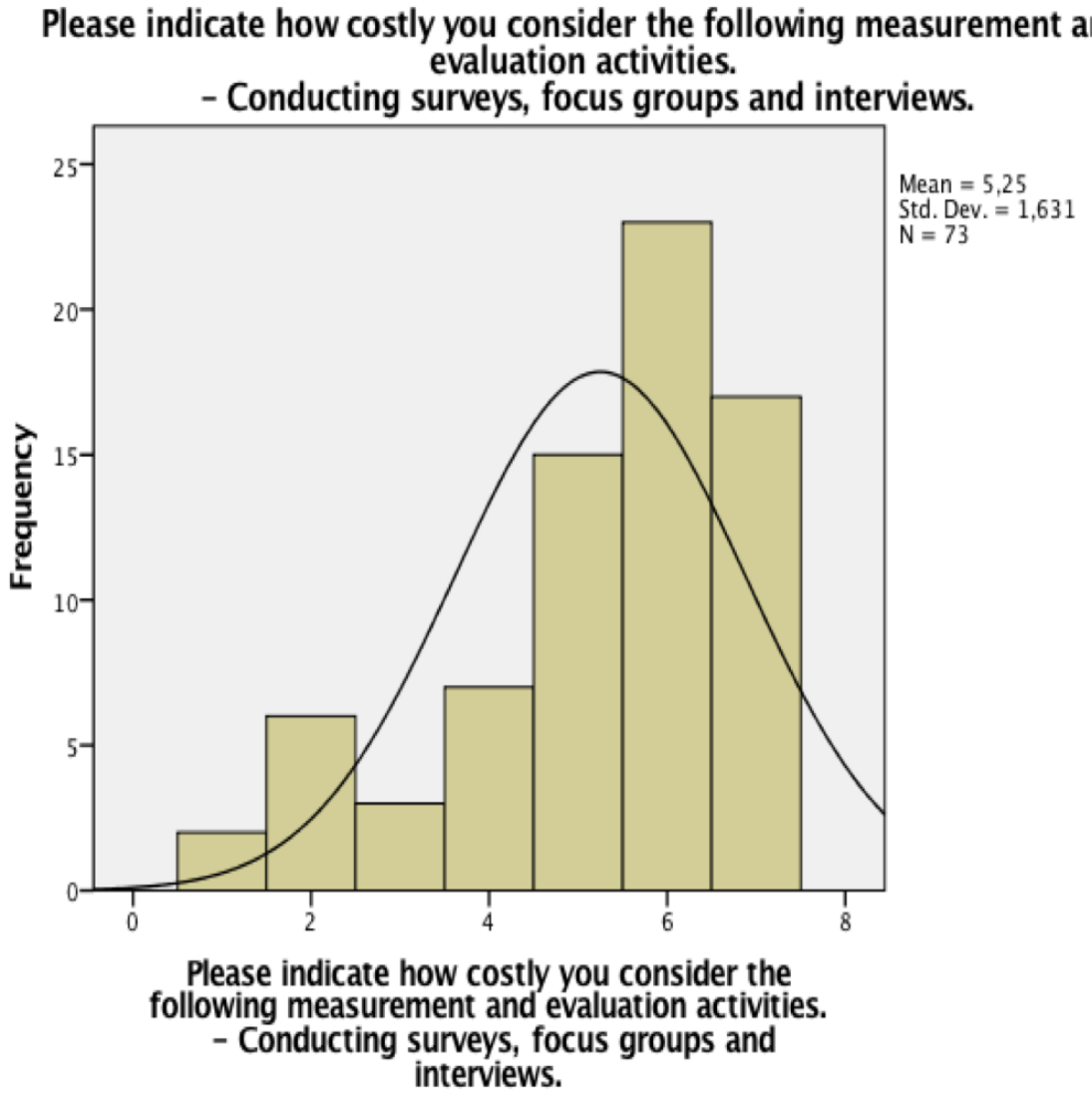
Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cost efficient	6	8,0	8,0	8,0
	2	3	4,0	4,0	12,0
	3	7	9,3	9,3	21,3
	4	16	21,3	21,3	42,7
	5	13	17,3	17,3	60,0
	6	16	21,3	21,3	81,3
	Costly	14	18,7	18,7	100,0
	Total	75	100,0	100,0	



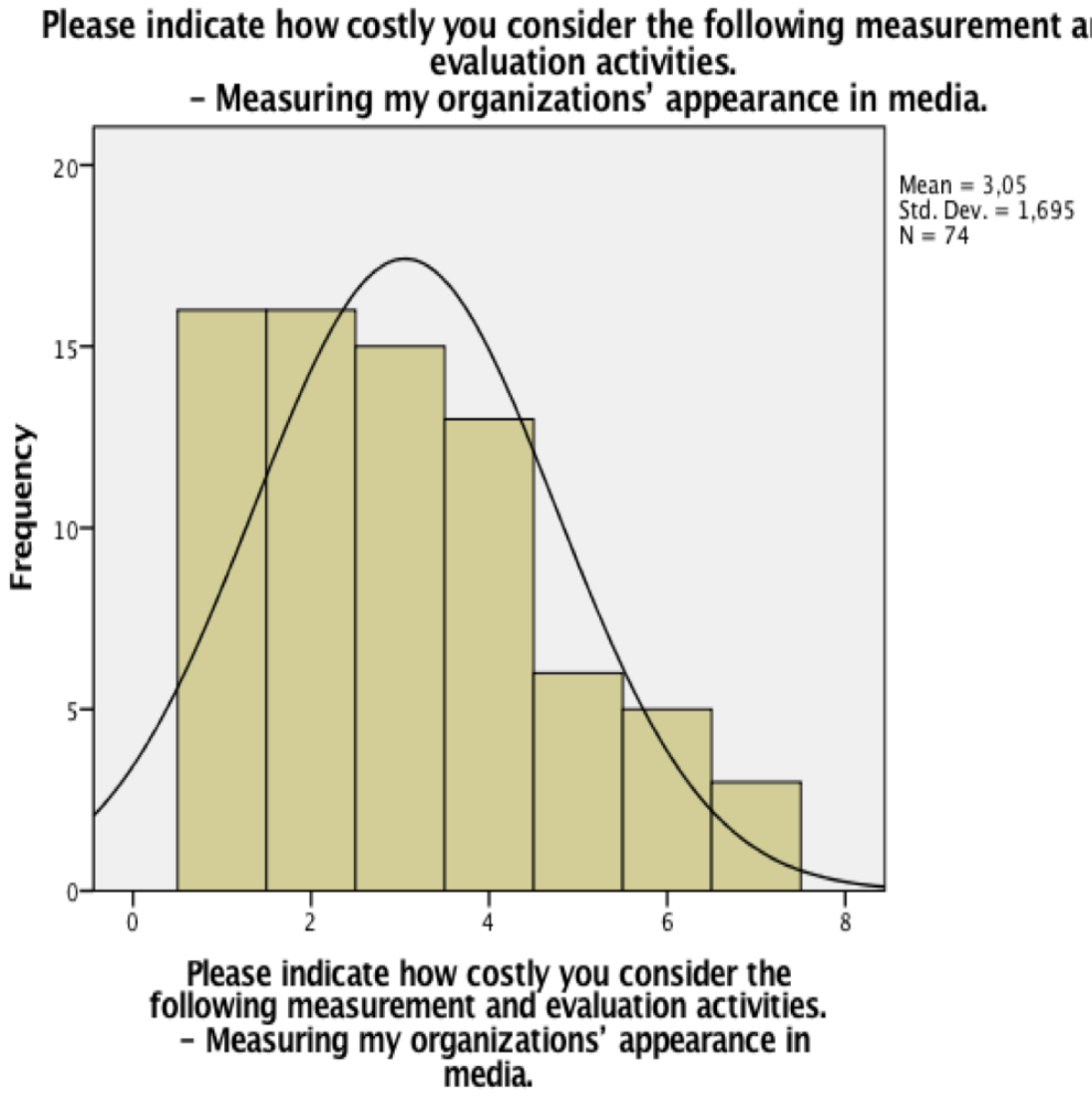
Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cost efficient	2	2,7	2,7	2,7
	2	6	8,0	8,2	11,0
	3	3	4,0	4,1	15,1
	4	7	9,3	9,6	24,7
	5	15	20,0	20,5	45,2
	6	23	30,7	31,5	76,7
	Costly	17	22,7	23,3	100,0
	Total	73	97,3	100,0	
Missing	999	2	2,7		
Total		75	100,0		



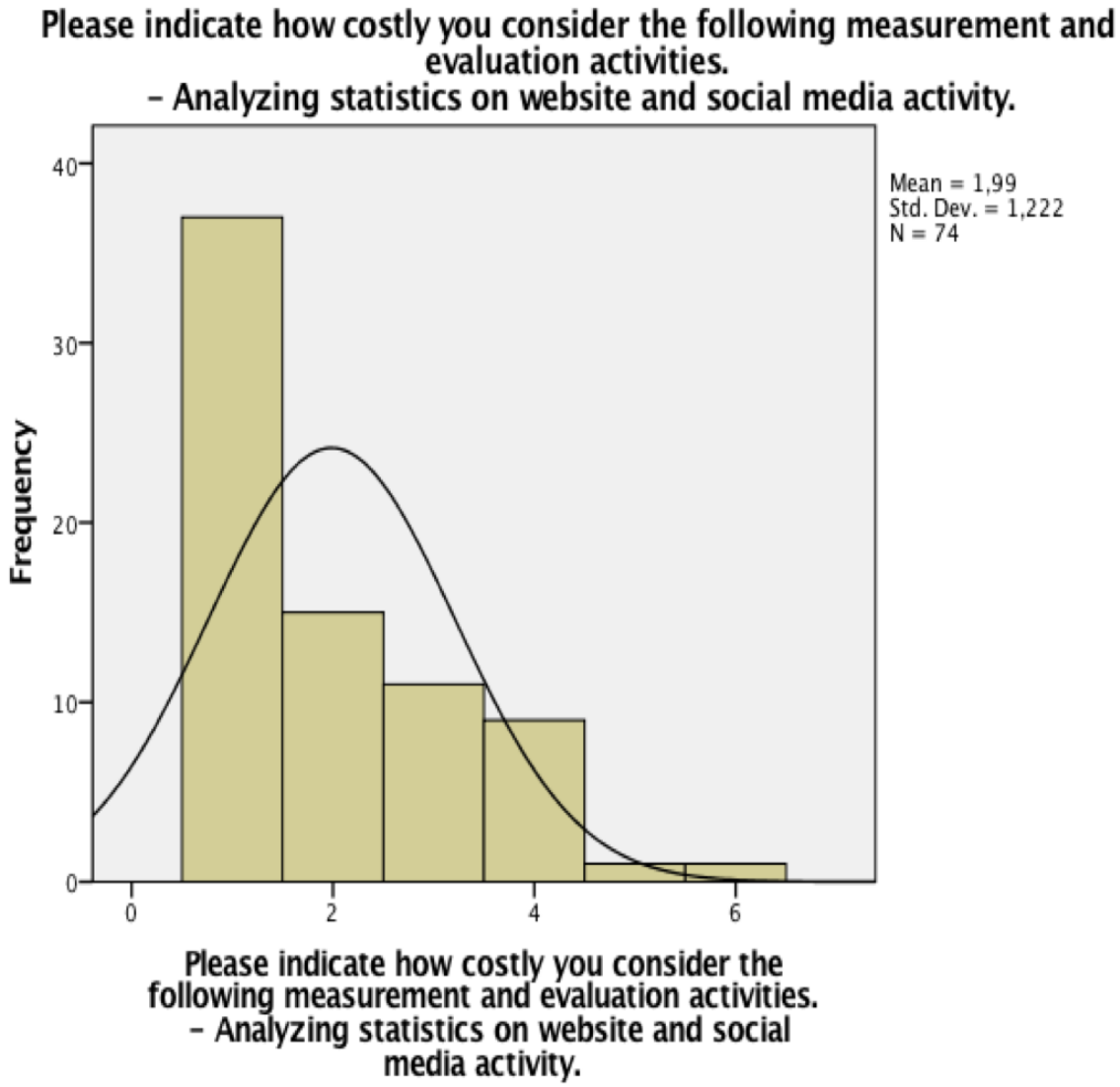
Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cost efficient	16	21,3	21,6	21,6
	2	16	21,3	21,6	43,2
	3	15	20,0	20,3	63,5
	4	13	17,3	17,6	81,1
	5	6	8,0	8,1	89,2
	6	5	6,7	6,8	95,9
	Costly	3	4,0	4,1	100,0
	Total	74	98,7	100,0	
Missing	999	1	1,3		
Total		75	100,0		



Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.

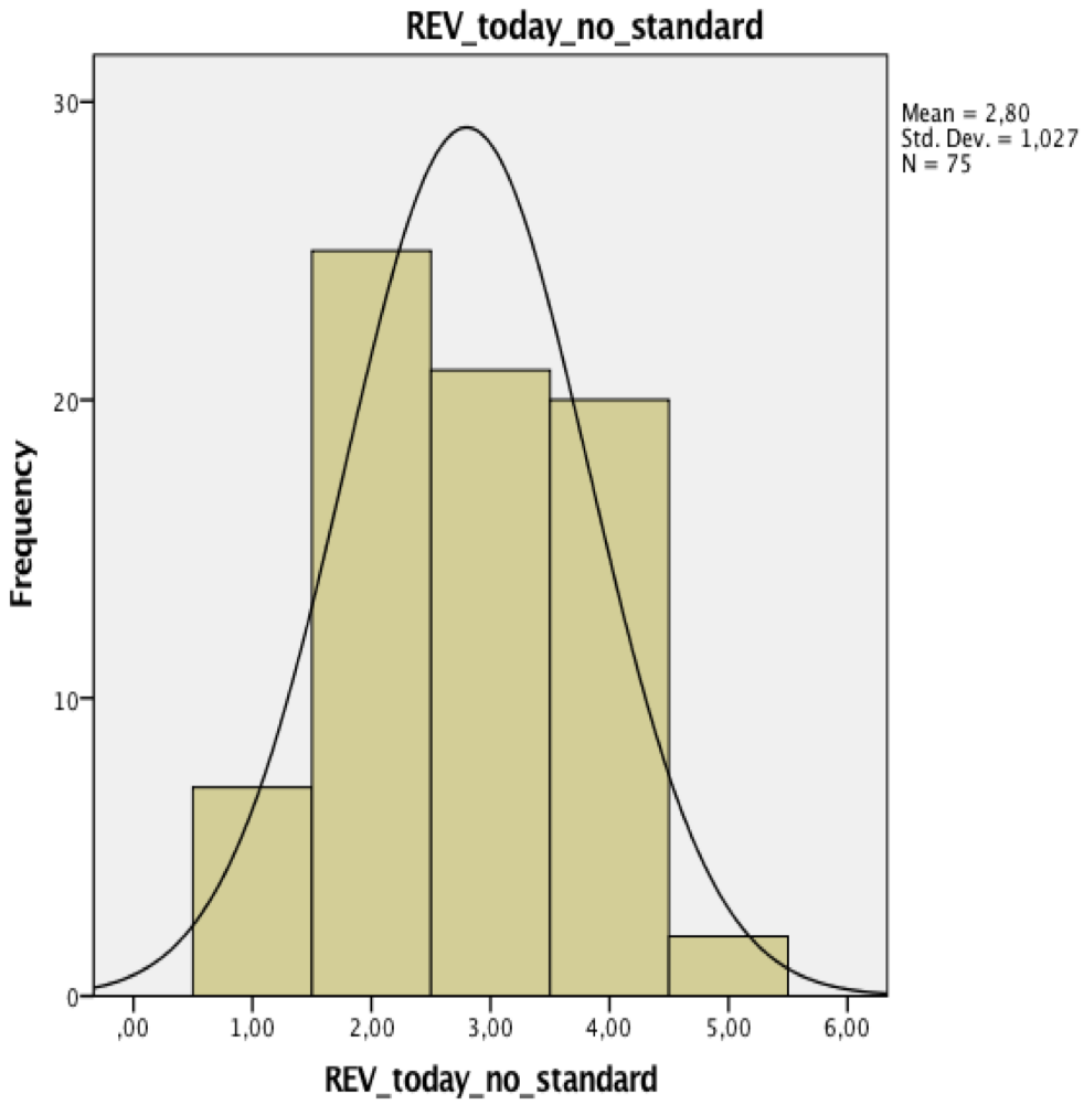
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cost efficient	37	49,3	50,0	50,0
	2	15	20,0	20,3	70,3
	3	11	14,7	14,9	85,1
	4	9	12,0	12,2	97,3
	5	1	1,3	1,4	98,6
	6	1	1,3	1,4	100,0
	Total	74	98,7	100,0	
Missing	999	1	1,3		
Total		75	100,0		



Perceptions of standards

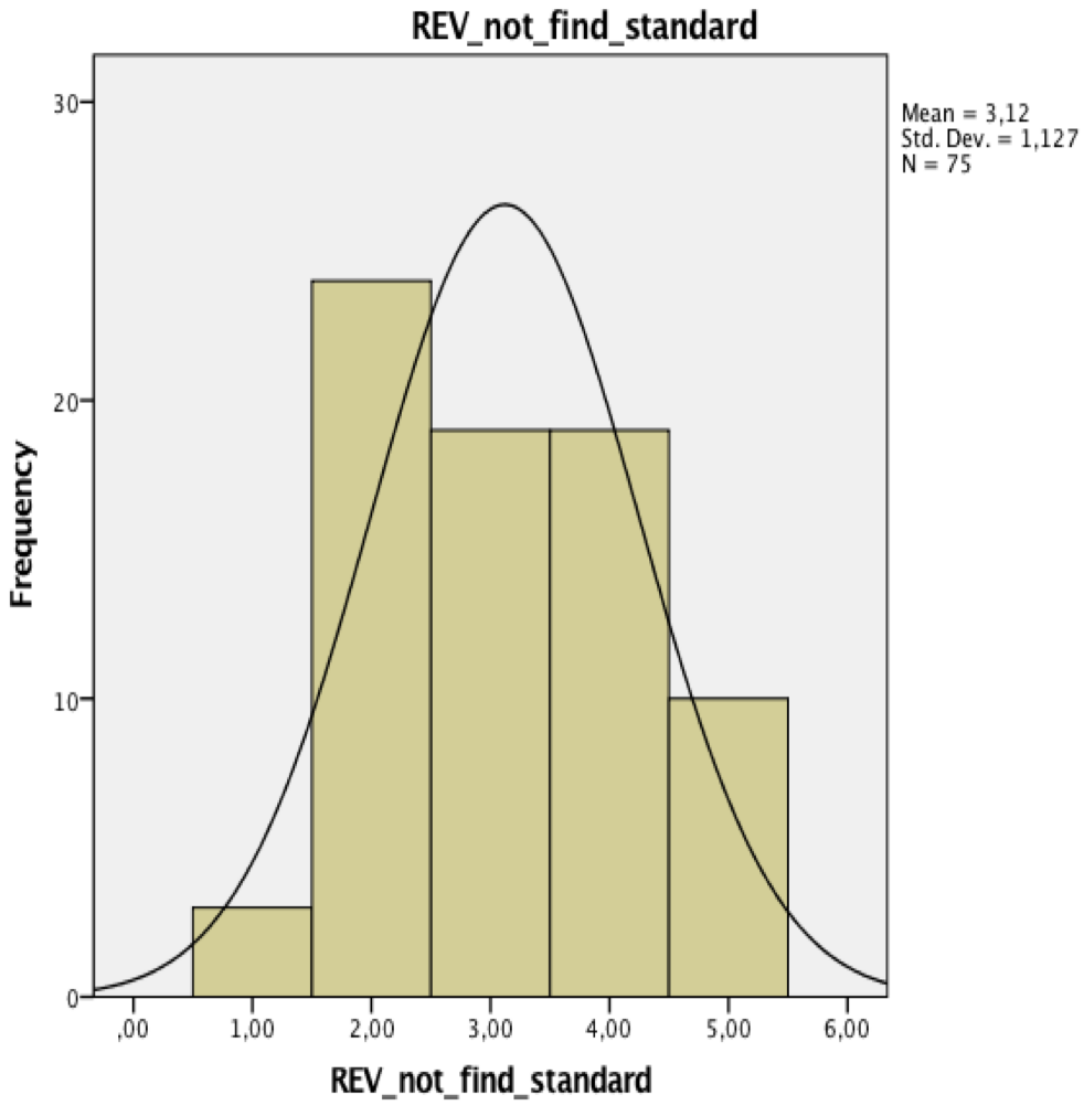
REV_today_no_standard

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	7	9,3	9,3	9,3
	2,00	25	33,3	33,3	42,7
	3,00	21	28,0	28,0	70,7
	4,00	20	26,7	26,7	97,3
	5,00	2	2,7	2,7	100,0
	Total	75	100,0	100,0	



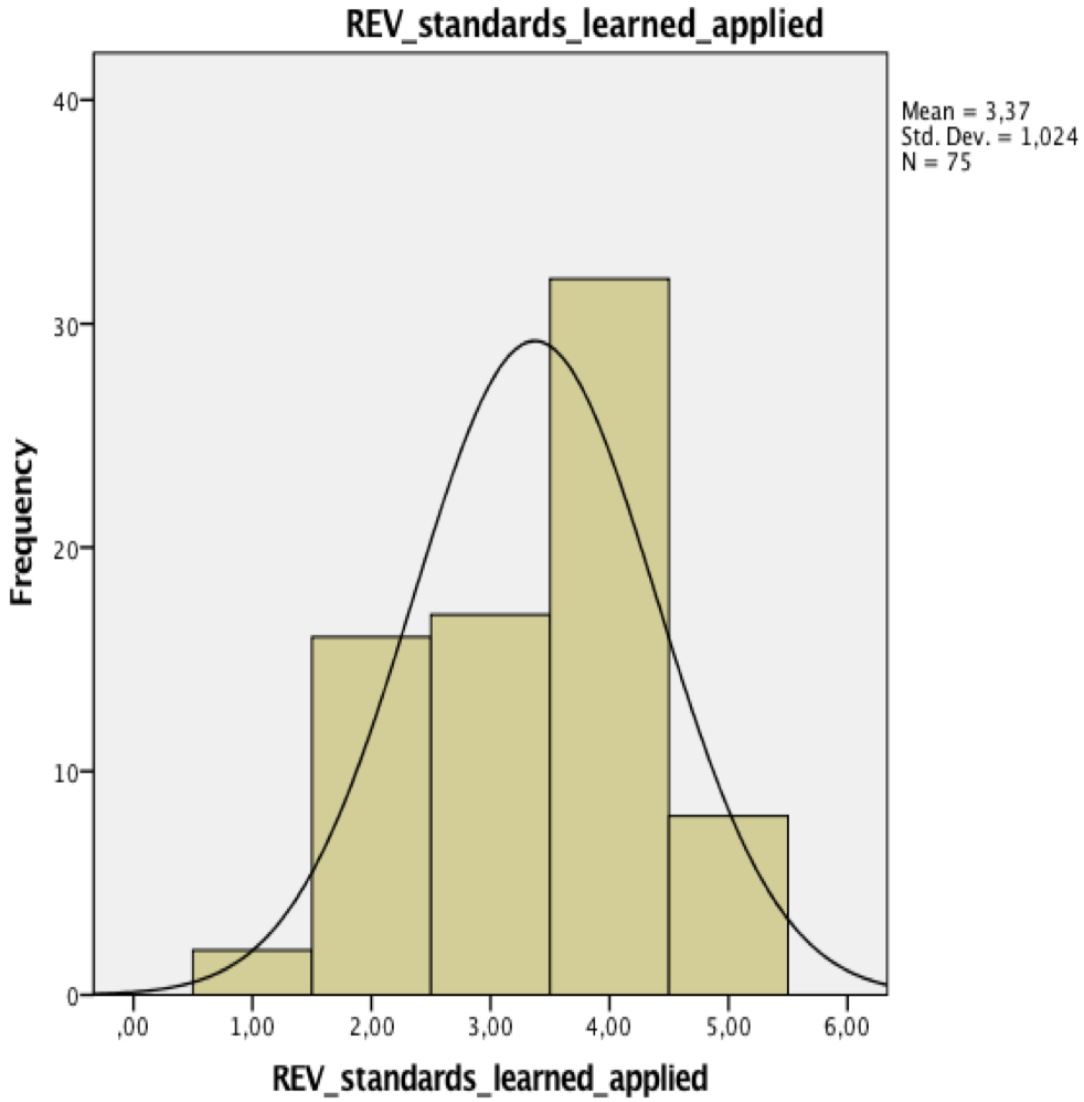
REV_not_find_standard

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	3	4,0	4,0	4,0
	2,00	24	32,0	32,0	36,0
	3,00	19	25,3	25,3	61,3
	4,00	19	25,3	25,3	86,7
	5,00	10	13,3	13,3	100,0
	Total	75	100,0	100,0	



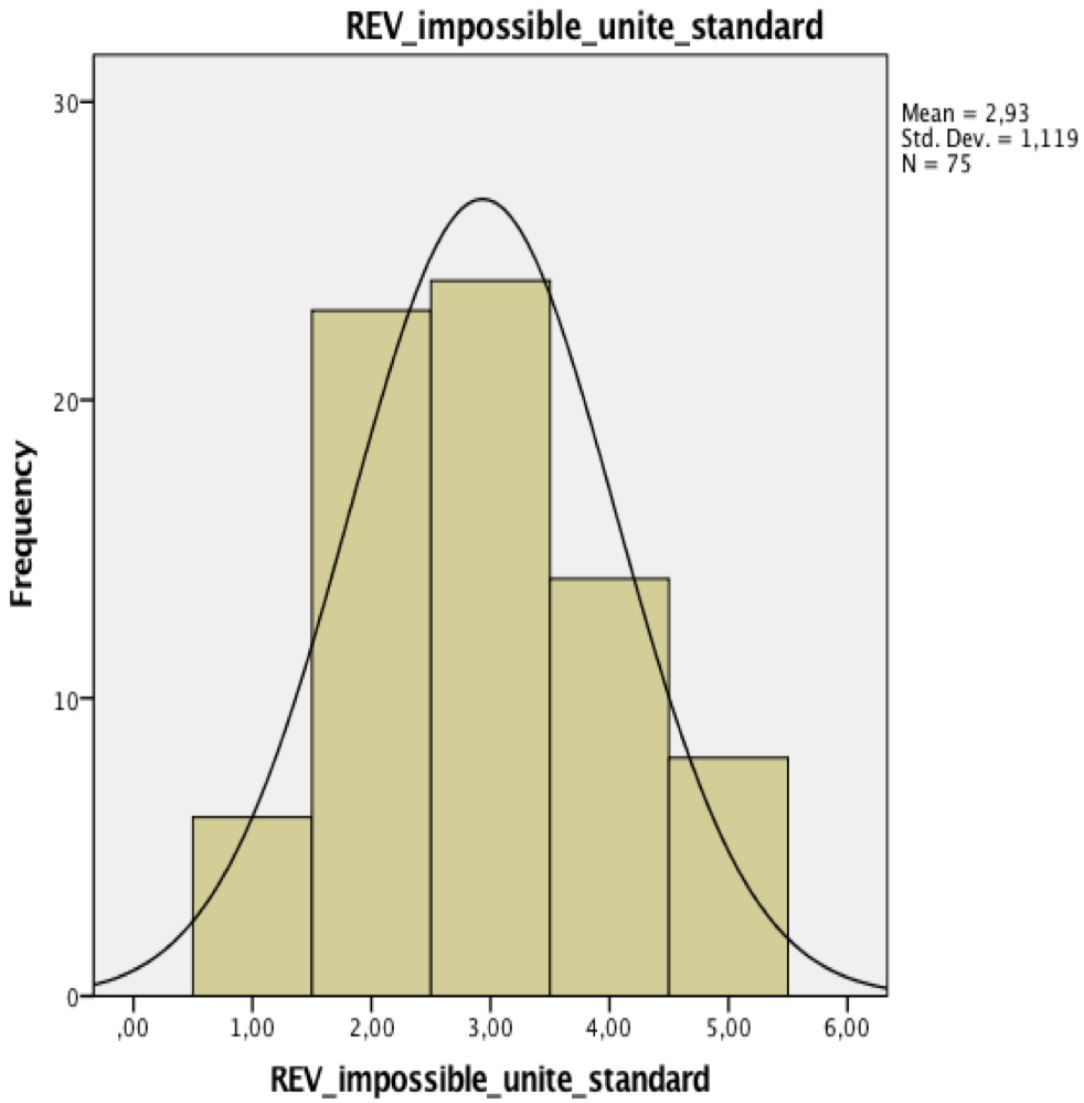
REV_standards_learned_applied

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	2	2,7	2,7	2,7
	2,00	16	21,3	21,3	24,0
	3,00	17	22,7	22,7	46,7
	4,00	32	42,7	42,7	89,3
	5,00	8	10,7	10,7	100,0
	Total	75	100,0	100,0	



REV_impossible_unite_standard

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	6	8,0	8,0	8,0
	2,00	23	30,7	30,7	38,7
	3,00	24	32,0	32,0	70,7
	4,00	14	18,7	18,7	89,3
	5,00	8	10,7	10,7	100,0
	Total	75	100,0	100,0	



Appendix 5: Bivariate correlations

M&E for reporting, independent variables + background variables

		In my organization, measurements and evaluations are used to establish the level of success communication activities had.	Level of Knowledge	Measuring and evaluating communication activities takes a lot of time and resources.	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications ' effect on target audience.	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	Gender	DUM_uni_ed	Is the head of communication a part of the execute board in your organization?	DUM_comp1	DUM_gov_org1	DUM_NGO	DUM_Org.size_SMALL	DUM_org.size_MID	DUM_org.size_LARGE
n my organization, measurements and valuations are used to stablish the level of success ommunication activities ad.	Pearson Correlation	1	-,420**	0,145	-,266*	-0,041	0,077	-0,120	-0,189	0,008	-,235*	0,021	0,134	-0,156	0,013	0,048	-0,183	0,152
	Sig. (2-tailed)		0,000	0,214	0,021	0,725	0,518	0,307	0,107	0,943	0,042	0,856	0,253	0,180	0,914	0,682	0,116	0,193
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
evel of Knowledge	Pearson Correlation	-,420**	1	-0,229	-,236*	-,307**	-0,228	0,068	,327**	0,218	,371**	-,383**	0,126	-0,009	-0,161	0,033	0,070	-0,119
	Sig. (2-tailed)	0,000		0,055	0,048	0,009	0,057	0,575	0,005	0,070	0,001	0,001	0,294	0,939	0,179	0,785	0,561	0,322
	N	71	71	71	71	71	70	71	71	70	71	70	71	71	71	71	71	71
Measuring and evaluating ommunication activities akes a lot of time and esources.	Pearson Correlation	0,145	-0,229	1	,472**	,490**	,448**	-0,150	-0,119	-0,105	-0,137	0,096	0,132	-0,127	-0,022	0,021	-0,151	0,148
	Sig. (2-tailed)	0,214	0,055		0,000	0,000	0,000	0,201	0,314	0,373	0,242	0,418	0,260	0,279	0,854	0,857	0,197	0,206
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
n my organization we do ot have enough time or esources to measure ommunication the way we vould have wanted.	Pearson Correlation	-,266*	-,236*	,472**	1	,458**	0,176	-0,131	-0,046	-0,106	-0,012	0,193	-0,175	0,145	0,057	-0,077	0,007	0,085
	Sig. (2-tailed)	0,021	0,048	0,000		0,000	0,136	0,266	0,694	0,368	0,919	0,100	0,134	0,214	0,628	0,513	0,950	0,469
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	Pearson Correlation	-0,041	-,307**	,490**	,458**	1	,525**	-0,059	-0,127	0,012	-0,202	0,198	0,066	-0,007	-0,082	0,009	0,005	-0,017
	Sig. (2-tailed)	0,725	0,009	0,000	0,000		0,000	0,618	0,281	0,916	0,083	0,092	0,571	0,952	0,487	0,937	0,964	0,882
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	Pearson Correlation	0,077	-0,228	,448**	0,176	,525**	1	-0,226	-0,209	-0,007	-0,016	,284*	0,125	-0,100	-0,045	0,104	0,051	-0,183
	Sig. (2-tailed)	0,518	0,057	0,000	0,136	0,000		0,054	0,077	0,956	0,893	0,016	0,291	0,400	0,707	0,381	0,671	0,122
	N	73	70	73	73	73	73	73	73	72	73	72	73	73	73	73	73	73
Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	Pearson Correlation	-0,120	0,068	-0,150	-0,131	-0,059	-0,226	1	,338**	-0,108	0,120	-0,082	0,030	-0,109	0,095	-0,126	-0,006	0,159
	Sig. (2-tailed)	0,307	0,575	0,201	0,266	0,618	0,054		0,003	0,361	0,308	0,491	0,802	0,357	0,422	0,286	0,960	0,177
	N	74	71	74	74	74	73	74	74	73	74	73	74	74	74	74	74	74
Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	Pearson Correlation	-0,189	,327**	-0,119	-0,046	-0,127	-0,209	,338**	1	-0,081	0,187	-0,023	0,079	-0,139	0,065	-0,012	-0,063	0,087
	Sig. (2-tailed)	0,107	0,005	0,314	0,694	0,281	0,077	0,003		0,495	0,111	0,846	0,503	0,238	0,580	0,916	0,596	0,461
	N	74	71	74	74	74	73	74	74	73	74	73	74	74	74	74	74	74

nder	Pearson Correlation	0,008	0,218	-0,105	-0,106	0,012	-0,007	-0,108	-0,081	1	0,073	0,037	-0,088	,244*	-0,183	-0,075	-0,029	0,
	Sig. (2-tailed)	0,943	0,070	0,373	0,368	0,916	0,956	0,361	0,495		0,539	0,755	0,455	0,036	0,119	0,525	0,803	0,
	N	74	70	74	74	74	72	73	73	74	74	73	74	74	74	74	74	
UM_uni_ed	Pearson Correlation	-,235*	,371**	-0,137	-0,012	-0,202	-0,016	0,120	0,187	0,073	1	-0,033	0,076	0,005	-0,110	0,108	-0,065	-0
	Sig. (2-tailed)	0,042	0,001	0,242	0,919	0,083	0,893	0,308	0,111	0,539		0,777	0,516	0,964	0,347	0,356	0,581	0,
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	
the head of mmunication a part of the ecute board in your ganization?	Pearson Correlation	0,021	-,383**	0,096	0,193	0,198	,284*	-0,082	-0,023	0,037	-0,033	1	-0,119	-0,020	0,186	0,119	-0,145	0,
	Sig. (2-tailed)	0,856	0,001	0,418	0,100	0,092	0,016	0,491	0,846	0,755	0,777		0,311	0,867	0,113	0,311	0,218	0,
	N	74	70	74	74	74	72	73	73	73	74	74	74	74	74	74	74	
UM_comp1	Pearson Correlation	0,134	0,126	0,132	-0,175	0,066	0,125	0,030	0,079	-0,088	0,076	-0,119	1	-,707**	-,479**	0,076	-0,038	-0
	Sig. (2-tailed)	0,253	0,294	0,260	0,134	0,571	0,291	0,802	0,503	0,455	0,516	0,311		0,000	0,000	0,517	0,747	0,
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	
UM_gov_org1	Pearson Correlation	-0,156	-0,009	-0,127	0,145	-0,007	-0,100	-0,109	-0,139	,244*	0,005	-0,020	-,707**	1	-,281*	-,351**	0,166	,
	Sig. (2-tailed)	0,180	0,939	0,279	0,214	0,952	0,400	0,357	0,238	0,036	0,964	0,867	0,000		0,015	0,002	0,155	0,
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	
UM_NGO	Pearson Correlation	0,013	-0,161	-0,022	0,057	-0,082	-0,045	0,095	0,065	-0,183	-0,110	0,186	-,479**	-,281*	1	,333**	-0,154	-,
	Sig. (2-tailed)	0,914	0,179	0,854	0,628	0,487	0,707	0,422	0,580	0,119	0,347	0,113	0,000	0,015		0,003	0,186	0,
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	
UM_Org.size_SMALL	Pearson Correlation	0,048	0,033	0,021	-0,077	0,009	0,104	-0,126	-0,012	-0,075	0,108	0,119	0,076	-,351**	,333**	1	-,644**	-,
	Sig. (2-tailed)	0,682	0,785	0,857	0,513	0,937	0,381	0,286	0,916	0,525	0,356	0,311	0,517	0,002	0,003		0,000	0,
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	
UM_org.size_MID	Pearson Correlation	-0,183	0,070	-0,151	0,007	0,005	0,051	-0,006	-0,063	-0,029	-0,065	-0,145	-0,038	0,166	-0,154	-,644**	1	-,
	Sig. (2-tailed)	0,116	0,561	0,197	0,950	0,964	0,671	0,960	0,596	0,803	0,581	0,218	0,747	0,155	0,186	0,000		0,
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	
UM_org.size_LARGE	Pearson Correlation	0,152	-0,119	0,148	0,085	-0,017	-0,183	0,159	0,087	0,128	-0,057	0,022	-0,049	,236*	-,227*	-,474**	-,368**	
	Sig. (2-tailed)	0,193	0,322	0,206	0,469	0,882	0,122	0,177	0,461	0,279	0,629	0,849	0,677	0,041	0,050	0,000	0,001	
	N	75	71	75	75	75	73	74	74	74	75	74	75	75	75	75	75	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

M&E for planning, independent variables + background variables

Correlations

		In my organization, the findings of measurements are used as material for future strategic planning of communication.	Level of Knowledge	Today there are no established methods and techniques for measuring communication activities.	I have been looking for standardized ways of measuring communication activities but did not find any.	I have learned standard approaches and techniques for measuring communication activities and apply them in my work with strategic communication.	It is not possible to ever unite around a common approach for measuring communication activities.	Measuring and evaluating communication activities takes a lot of time and resources.	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	Gender	DUM_uni_ed	Is the head of communication a part of the execute board in your organization?	DUM_comp1	DUM_gov_org1	DUM_NGO	DUM_Org.size_SMALL	DUM_org.size_MID	DUM_org.size_LARGE
In my organization, the findings of measurements are used as material for future strategic planning of communication.	Pearson Correlation	1	,278*	,375**	,570**	-,514**	,234*	-0,126	-,545**	-,328**	-0,181	-0,005	0,012	0,066	0,138	-,349**	0,141	-0,156	0,003	0,170	-0,164	-0,018
	Sig. (2-tailed)		0,019	0,001	0,000	0,000	0,043	0,283	0,000	0,004	0,126	0,966	0,916	0,579	0,236	0,002	0,228	0,180	0,981	0,145	0,159	0,881
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
Level of Knowledge	Pearson Correlation	,278*	1	,301*	,402**	-,344**	,600**	-0,229	-,236*	-,307**	-0,228	0,068	,327**	0,218	,371**	-,383**	0,126	-0,009	-0,161	0,033	0,070	-0,119
	Sig. (2-tailed)	0,019		0,011	0,001	0,003	0,000	0,055	0,048	0,009	0,057	0,575	0,005	0,070	0,001	0,001	0,294	0,939	0,179	0,785	0,561	0,322
	N	71	71	71	71	71	71	71	71	71	70	71	71	70	71	70	71	71	71	71	71	71
Today there are no established methods and techniques for measuring communication activities.	Pearson Correlation	,375**	,301*	1	,652**	-,391**	,412**	-,245*	-0,225	-,320**	-,304**	,300**	0,100	0,063	,288*	-,385**	0,021	0,017	-0,050	0,058	-0,083	0,026
	Sig. (2-tailed)	0,001	0,011		0,000	0,001	0,000	0,034	0,052	0,005	0,009	0,009	0,396	0,596	0,012	0,001	0,858	0,883	0,671	0,622	0,478	0,828
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
I have been looking for standardized ways of measuring communication activities but did not find any.	Pearson Correlation	,570**	,402**	,652**	1	-,543**	,349**	-,331**	-,419**	-,353**	-0,199	0,212	-0,011	0,105	,375**	-,273*	0,166	-0,062	-0,148	0,146	-0,177	0,027
	Sig. (2-tailed)	0,000	0,001	0,000		0,000	0,002	0,004	0,000	0,002	0,091	0,070	0,924	0,375	0,001	0,019	0,156	0,599	0,204	0,213	0,129	0,820
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
I have learned standard approaches and techniques for measuring communication activities and apply them in my work with strategic communication.	Pearson Correlation	-,514**	-,344**	-,391**	-,543**	1	-,320**	,367**	,407**	,289*	,257*	-0,154	-0,059	0,069	-0,118	0,165	-0,018	-0,051	0,089	0,097	-0,102	-0,001
	Sig. (2-tailed)	0,000	0,003	0,001	0,000		0,005	0,001	0,000	0,012	0,028	0,191	0,620	0,560	0,314	0,161	0,876	0,661	0,449	0,406	0,384	0,994
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75

It is not possible to ever unite around a common approach for measuring communication activities.	Pearson Correlation	,234*	,600**	,412**	,349**	-,320**	1	-0,207	-,228*	-0,222	-0,189	,258*	,270*	0,056	0,184	-,399**	0,223	-0,091	-0,190	-0,006	0,085	-0,090
	Sig. (2-tailed)	0,043	0,000	0,000	0,002	0,005		0,074	0,049	0,055	0,109	0,027	0,020	0,638	0,114	0,000	0,054	0,436	0,103	0,956	0,469	0,444
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
Measuring and evaluating communication activities takes a lot of time and resources.	Pearson Correlation	-0,126	-0,229	-,245*	-,331**	,367**	-0,207	1	,472**	,490**	,448**	-0,150	-0,119	-0,105	-0,137	0,096	0,132	-0,127	-0,022	0,021	-0,151	0,148
	Sig. (2-tailed)	0,283	0,055	0,034	0,004	0,001	0,074		0,000	0,000	0,000	0,201	0,314	0,373	0,242	0,418	0,260	0,279	0,854	0,857	0,197	0,206
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
In my organization we do not have enough time or resources to measure communication the way we would have wanted.	Pearson Correlation	-,545**	-,236*	-0,225	-,419**	,407**	-,228*	,472**	1	,458**	0,176	-0,131	-0,046	-0,106	-0,012	0,193	-0,175	0,145	0,057	-0,077	0,007	0,085
	Sig. (2-tailed)	0,000	0,048	0,052	0,000	0,000	0,049	0,000		0,000	0,136	0,266	0,694	0,368	0,919	0,100	0,134	0,214	0,628	0,513	0,950	0,469
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	Pearson Correlation	-,328**	-,307**	-,320**	-,353**	,289*	-0,222	,490**	,458**	1	,525**	-0,059	-0,127	0,012	-0,202	0,198	0,066	-0,007	-0,082	0,009	0,005	-0,017
	Sig. (2-tailed)	0,004	0,009	0,005	0,002	0,012	0,055	0,000	0,000		0,000	0,618	0,281	0,916	0,083	0,092	0,571	0,952	0,487	0,937	0,964	0,882
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	Pearson Correlation	-0,181	-0,228	-,304**	-0,199	,257*	-0,189	,448**	0,176	,525**	1	-0,226	-0,209	-0,007	-0,016	,284*	0,125	-0,100	-0,045	0,104	0,051	-0,183
	Sig. (2-tailed)	0,126	0,057	0,009	0,091	0,028	0,109	0,000	0,136	0,000		0,054	0,077	0,956	0,893	0,016	0,291	0,400	0,707	0,381	0,671	0,122
	N	73	70	73	73	73	73	73	73	73	73	73	73	72	73	72	73	73	73	73	73	73
Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	Pearson Correlation	-0,005	0,068	,300**	0,212	-0,154	,258*	-0,150	-0,131	-0,059	-0,226	1	,338**	-0,108	0,120	-0,082	0,030	-0,109	0,095	-0,126	-0,006	0,159
	Sig. (2-tailed)	0,966	0,575	0,009	0,070	0,191	0,027	0,201	0,266	0,618	0,054		0,003	0,361	0,308	0,491	0,802	0,357	0,422	0,286	0,960	0,177
	N	74	71	74	74	74	74	74	74	74	73	74	74	73	74	73	74	74	74	74	74	74
Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	Pearson Correlation	0,012	,327**	0,100	-0,011	-0,059	,270*	-0,119	-0,046	-0,127	-0,209	,338**	1	-0,081	0,187	-0,023	0,079	-0,139	0,065	-0,012	-0,063	0,087
	Sig. (2-tailed)	0,916	0,005	0,396	0,924	0,620	0,020	0,314	0,694	0,281	0,077	0,003		0,495	0,111	0,846	0,503	0,238	0,580	0,916	0,596	0,461
	N	74	71	74	74	74	74	74	74	74	73	74	74	73	74	73	74	74	74	74	74	74

Gender	Pearson Correlation	0,066	0,218	0,063	0,105	0,069	0,056	-0,105	-0,106	0,012	-0,007	-0,108	-0,081	1	0,073	0,037	-0,088	,244*	-0,183	-0,075	-0,029	0,128
	Sig. (2-tailed)	0,579	0,070	0,596	0,375	0,560	0,638	0,373	0,368	0,916	0,956	0,361	0,495		0,539	0,755	0,455	0,036	0,119	0,525	0,803	0,279
	N	74	70	74	74	74	74	74	74	74	72	73	73	74	74	73	74	74	74	74	74	74
DUM_uni_ed	Pearson Correlation	0,138	,371**	,288*	,375**	-0,118	0,184	-0,137	-0,012	-0,202	-0,016	0,120	0,187	0,073	1	-0,033	0,076	0,005	-0,110	0,108	-0,065	-0,057
	Sig. (2-tailed)	0,236	0,001	0,012	0,001	0,314	0,114	0,242	0,919	0,083	0,893	0,308	0,111	0,539		0,777	0,516	0,964	0,347	0,356	0,581	0,629
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
Is the head of communication a part of the execute board in your organization?	Pearson Correlation	-,349**	-,383**	-,385**	-,273*	0,165	-,399**	0,096	0,193	0,198	,284*	-0,082	-0,023	0,037	-0,033	1	-0,119	-0,020	0,186	0,119	-0,145	0,022
	Sig. (2-tailed)	0,002	0,001	0,001	0,019	0,161	0,000	0,418	0,100	0,092	0,016	0,491	0,846	0,755	0,777		0,311	0,867	0,113	0,311	0,218	0,849
	N	74	70	74	74	74	74	74	74	74	72	73	73	73	74	74	74	74	74	74	74	74
DUM_comp1	Pearson Correlation	0,141	0,126	0,021	0,166	-0,018	0,223	0,132	-0,175	0,066	0,125	0,030	0,079	-0,088	0,076	-0,119	1	-,707**	-,479**	0,076	-0,038	-0,049
	Sig. (2-tailed)	0,228	0,294	0,858	0,156	0,876	0,054	0,260	0,134	0,571	0,291	0,802	0,503	0,455	0,516	0,311		0,000	0,000	0,517	0,747	0,677
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
DUM_gov_org1	Pearson Correlation	-0,156	-0,009	0,017	-0,062	-0,051	-0,091	-0,127	0,145	-0,007	-0,100	-0,109	-0,139	,244*	0,005	-0,020	-,707**	1	-,281*	-,351**	0,166	,236*
	Sig. (2-tailed)	0,180	0,939	0,883	0,599	0,661	0,436	0,279	0,214	0,952	0,400	0,357	0,238	0,036	0,964	0,867	0,000		0,015	0,002	0,155	0,041
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
DUM_NGO	Pearson Correlation	0,003	-0,161	-0,050	-0,148	0,089	-0,190	-0,022	0,057	-0,082	-0,045	0,095	0,065	-0,183	-0,110	0,186	-,479**	-,281*	1	,333**	-0,154	-,227*
	Sig. (2-tailed)	0,981	0,179	0,671	0,204	0,449	0,103	0,854	0,628	0,487	0,707	0,422	0,580	0,119	0,347	0,113	0,000	0,015		0,003	0,186	0,050
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
DUM_Org.size_SMALL	Pearson Correlation	0,170	0,033	0,058	0,146	0,097	-0,006	0,021	-0,077	0,009	0,104	-0,126	-0,012	-0,075	0,108	0,119	0,076	-,351**	,333**	1	-,644**	-,474**
	Sig. (2-tailed)	0,145	0,785	0,622	0,213	0,406	0,956	0,857	0,513	0,937	0,381	0,286	0,916	0,525	0,356	0,311	0,517	0,002	0,003		0,000	0,000
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
DUM_org.size_MID	Pearson Correlation	-0,164	0,070	-0,083	-0,177	-0,102	0,085	-0,151	0,007	0,005	0,051	-0,006	-0,063	-0,029	-0,065	-0,145	-0,038	0,166	-0,154	-,644**	1	-,368**
	Sig. (2-tailed)	0,159	0,561	0,478	0,129	0,384	0,469	0,197	0,950	0,964	0,671	0,960	0,596	0,803	0,581	0,218	0,747	0,155	0,186	0,000		0,001
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75
DUM_org.size_LARGE	Pearson Correlation	-0,018	-0,119	0,026	0,027	-0,001	-0,090	0,148	0,085	-0,017	-0,183	0,159	0,087	0,128	-0,057	0,022	-0,049	,236*	-,227*	-,474**	-,368**	1
	Sig. (2-tailed)	0,881	0,322	0,828	0,820	0,994	0,444	0,206	0,469	0,882	0,122	0,177	0,461	0,279	0,629	0,849	0,677	0,041	0,050	0,000	0,001	
	N	75	71	75	75	75	75	75	75	75	73	74	74	74	75	74	75	75	75	75	75	75

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Outcome, independent variables + background variables

Correlations

		Level of Outcome implementation	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	In my organization, the findings of measurements are used as material for future strategic planning of communication.	Gender	DUM_uni_ed	Is the head of communication a part of the execute board in your organization?	DUM_comp1	DUM_gov_org1	DUM_NGO	DUM_Org.size_SMALL	DUM_org.size_MID	DUM_org.size_LARGE
Level of Outcome implementation	Pearson Correlation	1	,387**	,735**	-0,105	0,175	-,393**	,291*	-0,179	-0,169	-0,106	0,091	0,025
	Sig. (2-tailed)		0,001	0,000	0,400	0,154	0,001	0,016	0,144	0,168	0,388	0,463	0,841
	N	68	68	68	67	68	68	68	68	68	68	68	68
In my organization, measurements and evaluations are used to establish the level of success communication activities had.	Pearson Correlation	,387**	1	,567**	0,008	-,235*	0,021	0,134	-0,156	0,013	0,048	-0,183	0,152
	Sig. (2-tailed)	0,001		0,000	0,943	0,042	0,856	0,253	0,180	0,914	0,682	0,116	0,193
	N	68	75	75	74	75	74	75	75	75	75	75	75
In my organization, the findings of measurements are used as material for future strategic planning of communication.	Pearson Correlation	,735**	,567**	1	0,066	0,138	-,349**	0,141	-0,156	0,003	0,170	-0,164	-0,018
	Sig. (2-tailed)	0,000	0,000		0,579	0,236	0,002	0,228	0,180	0,981	0,145	0,159	0,881
	N	68	75	75	74	75	74	75	75	75	75	75	75
Gender	Pearson Correlation	-0,105	0,008	0,066	1	0,073	0,037	-0,088	,244*	-0,183	-0,075	-0,029	0,128
	Sig. (2-tailed)	0,400	0,943	0,579		0,539	0,755	0,455	0,036	0,119	0,525	0,803	0,279
	N	67	74	74	74	74	73	74	74	74	74	74	74
DUM_uni_ed	Pearson Correlation	0,175	-,235*	0,138	0,073	1	-0,033	0,076	0,005	-0,110	0,108	-0,065	-0,057
	Sig. (2-tailed)	0,154	0,042	0,236	0,539		0,777	0,516	0,964	0,347	0,356	0,581	0,629
	N	68	75	75	74	75	74	75	75	75	75	75	75
Is the head of communication a part of the execute board in your organization?	Pearson Correlation	-,393**	0,021	-,349**	0,037	-0,033	1	-0,119	-0,020	0,186	0,119	-0,145	0,022
	Sig. (2-tailed)	0,001	0,856	0,002	0,755	0,777		0,311	0,867	0,113	0,311	0,218	0,849
	N	68	74	74	73	74	74	74	74	74	74	74	74
DUM_comp1	Pearson Correlation	,291*	0,134	0,141	-0,088	0,076	-0,119	1	-,707**	-,479**	0,076	-0,038	-0,049
	Sig. (2-tailed)	0,016	0,253	0,228	0,455	0,516	0,311		0,000	0,000	0,517	0,747	0,677
	N	68	75	75	74	75	74	75	75	75	75	75	75
DUM_gov_org1	Pearson Correlation	-0,179	-0,156	-0,156	,244*	0,005	-0,020	-,707**	1	-,281*	-,351**	-,351**	,236*
	Sig. (2-tailed)	0,144	0,180	0,180	0,036	0,964	0,867	0,000		0,015	0,002	0,155	0,041
	N	68	75	75	74	75	74	75	75	75	75	75	75
DUM_NGO	Pearson Correlation	-0,169	0,013	0,003	-0,183	-0,110	0,186	-,479**	-,281*	1	,333**	-0,154	-,227*
	Sig. (2-tailed)	0,168	0,914	0,981	0,119	0,347	0,113	0,000	0,015		0,003	0,186	0,050
	N	68	75	75	74	75	74	75	75	75	75	75	75
DUM_Org.size_SMALL	Pearson Correlation	-0,106	0,048	0,170	-0,075	0,108	0,119	0,076	-,351**	,333**	1	-,644**	-,474**
	Sig. (2-tailed)	0,388	0,682	0,145	0,525	0,356	0,311	0,517	0,002	0,003		0,000	0,000
	N	68	75	75	74	75	74	75	75	75	75	75	75
DUM_org.size_MID	Pearson Correlation	0,091	-0,183	-0,164	-0,029	-0,065	-0,145	-0,038	0,166	-0,154	-,644**	1	-,368**
	Sig. (2-tailed)	0,463	0,116	0,159	0,803	0,581	0,218	0,747	0,155	0,186	0,000		0,001
	N	68	75	75	74	75	74	75	75	75	75	75	75
DUM_org.size_LARGE	Pearson Correlation	0,025	0,152	-0,018	0,128	-0,057	0,022	-0,049	,236*	-,227*	-,474**	-,368**	1
	Sig. (2-tailed)	0,841	0,193	0,881	0,279	0,629	0,849	0,677	0,041	0,050	0,000	0,001	
	N	68	75	75	74	75	74	75	75	75	75	75	75

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 6: Regression analyzes

M&E for reporting

Correlations

Correlations

		In my organization, measurements and evaluations are used to establish the level of success communication activities had.	Level of Knowledge	Measuring and evaluating communication activities takes a lot of time and resources.	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	DUM_uni_ed
Pearson Correlation	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	1,000	-0,420	0,145	-0,266	-0,041	0,077	-0,120	-0,189	-0,235
	Level of Knowledge	-0,420	1,000	-0,229	-0,236	-0,307	-0,228	0,068	0,327	0,371
	Measuring and evaluating communication activities takes a lot of time and resources.	0,145	-0,229	1,000	0,472	0,490	0,448	-0,150	-0,119	-0,137
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	-0,266	-0,236	0,472	1,000	0,458	0,176	-0,131	-0,046	-0,012
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	-0,041	-0,307	0,490	0,458	1,000	0,525	-0,059	-0,127	-0,202
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	0,077	-0,228	0,448	0,176	0,525	1,000	-0,226	-0,209	-0,016
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	-0,120	0,068	-0,150	-0,131	-0,059	-0,226	1,000	0,338	0,120
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	-0,189	0,327	-0,119	-0,046	-0,127	-0,209	0,338	1,000	0,187
	DUM_uni_ed	-0,235	0,371	-0,137	-0,012	-0,202	-0,016	0,120	0,187	1,000

Sig. (1-tailed)	In my organization, measurements and evaluations are used to establish the level of success communication activities had.		0,000	0,107	0,010	0,362	0,259	0,153	0,053	0,021
	Level of Knowledge	0,000		0,027	0,024	0,005	0,029	0,288	0,003	0,001
	Measuring and evaluating communication activities takes a lot of time and resources.	0,107	0,027		0,000	0,000	0,000	0,101	0,157	0,121
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	0,010	0,024	0,000		0,000	0,068	0,133	0,347	0,459
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	0,362	0,005	0,000	0,000		0,000	0,309	0,141	0,041
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	0,259	0,029	0,000	0,068	0,000		0,027	0,038	0,446
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	0,153	0,288	0,101	0,133	0,309	0,027		0,002	0,154
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	0,053	0,003	0,157	0,347	0,141	0,038	0,002		0,056
	DUM_uni_ed	0,021	0,001	0,121	0,459	0,041	0,446	0,154	0,056	
N	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	75	71	75	75	75	73	74	74	75
	Level of Knowledge	71	71	71	71	71	70	71	71	71
	Measuring and evaluating communication activities takes a lot of time and resources.	75	71	75	75	75	73	74	74	75
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	75	71	75	75	75	73	74	74	75
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	75	71	75	75	75	73	74	74	75
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	73	70	73	73	73	73	73	73	73
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	74	71	74	74	74	73	74	74	74
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	74	71	74	74	74	73	74	74	74
	DUM_uni_ed	75	71	75	75	75	73	74	74	75

Model summary

Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,420[a]	0,176	0,164	0,949
2	,635[b]	0,404	0,336	0,846
3	,636[c]	0,404	0,326	0,852

a. Predictors: (Constant), Level of Knowledge

ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13,130	1	13,130	14,574	,000[b]
	Residual	61,265	68	0,901		
	Total	74,396	69			
2	Regression	30,038	7	4,291	5,998	,000[c]
	Residual	44,358	62	0,715		
	Total	74,396	69			
3	Regression	30,064	8	3,758	5,171	,000[d]
	Residual	44,332	61	0,727		
	Total	74,396	69			

a. Dependent Variable: In my organization, measurements and evaluations are used to establish the level of success communication activities had.

Coefficients

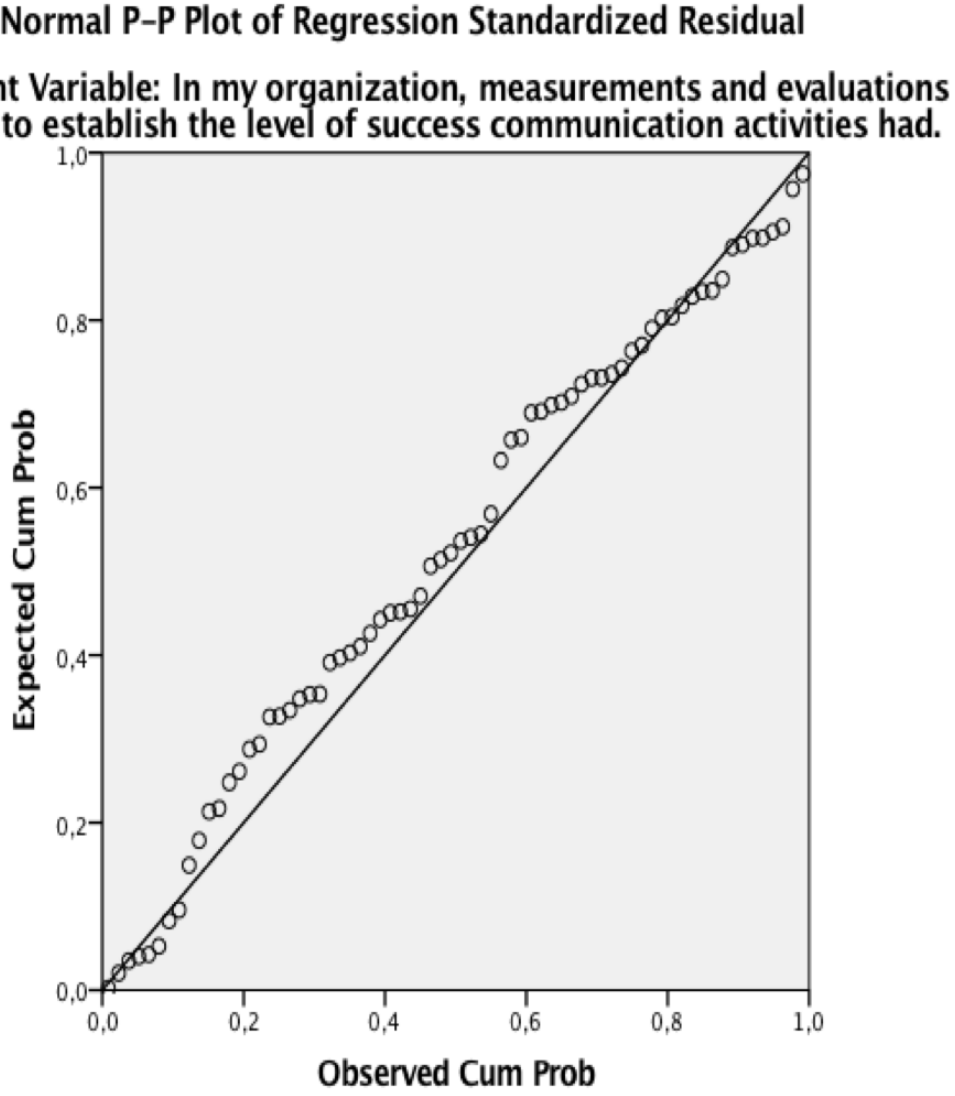
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	5,714	0,620		9,215	0,000	4,477	6,951
	Level of Knowledge	-0,050	0,013	-0,420	-3,818	0,000	-0,076	-0,024
2	(Constant)	6,988	0,907		7,704	0,000	5,175	8,801
	Level of Knowledge	-0,059	0,013	-0,503	-4,588	0,000	-0,085	-0,033
	Measuring and evaluating communication activities takes a lot of time and resources.	0,385	0,147	0,327	2,623	0,011	0,092	0,678
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	-0,402	0,097	-0,499	-4,148	0,000	-0,596	-0,208
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	-0,056	0,077	-0,095	-0,719	0,475	-0,211	0,099
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	-0,047	0,080	-0,074	-0,590	0,557	-0,206	0,112
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	-0,078	0,066	-0,127	-1,179	0,243	-0,210	0,054
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	0,005	0,094	0,006	0,055	0,956	-0,183	0,194

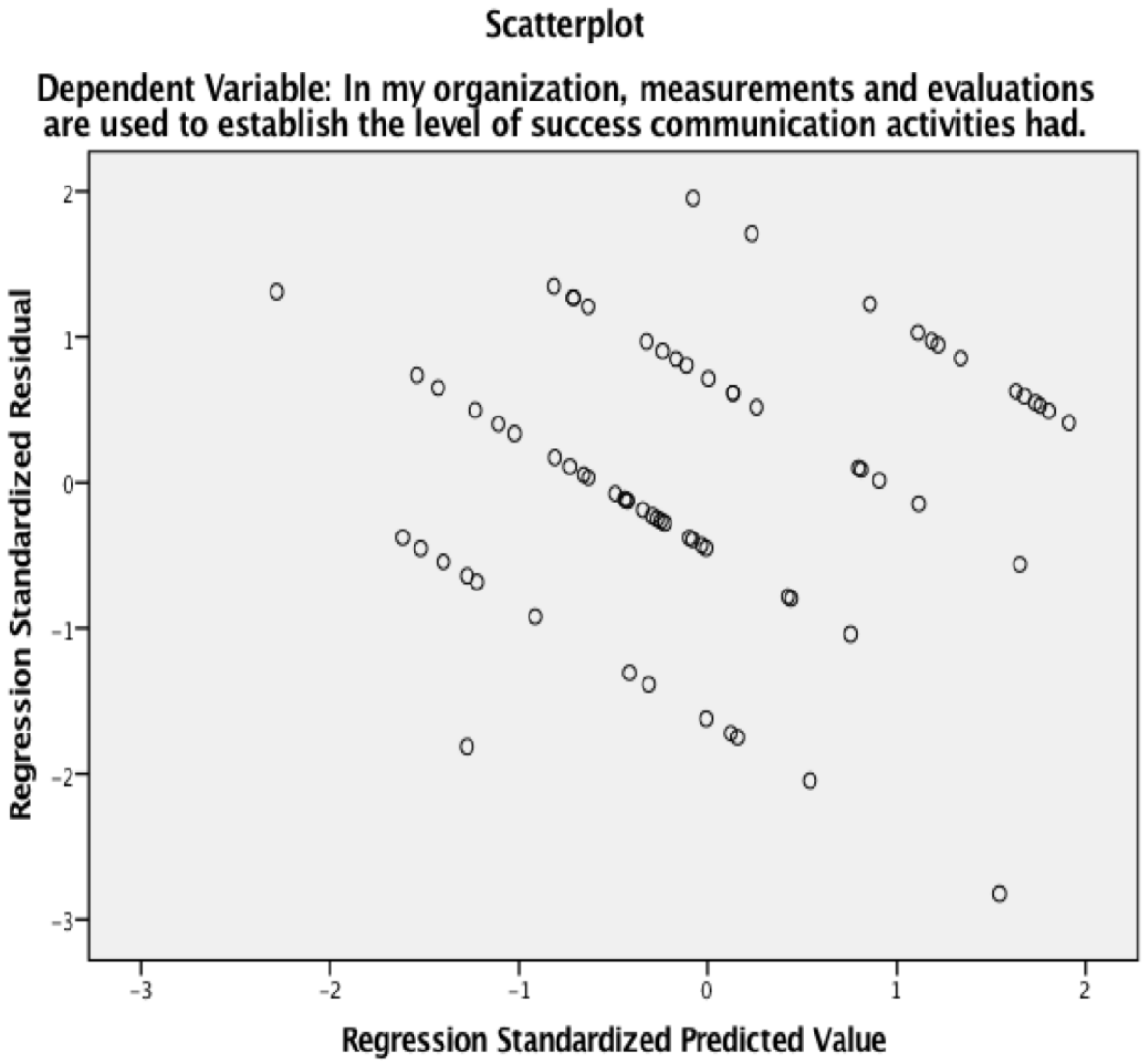
5	(Constant)	7,002	0,917		7,634	0,000	5,168	8,836
	Level of Knowledge	-0,058	0,014	-0,495	-4,227	0,000	-0,086	-0,031
	Measuring and evaluating communication activities takes a lot of time and resources.	0,382	0,149	0,324	2,566	0,013	0,084	0,680
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	-0,399	0,100	-0,494	-3,996	0,000	-0,598	-0,199
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	-0,059	0,080	-0,101	-0,738	0,464	-0,218	0,101
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	-0,044	0,082	-0,068	-0,530	0,598	-0,208	0,121
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	-0,076	0,067	-0,124	-1,133	0,262	-0,210	0,058
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	0,006	0,095	0,007	0,063	0,950	-0,184	0,196
	DUM_uni_ed	-0,075	0,396	-0,021	-0,189	0,851	-0,866	0,716

a. Dependent Variable: In my organization, measurements and evaluations are used to establish the level of success communication activities had.

Normal PP-plot



Scatterplot



M&E for planning

Correlations

Correlations

		In my organization, the findings of measurements are used as material for future strategic planning of communication.	Level of Knowledge	REV_today_no_standard	REV_not_find_standard	REV_standards_learned_applied	REV_impossible_unite_standard	Measuring and evaluating communication activities takes a lot of time and resources.	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	Is the head of communication a part of the execute board in your organization?
Pearson Correlation	In my organization, the findings of measurements are used as material for future strategic planning of communication.	1,000	0,278	-0,375	-0,570	0,514	-0,234	-0,126	-0,545	-0,328	-0,181	-0,005	0,012	-0,349
	Level of Knowledge	0,278	1,000	-0,301	-0,402	0,344	-0,600	-0,229	-0,236	-0,307	-0,228	0,068	0,327	-0,383
	REV_today_no_standard	-0,375	-0,301	1,000	0,652	-0,391	0,412	0,245	0,225	0,320	0,304	-0,300	-0,100	0,385
	REV_not_find_standard	-0,570	-0,402	0,652	1,000	-0,543	0,349	0,331	0,419	0,353	0,199	-0,212	0,011	0,273
	REV_standards_learned_applied	0,514	0,344	-0,391	-0,543	1,000	-0,320	-0,367	-0,407	-0,289	-0,257	0,154	0,059	-0,165
	REV_impossible_unite_standard	-0,234	-0,600	0,412	0,349	-0,320	1,000	0,207	0,228	0,222	0,189	-0,258	-0,270	0,399
	Measuring and evaluating communication activities takes a lot of time and resources.	-0,126	-0,229	0,245	0,331	-0,367	0,207	1,000	0,472	0,490	0,448	-0,150	-0,119	0,096
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	-0,545	-0,236	0,225	0,419	-0,407	0,228	0,472	1,000	0,458	0,176	-0,131	-0,046	0,193
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	-0,328	-0,307	0,320	0,353	-0,289	0,222	0,490	0,458	1,000	0,525	-0,059	-0,127	0,198
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	-0,181	-0,228	0,304	0,199	-0,257	0,189	0,448	0,176	0,525	1,000	-0,226	-0,209	0,284
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	-0,005	0,068	-0,300	-0,212	0,154	-0,258	-0,150	-0,131	-0,059	-0,226	1,000	0,338	-0,082
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	0,012	0,327	-0,100	0,011	0,059	-0,270	-0,119	-0,046	-0,127	-0,209	0,338	1,000	-0,023
	Is the head of communication a part of the execute board in your organization?	-0,349	-0,383	0,385	0,273	-0,165	0,399	0,096	0,193	0,198	0,284	-0,082	-0,023	1,000

Sig. (1-tailed)	In my organization, the findings of measurements are used as material for future strategic planning of communication.		0,010	0,000	0,000	0,000	0,021	0,142	0,000	0,002	0,063	0,483	0,458	0,001
	Level of Knowledge	0,010		0,005	0,000	0,002	0,000	0,027	0,024	0,005	0,029	0,288	0,003	0,001
	REV_today_no_standard	0,000	0,005		0,000	0,000	0,000	0,017	0,026	0,003	0,004	0,005	0,198	0,000
	REV_not_find_standard	0,000	0,000	0,000		0,000	0,001	0,002	0,000	0,001	0,046	0,035	0,462	0,005
	REV_standards_learned_applied	0,000	0,002	0,000	0,000		0,003	0,001	0,000	0,006	0,014	0,096	0,310	0,081
	REV_impossible_unite_standard	0,021	0,000	0,000	0,001	0,003		0,037	0,024	0,028	0,055	0,013	0,010	0,000
	Measuring and evaluating communication activities takes a lot of time and resources.	0,142	0,027	0,017	0,002	0,001	0,037		0,000	0,000	0,000	0,101	0,157	0,209
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	0,000	0,024	0,026	0,000	0,000	0,024	0,000		0,000	0,068	0,133	0,347	0,050
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	0,002	0,005	0,003	0,001	0,006	0,028	0,000	0,000		0,000	0,309	0,141	0,046
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	0,063	0,029	0,004	0,046	0,014	0,055	0,000	0,068	0,000		0,027	0,038	0,008
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	0,483	0,288	0,005	0,035	0,096	0,013	0,101	0,133	0,309	0,027		0,002	0,245
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	0,458	0,003	0,198	0,462	0,310	0,010	0,157	0,347	0,141	0,038	0,002		0,423
	Is the head of communication a part of the execute board in your organization?	0,001	0,001	0,000	0,009	0,081	0,000	0,209	0,050	0,046	0,008	0,245	0,423	
N	In my organization, the findings of measurements are used as material for future strategic planning of communication.	75	71	75	75	75	75	75	75	75	73	74	74	
	Level of Knowledge	71	71	71	71	71	71	71	71	71	70	71	71	
	REV_today_no_standard	75	71	75	75	75	75	75	75	75	73	74	74	
	REV_not_find_standard	75	71	75	75	75	75	75	75	75	73	74	74	
	REV_standards_learned_applied	75	71	75	75	75	75	75	75	75	73	74	74	
	REV_impossible_unite_standard	75	71	75	75	75	75	75	75	75	73	74	74	
	Measuring and evaluating communication activities takes a lot of time and resources.	75	71	75	75	75	75	75	75	75	73	74	74	
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	75	71	75	75	75	75	75	75	75	73	74	74	
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	75	71	75	75	75	75	75	75	75	73	74	74	
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	73	70	73	73	73	73	73	73	73	73	73	73	
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	74	71	74	74	74	74	74	74	74	73	74	74	
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	74	71	74	74	74	74	74	74	74	73	74	74	
	Is the head of communication a part of the execute board in your organization?	74	70	74	74	74	74	74	74	74	72	73	73	

Model summary

Model Summary[e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,278[a]	0,077	0,064	1,007
2	,620[b]	0,385	0,337	0,847
3	,754[c]	0,569	0,487	0,745
4	,769[d]	0,592	0,506	0,731

a. Predictors: (Constant), Level of Knowledge

ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,759	1	5,759	5,683	,020[b]
	Residual	68,910	68	1,013		
	Total	74,669	69			
2	Regression	28,725	5	5,745	8,003	,000[c]
	Residual	45,944	64	0,718		
	Total	74,669	69			
3	Regression	42,476	11	3,861	6,957	,000[d]
	Residual	32,193	58	0,555		
	Total	74,669	69			
4	Regression	44,207	12	3,684	6,893	,000[e]
	Residual	30,463	57	0,534		
	Total	74,669	69			

Coefficients

Coefficients[a]

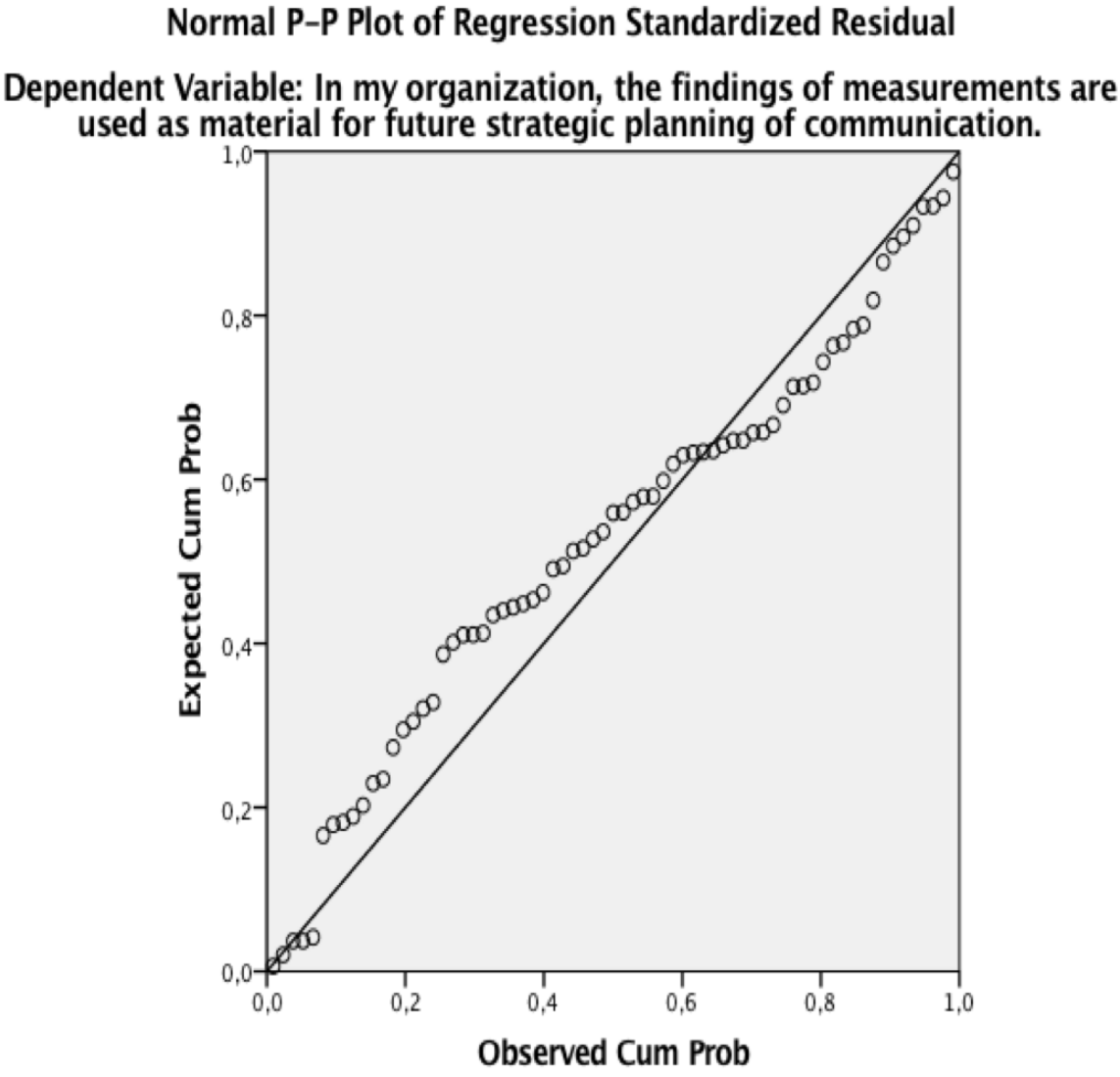
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1,619	0,658		2,461	0,016	0,306	2,931
	Level of Knowledge	0,033	0,014	0,278	2,384	0,020	0,005	0,060
2	(Constant)	3,185	1,159		2,749	0,008	0,870	5,501
	Level of Knowledge	0,003	0,015	0,021	0,167	0,868	-0,028	0,033
	REV_today_no_standard	0,011	0,136	0,011	0,083	0,934	-0,261	0,284
	REV_not_find_standard	-0,384	0,134	-0,416	-2,859	0,006	-0,652	-0,116
	REV_standards_learned_applied	0,294	0,121	0,289	2,431	0,018	0,052	0,535
	REV_impossible_unite_standard	0,011	0,120	0,012	0,089	0,929	-0,229	0,251

5	(Constant)	4,310	1,253		3,439	0,001	1,801	6,818
	Level of Knowledge	-0,005	0,014	-0,040	-0,329	0,743	-0,033	0,024
	REV_today_no_standard	-0,040	0,126	-0,040	-0,321	0,749	-0,292	0,211
	REV_not_find_standard	-0,329	0,126	-0,356	-2,608	0,012	-0,582	-0,076
	REV_standards_learned_applied	0,250	0,111	0,246	2,250	0,028	0,028	0,472
	REV_impossible_unite_standard	-0,009	0,108	-0,010	-0,087	0,931	-0,226	0,207
	Measuring and evaluating communication activities takes a lot of time and resources.	0,411	0,131	0,348	3,137	0,003	0,149	0,672
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	-0,358	0,090	-0,443	-3,989	0,000	-0,537	-0,178
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	-0,017	0,069	-0,030	-0,252	0,802	-0,156	0,121
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	-0,085	0,071	-0,134	-1,197	0,236	-0,228	0,057
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	-0,116	0,062	-0,188	-1,869	0,067	-0,239	0,008
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	0,052	0,086	0,061	0,605	0,547	-0,120	0,224

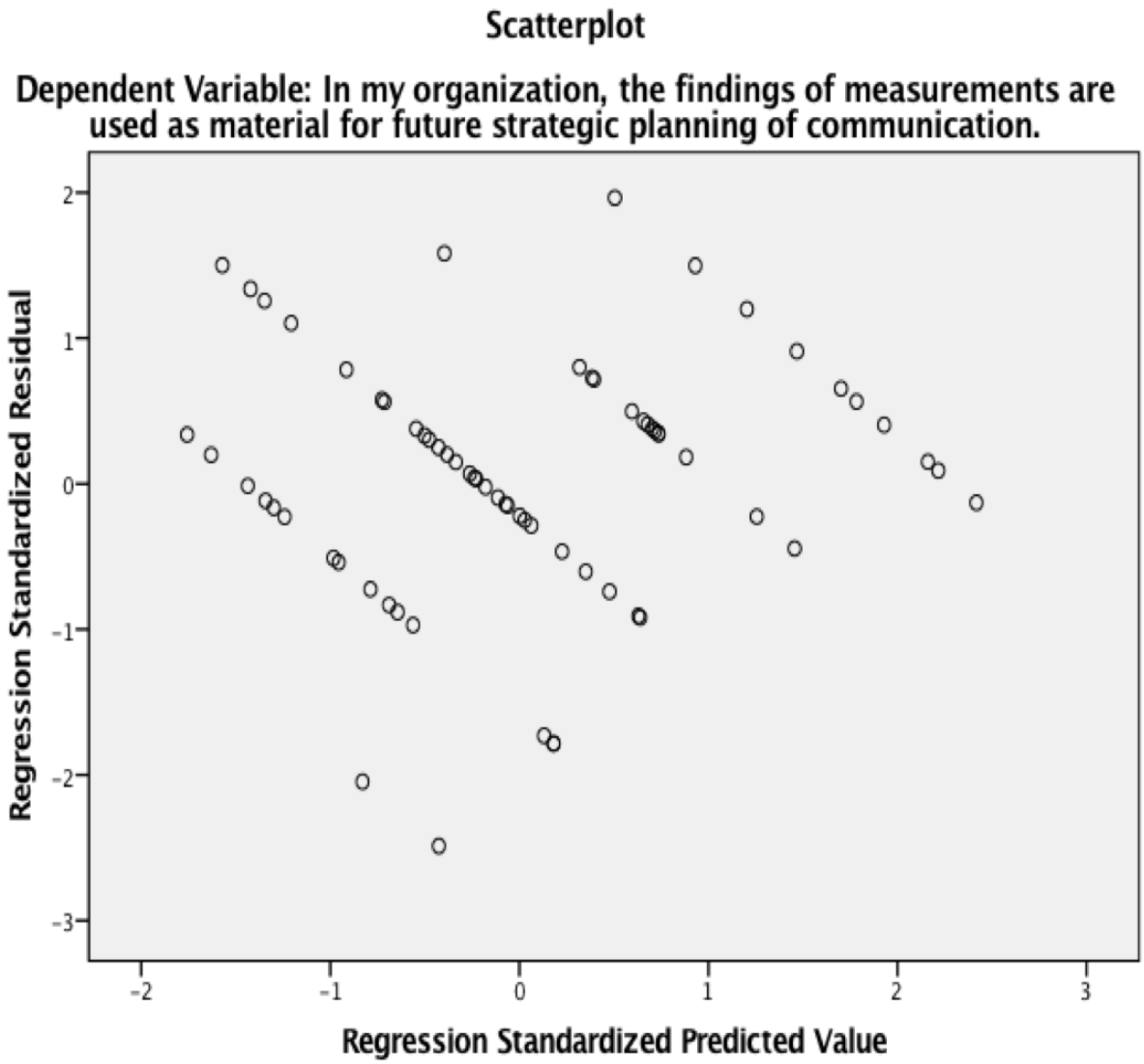
4	(Constant)	4,668	1,246		3,747	0,000	2,173	7,162
	Level of Knowledge	-0,010	0,014	-0,087	-0,711	0,480	-0,039	0,019
	REV_today_no_standard	0,012	0,127	0,012	0,098	0,922	-0,241	0,266
	REV_not_find_standard	-0,340	0,124	-0,368	-2,743	0,008	-0,588	-0,092
	REV_standards_learned_applied	0,269	0,109	0,265	2,461	0,017	0,050	0,488
	REV_impossible_unite_standard	0,025	0,108	0,027	0,234	0,816	-0,191	0,241
	Measuring and evaluating communication activities takes a lot of time and resources.	0,379	0,130	0,322	2,927	0,005	0,120	0,639
	In my organization we do not have enough time or resources to measure communication the way we would have wanted.	-0,333	0,089	-0,412	-3,739	0,000	-0,511	-0,155
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring communications' effect on target audience.	-0,027	0,068	-0,045	-0,390	0,698	-0,163	0,110
	Please indicate how costly you consider the following measurement and evaluation activities. - Conducting surveys, focus groups and interviews.	-0,054	0,072	-0,085	-0,754	0,454	-0,199	0,090
	Please indicate how costly you consider the following measurement and evaluation activities. - Measuring my organizations' appearance in media.	-0,111	0,061	-0,180	-1,821	0,074	-0,232	0,011
	Please indicate how costly you consider the following measurement and evaluation activities. - Analyzing statistics on website and social media activity.	0,077	0,085	0,090	0,898	0,373	-0,094	0,247
	Is the head of communication a part of the execute board in your organization?	-0,393	0,219	-0,185	-1,799	0,077	-0,831	0,044

a. Dependent Variable: In my organization, the findings of measurements are used as material for future strategic planning of communication.

Normal PP-plot



Scatterplot



Outcome

Correlations

Correlations

		Level of Outcome implementation	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	In my organization, the findings of measurements are used as material for future strategic planning of communication.	Is the head of communication a part of the execute board in your organization?	DUM_comp1
Pearson Correlation	Level of Outcome implementation	1,000	0,387	0,735	-0,393	0,291
	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	0,387	1,000	0,567	0,021	0,134
	In my organization, the findings of measurements are used as material for future strategic planning of communication.	0,735	0,567	1,000	-0,349	0,141
	Is the head of communication a part of the execute board in your organization?	-0,393	0,021	-0,349	1,000	-0,119
	DUM_comp1	0,291	0,134	0,141	-0,119	1,000
Sig. (1-tailed)	Level of Outcome implementation		0,001	0,000	0,000	0,008
	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	0,001		0,000	0,428	0,126
	In my organization, the findings of measurements are used as material for future strategic planning of communication.	0,000	0,000		0,001	0,114
	Is the head of communication a part of the execute board in your organization?	0,000	0,428	0,001		0,156
	DUM_comp1	0,008	0,126	0,114	0,156	
N	Level of Outcome implementation	68	68	68	68	68
	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	68	75	75	74	75
	In my organization, the findings of measurements are used as material for future strategic planning of communication.	68	75	75	74	75
	Is the head of communication a part of the execute board in your organization?	68	74	74	74	74
	DUM_comp1	68	75	75	74	75

Model summary

Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,387[a]	0,150	0,137	5,74485
2	,736[b]	0,542	0,528	4,24829
3	,771[c]	0,594	0,568	4,06344

a. Predictors: (Constant), In my organization, measurements and evaluations are used to establish the level of success

ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	384,652	1	384,652	11,655	,001[b]
	Residual	2178,216	66	33,003		
	Total	2562,868	67			
2	Regression	1389,751	2	694,875	38,502	,000[c]
	Residual	1173,117	65	18,048		
	Total	2562,868	67			
3	Regression	1522,638	4	380,660	23,054	,000[d]
	Residual	1040,229	63	16,512		
	Total	2562,868	67			

a. Dependent Variable: Level of Outcome implementation

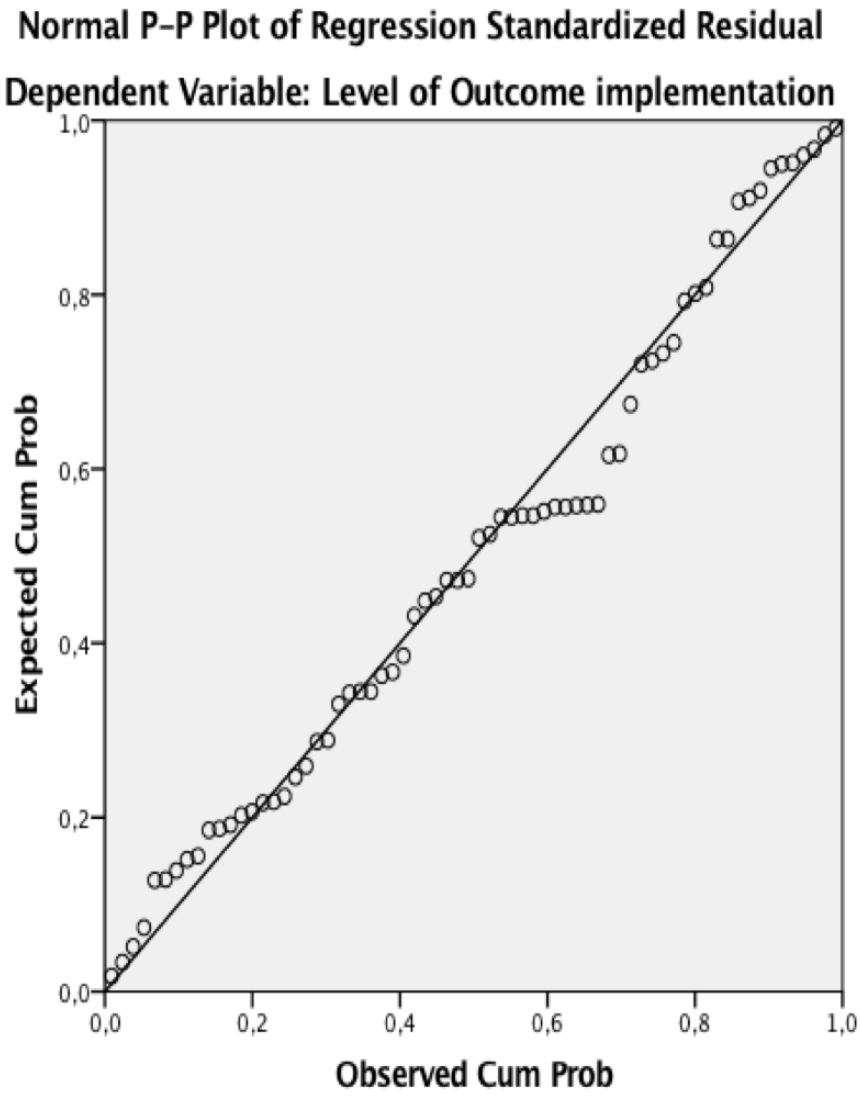
Coefficients

Coefficients[a]

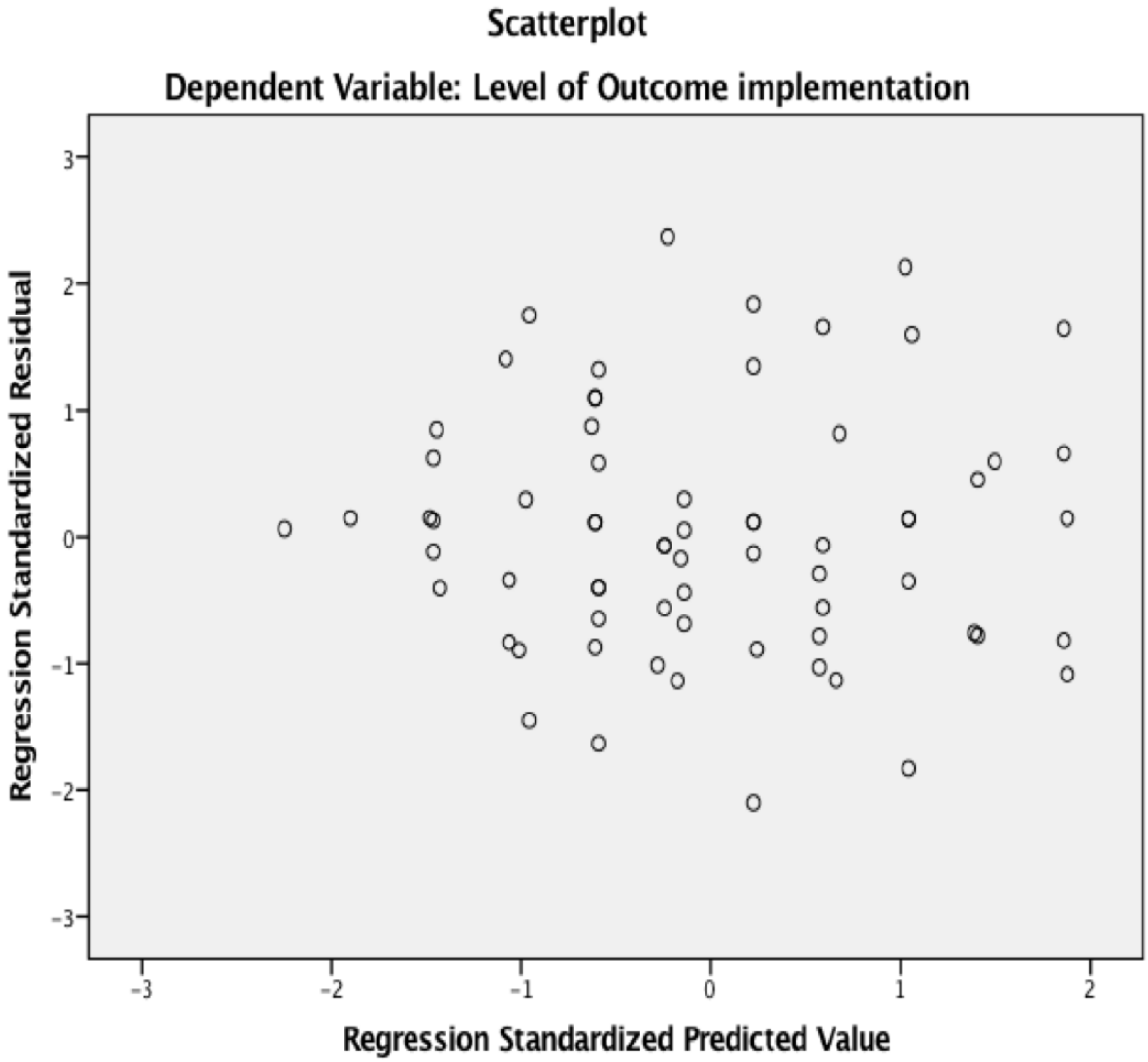
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	11,641	2,393		4,865	0,000	6,864	16,418
	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	2,308	0,676	0,387	3,414	0,001	0,958	3,657
2	(Constant)	6,058	1,921		3,154	0,002	2,222	9,895
	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	-0,263	0,607	-0,044	-0,434	0,666	-1,476	0,949
	In my organization, the findings of measurements are used as material for future strategic planning of communication.	4,522	0,606	0,761	7,463	0,000	3,312	5,732
3	(Constant)	8,326	2,662		3,128	0,003	3,007	13,645
	In my organization, measurements and evaluations are used to establish the level of success communication activities had.	-0,084	0,608	-0,014	-0,138	0,891	-1,299	1,131
	In my organization, the findings of measurements are used as material for future strategic planning of communication.	3,983	0,645	0,670	6,173	0,000	2,694	5,272
	Is the head of communication a part of the execute board in your organization?	-1,740	1,137	-0,137	-1,530	0,131	-4,012	0,533
	DUM_comp1	2,244	1,008	0,182	2,227	0,030	0,230	4,257

a. Dependent Variable: Level of Outcome implementation

Normal PP-plot



Scatterplot


Scatterplot
Dependent Variable: Level of Outcome implementation
Regression Standardized Residual
Regression Standardized Predicted Value
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2