MSc in Business Administration

Fostering a Strong Feedback Culture in Organizations:
A case study on the feedback culture at KPMG

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Declaration of Research Work Integrity

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature of any degree. This thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by giving explicit references. A bibliography is appended.

By signing the present document I confirm and agree that I have read RU's ethics code of conduct and fully understand the consequences of violating these rules in regards of my thesis.

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Date and place   Kennitala   Signature

Abstract

Providing effective informal feedback to employees in organizations can improve employee job performance and strengthen organizational feedback culture. However, regularly providing formative feedback is a managerial skill that requires conscious effort and dedication to master. Receiving, processing and utilizing feedback to improve one's performance is also a skill that employees must harness to make the most of the feedback they receive. The current study uses a methodological framework, developed by Warman, Laws, Crowther, & Baillie, (2014), to measure and improve feedback cultures at the Reykjavík office of KPMG. The framework was adapted to fit the structure the company. Initiatives were designed to positively influence feedback culture levels at KPMG and employees were surveyed on chosen feedback culture variables to test for significant differences in scores, using an independent-sample t-test analysis. Survey results were also used to assess the company's feedback culture. The study finds that KPMG employees are qualified and capable of maintaining a strong feedback cultures, but formative feedback is scarcely provided. The study hypothesizes that a lack of a trusting climate within the organization is the reason for this stalemate, and proposes a conceptual framework to support KPMG's management in fostering a feedback-friendly culture (Baker, Perreault, Reid, & Blanchard, 2013).

Keywords: feedback culture, feedback orientation, feedback-seeking behaviour, performance development

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1. Introduction

1.1 Why this study is important

The value of feedback has broadly been recognized by organizations as a critical driver for performance improvements. A clue for its importance comes from Google's people analytics approach to human resource, naming frequent and personal feedback to employees as the most important contribute of a great manager and leadership in the company (Sullivan, 2014).

Research on feedback has had an erosion of attention since the start of the 21st century, where the attention has been focused on multi-source feedback frameworks, feedback seeking, and initiatives with the intention of using feedback to improve employee performance, as well as feedback cycles and causes of overlapping cycles (Armstrong, 2009; Ashford, Blatt, & VandeWalle, 2003; Kluger & DeNisi, 1996; London & Smither, 2002). However, feedback cultures and their impact on the utility and quality of feedback is an area in need of further research (Baker et al., 2013).

Building on meta-analyses and suggested limitations of organizational cultures that restrict feedback outcomes, the current study uses a case study to analyse a company's feedback culture and applies recommended improvement initiatives. The ideology is that this study may serve as a precedent to build on when organizations are in need of ways to improve its feedback culture and to supply the discipline of social science in the field of feedback culture with a good case study that provides in-depth knowledge of the phenomenon. By analysing a company's feedback culture with consideration to prior feedback research results, I build on prior feedback culture research to design initiatives that are considered capable of improving a company's feedback culture, and inherently enable employees to get more value out of feedback they receive in the workplace.

1.2 Purpose of the study

The author of this study is an associate at KPMG in Iceland with 16 months of working experience for the company. The concept of feedback has been a professional curiosity of mine during the first steps of my career as a business advisor. I am interested in ways to improve my performance in the workplace by building on the experience of others. It was my belief that as a young professional I would receive tricks of the trade and good-

to-know information to improve my performance on the job from my managers with considerable ease. However, such feedback does not come from managers automatically. Receiving constructive and valuable feedback is troublesome in the absence of a strong *feedback culture*, and fostering a good feedback culture takes managerial effort and dedication, whereas the complexities of providing and receiving feedback are numerous (Murdoch-Eaton, 2012).

From working at KPMG, I have noted that junior employees are eager to improve their performance at work and that managers and partners are also willing to give employees a moment of their time to share their expertise. KPMG's employees report a high job satisfaction rating, and claim that they are proud to be working for the company (Guðmundsson, 2017). Nevertheless, there seems to be a boundary embedded in the company culture that prevents junior employees from seeking feedback, and in my experience, managers and partners do not seem to proactively provide verbal formative feedback on a regular basis.

Concerning the focus of the study, I intend to probe into the literature of feedback culture and build an understanding for what organizational elements constitute a *feedback-friendly culture*, or a *strong feedback culture*. The aim is to identify what areas have been researched in both formal and informal feedback within organizations and to investigate whether feedback is in fact proven to improve performance, and if so, what sort of feedback is most effective, and ultimately, figure out what keeps it from being used more commonly.

KPMG has accepted to participate in this study and granted the author permission to approach employees in its Icelandic headquarters in Borgartún, Reykjavík, with questionnaires and designed initiatives for all employees to measure and analyse KPMG's feedback culture. The purpose and orientation of the questionnaire and initiatives is discussed in the methodological approach section of this introduction and the specifics of the method are covered in more detail in the methodology chapter after the literature review. The overall objective of this study is to identify areas for cultural improvements in order for the company to foster a stronger performance enhancing feedback culture, or a feedback-friendly culture.

1.3 What is feedback?

The nature of feedback transforms from one stage of life to the next. As children, we receive praise and promise for taking our first steps or when we ride a bike for the first time. Feedback in that stage of life comes in the form of encouragement and compliments (positive feedback) when children behave well or learn new skills, and disciplinary actions when a child's behaviour is undesired by its parents (negative feedback).

What these types of feedback have in common is that they are both informal and in most cases, verbal. Both prove to be necessary for children to learn important lessons about life and what we understand from those lessons is that both negative and positive feedback can help to improve performance. The law of effect, a principle developed by Edward Throndike early last century, established that positive responses to a desired outcome improves chances of continued good performance, and negative responses to poor performance reduces the chances of continued poor performances (Kluger & DeNisi, 1996). In relation to that principle, feedback is simply a form of response to a performance.

When children go to school they are introduced to a new type of feedback, namely the grading system. A grading system is more rigorous and formal than any previous type of feedback from before. Ideally, it is rid of the subjectivity and nepotistic bias that children were used to from their parents. A teacher is an objective provider, or source, of feedback, who uses grades to assess the performance of the recipient, the student. The inherent reasoning behind the grading system is that if a student receives a low grade, he will need to focus on paying more attention in class and be better prepared for the next test in order to receive a higher grade. If a student receives a high grade, he will be aware that his performance was desirable, which should motivate him to continue performing at that level. The nature of this system correlates with the essence of the law of effect and shows that it applies both in formal and informal feedback processes in different stages of life.

For the current study, however, the topic is feedback and feedback culture in the workplace, the place where we spend most of our lives. Feedback is a densely researched area, and has applications in social science, managerial issues and psychology. From a culmination of prior research on feedback in the workplace a clear line is drawn between two primary types of feedback; 1) formal feedback, most commonly recognized in the

form of annual or semi-annual performance appraisals, and 2) informal feedback, where individuals commonly seek feedback proactively which researchers in modern feedback literature refer to as feedback-seeking behaviour (Ashford et al., 2003; Ashford & Cummings, 1985; Krasman, 2011; Luque & Sommer, 2000).

Researchers Ashford and Cummings (1983) coined the term *feedback-seeking behaviour* when they proposed a theoretical model for how individuals in organizations proactively sought feedback from expert sources, rather than opting to wait for feedback to be given to them. This individual need for formative feedback is rooted in the higher order of needs of human nature, relating back to the top of Maslow's (1987) hierarchy of needs. Boosting self-esteem and self-actualization is the result of performance improvements that individuals experience from proactively seeking constructive feedback (Ilgen, Fisher, & Susan, 1979).
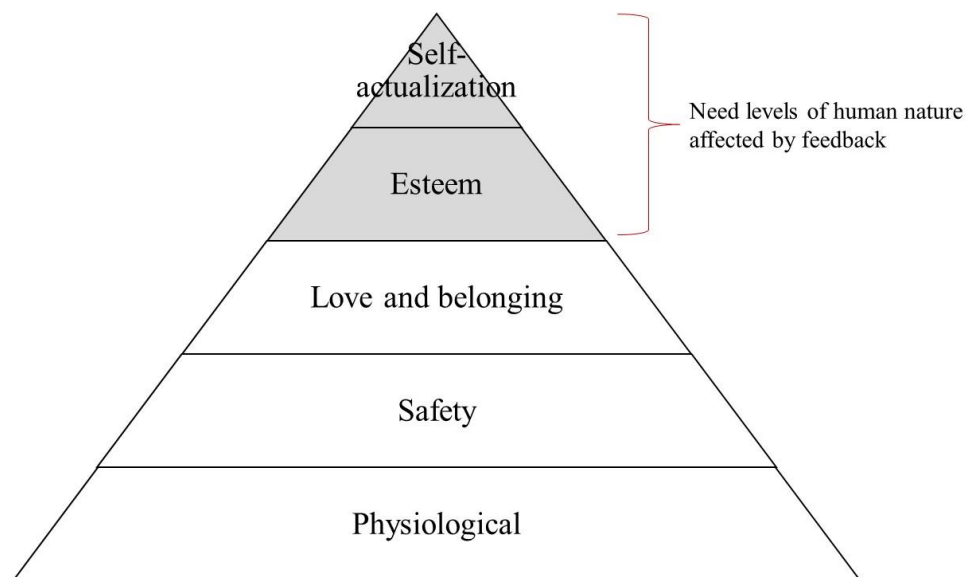
Figure 1: Maslow's hierarchy of needs (1987)
Note 1: Figure created by author, based on Maslows (1987) theory

As noted, proactively seeking feedback is proven to be a way to improve one's performance. Proactively providing formative feedback on the other hand is also an important element of the feedback process (Warman et al., 2014). Providing constructive informal feedback is an acquired skill, which researchers Warman et al. (2014) have analysed thoroughly and developed a workshop that assists feedback providers in honing their feedback provision skills. In that sense, both employees' ability to receive and process feedback and managers' competence in providing feedback are the cornerstones of building a strong and effective feedback culture.

It is my belief that an organization with:

1. managers that are capable of providing constructive and useful feedback, and

2. employees with the ability to process and utilize feedback to improve performance,

is an organization that *possesses* all the necessary tools to build a strong feedback culture. However, possessing the means for a strong feedback culture does not guarantee that organizations are affective in maintaining one.

Recent research on feedback-friendly culture in organizations identifies that fostering *a trusting climate* in the workplace is a prerequisite for building a feedback-friendly culture (Baker et al., 2013). More specifically, emotional boundaries, such as:

- *lack of psychological safety*, and

- *lack of affective trust* in the workplace,

are the main culprits in preventing a feedback-friendly culture to thrive (Baker et al., 2013). Baker et al. (2013) explains that "*psychological safety consists of an employee's sense of being able to show and employ one's self without fear of negative consequences to self-image, status, or career (Kahn, 1990),*" and that affective trust "*allows individuals to be honest about their vulnerabilities and reduces concerns and insecurities which, in their presence may hinder learning and consequently reduce performance.*"

Considering these suggested limitations to cultivating a feedback-friendly culture, the current study answers the call of Baker et al. (2014) for research the gap between having the potential of maintaining a feedback-friendly culture and fostering such a culture in practice, with consideration to whether the organization is successful in fostering a trusting climate or not.

So far, an understanding for what feedback is has been established and what needs feedback caters to in employees' minds. I have explained that I am personally involved in the fabric of this study as an employee of the subject organization. This study will thus include an objective perspective of the company's feedback culture from my point of view as an associate at KPMG, as well as a subjective approach to interpreting study

results and future implications and contribution to the literature on the value of feedback in the workplace.

1.4 Research question and hypothesis

This research takes a close look at the feedback culture at KPMG by using survey questionnaires to answer the research questions. It also attempts to impact its feedback culture with initiatives that are designed to raise awareness on the importance of a strong feedback culture and emphasise the value of consciously upholding a feedback dialogue on a regular basis. In association with KPMG's human resource manager, we derived that the focus of the study should be twofold:

1. to measure KPMG's feedback culture capacity, and

2. to improve KPMG's feedback culture

Section 1.4.1. and 1.4.2. explain how the study specifically handles each one of the focus areas. Both sections contain one or more research questions and a hypothesis.

1.4.1 Measuring KPMG's feedback culture capacity

The first phase of the study shines a light onto KPMG's capacity for upholding a strong feedback culture and whether KPMG has an active formative verbal feedback dialogue among employees. To measure KPMG's feedback culture capacity the study issues questionnaires to all employees, whose responses will help answer the following research questions:

Research question 1a:

Do the employees of the company possess the necessary means for maintaining a strong feedback culture?

Research question 1b:

Is there an active informal feedback dialogue between employees in the company?

To clarify whether the company possesses the means to foster a feedback-friendly culture, the study will assess whether managers and partners feel qualified to provide formative

verbal feedback to associates on a regular basis. The study will also ask associates how they feel about the feedback culture at the company and whether they are proactive in seeking feedback.

Also, the study will assess whether managers and partners *in fact provide* such feedback to associates to help them improve their performance. Managers and partners will be asked about the frequency of their feedback provision to associates, and associates will be asked how frequently they receive formative verbal feedback. The underlying intention for asking these questions is threefold, and focuses primarily on:

1. verifying that the means for maintaining an informal feedback dialogue exists within the company,

2. examining whether an informal feedback dialogue is maintained within the company, and if not

3. identifying a plausible reason for the absence of an informal feedback dialogue within the company and recommend actions to activate such a dialogue.

In a scenario where survey results show that research question 1a has a positive answer and 1b has a negative one (the company possesses the means to maintain a strong feedback culture, but formative feedback is rarely provided), the author presents the following hypothesis:

Hypothesis 1:

The company has a weak feedback culture – informal formative verbal feedback is not frequently provided in the organization.

Hypothesis 1 assumes Baker et al.'s (2013) theory that failing to foster a trusting climate in the organization hinders feedback-seeking behaviour and reduces the chance for a feedback friendly culture to thrive, even though employees are willing and capable of having a strong feedback culture.

If survey results test positive for this hypothesis, the author concludes that the organization is unsuccessful in fostering a trusting climate, and thus, does not have a feedback friendly culture. Further, if hypothesis 1 is true, the author assumes that

associates and senior associates fear negative responses for showing vulnerability in the feedback process, supporting Baker et al's (2013) findings on the necessity of having a trusting climate in the organization to enable active feedback-seeking behaviour within the organization.

Alternatively, if study results find negative answers to both research questions (employees do not possess the means to maintain a strong feedback culture and formative feedback is rarely provided), the author concludes that the hypothesis is also true because the company does *not* possess the means to maintain a feedback-friendly culture, but not solely on the basis of the absence of a trusting climate within the organization.

1.4.2 Initiatives to improve KPMG's feedback culture

The second phase of the feedback research at KPMG uses two initiatives, X_1 and X_2;

X_1 a one-pager information sheet with advice on informal feedback provision and seeking, and

X_2 a workshop for managers and partner designed to brief them on the current feedback culture level of the company and to coach them in providing effective feedback.

Details on both initiatives are covered in the methodology section below. The intention of employing these feedback initiatives is to strengthen the feedback culture of the company and is based on the successful feedback culture building method by Warman et al. (2014). The following research question is presented in regards to the effects of the initiatives:

Research question 2:

Can feedback initiatives X_1 and X_2 improve the feedback culture at the company?

Sheena Warman et al. (2014) find in their research that feedback initiatives have indeed improved the feedback culture in the veterinary clinical environment. It is the hope of the author to produce the same results by employing the same methodology at KPMG. Success would support Warman et al.'s (2014) research by providing added validation to

their method in a performance driven organization. On those grounds the author presents the following hypothesis for research question 2:

Hypothesis 2:

Feedback initiatives have caused a statistically significant positive change to the feedback culture at KPMG

1.5   The organization

The subject of this case study is KPMG's headquarters in Iceland and its level of feedback culture. It is located in Borgartún 27 in Reykjavík, and will be referred to as "KPMG" or "the company" hereafter.

KPMG is a member firm of KPMG Global, a corporation that provides audit, tax and advisory services worldwide. It is based in 152 countries and has over 189.000 employees in total ("Overview | KPMG | GLOBAL," 2017). KPMG in Iceland has 17 offices around the country and employs around 250 employees in audit, tax and advisory service and support departments, and its headquarters in Borgartún has 191 employees (Guðmundsson, 2017). The reason for only including employees in the Borgartún office in the study is that other KPMG offices in Iceland are significantly smaller, and thus, different company cultures and feedback processes may apply in all other KPMG offices in Iceland.

The company has a five-level hierarchy system (Figure 2), ranging from associate to partner. Associates are promoted to senior associate to manager to senior manager and finally to partner. Every KPMG firm is solely owned by its employed partners, and thus
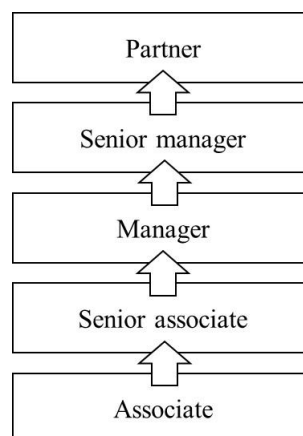
Figure 2: KPMG's hierarchy system

has no third-party shareholders. This strategy is intended to reinforce its commitment to independence due to the nature of its auditing and consulting practices.

1.5.1 KPMG Story

KPMG Story is the name of KPMG's Global set of values, vision, purpose, strategy and promise. It was launched in 2016 and is intended to help member firms and employees grow and reach their goals, and to instil confidence in client minds towards the company. The merit behind the KPMG Story is that it serves as a benchmark for goal setting for KPMG employees worldwide, which helps them to adjust their performance ambitions in a universally desired direction. The full KPMG Story is available in Appendix A in detail for clarification of its content and structure.

It is useful to keep in mind that the KPMG Story represents the ideal performance level of KPMG's employees. Managers and partners of KPMG speak of performance attributes such as being "shoulder-to-shoulder with the client" and "being the clear choice", which are tag phrases from the KPMG Story, when communicating with other employees about what the company strives to accomplish in the market. These sorts of encouragement give employees an idea for how they are expected to operate on the job, and thus contribute to KPMG's feedback culture as a benchmark for ideal employee performance.

1.5.2 MyPD

MyPD, which stands for My Performance Development, is the name of KPMG's performance management framework that is available to all employees in all member firms through each member firms' intranet. The framework was designed by KPMG Global to create a mutual venue for individual employee goal setting and as a platform to manage employee interviews. Employee interviews are held annually, typically at the end of each member firm's fiscal year. In Iceland's case that is by the end of November.

Every employee is assigned a Performance Manager (PM) within the office who has access to the employees' intranet based MyPD room. Only the employee and the PM have access to the employees' MyPD room. In every MyPD room are forms that the employee uses for self-review and goal setting, completed by the employee and later reviewed by his PM. At the end of the fiscal year, these forms are reviewed in a performance appraisal,

where the PM and the employee reflect on the employees' performance and set new performance goals for the following year.

This process is KPMG's formal feedback. Other performance related conversations, such as salary interviews, or promotion related interviews, have semi-annual rotations but do not contribute significantly to the company's feedback culture.

An additional application of MyPD is a form where an employee can request feedback from a co-worker using a similar infrastructure as the goal setting process. Employees can also provide feedback to co-workers using the same channel, meaning that associates are able to provide feedback to their managers and even partners, and only the involved parties have access to these communications within the MyPD system. Further information on KPMG's formal feedback processes to employees are not available to the author for confidentiality reasons.

However, MyPD is the system where the company's formal feedback and goal setting process takes place, but it is rarely spoken about or utilized throughout the year from goal setting to performance review. This indicates that KPMG's feedback culture is characterized by an inactive feedback dialogue for the majority of the year, but has a rigid formal feedback process with annual goal setting and performance appraisal meetings. It is this lack of regular informal feedback that characterizes the feedback culture at KPMG as stale, and may be reducing the willingness of associates to proactively seek informal feedback.

1.6   Methodological approach

A brief introduction to how this study will conduct its research at KPMG is appropriate before launching into the literature review. As discussed in the research question and hypothesis section, the current study will conduct a case study using two types of interrelated measurements at KPMG; two interventions aimed at improving feedback culture at KPMG, and two company-wide surveys to measure feedback culture levels before and after the initiatives to test responses for changes in the feedback culture.

The two interventions are based on a method that has been developed and tested by feedback researchers Sheena Warman et al. (2014) in veterinary clinics to improve the quality of verbal feedback within the clinic. The study participants were veterinary clinic

faculty and students, referred to as "feedback providers" and "feedback receivers" hereafter, respectively. Detailed explanation on the research design and method is addressed on the methodology chapter, following the literature review here below.

Selecting a method for this study was a strategic decision with the aim of providing detailed expertise understanding on the feedback culture level at an Icelandic company. As an associate at KPMG, I have pre-existing knowledge of the company's feedback culture from personal experience and from my experience I believe this approach is well suited for this study. The general proposition I challenge is that a company with all the bearings for having a strong feedback culture should by default have one.

However, I hypothesize that KPMG is unsuccessful in fostering a strong feedback culture due to a lack of a trusting climate within the company. In that regard, this study is a "most likely" critical case study, which, according to Bent Flyvberg (2006), is considered suitable for falsification of the proposition. In his article on common misunderstandings about case-study research methods, Flyvberg talks about the qualities of case studies, and among them was the following;

> *The case study is useful for both generating and testing of hypotheses*
> *but is not limited to these research activities alone (Flyvbjerg, 2006).*

The case study method has historically been criticized for not providing generalizable information to the literature. In academic research, the case study method is designed to provide in-depth knowledge of a phenomenon. Renowned researchers, such as Donald Campbell, worried greatly about the scientific qualities of the case study design, using the words "uncontrollable" and "misplaced precision" quite often in his review of the method (Campbell & Stanley, 1966). However, with the evolution of the method and its growing popularity in social science research, Campbell had a change of heart about his view of the method and has become one of its strongest supporters. In Flyvberg's article on the misunderstandings about case studies, he used some of Campbell's later work to help correct these common misperceptions (Flyvbjerg, 2006).

Flyvberg also used the historic example of how Galileo defied Aristotle's law of gravity to support his argument about the validity of the case study. Aristotle's law of gravity stood undisputed for millennia until Galileo conducted a case study that rejected this

scientific fact. There was no meta-analysis of multiple case studies, but merely an experiment that falsified the proposition. On these grounds, the current study stands to provide testimony to the value of a single case study to the literature on feedback culture, and my hope is that the study findings can help companies in Iceland capitalize the potential value of a strong feedback culture.

2. Understanding feedback culture

This section is a literature review of prior research on feedback and feedback culture. It will begin by examining individuals' relationship with feedback prior to entering the workplace. A brief look is taken into feedback cultures within classrooms and what themes characterize effective feedback processes in education. Then the review transitions into feedback themes in organizations and examines similarities and contrasting aspects of organizational versus educational feedback cultures. The purpose of this comparison is for the reader to understand that junior employees are often recent graduates, who are unaccustomed to organizational feedback culture, which can be the source of some frictions in adapting to the workplace.

 Following that, the review will build on more specific features of feedback processes in organizations. *Formal feedback* processes in organizations and their relationship with employee performance are reviewed, and the concept of *informal feedback* in organizations is introduced with an emphasis on performance influence and complexities of maintaining an ongoing informal feedback dialogue.

Literature on the individual-level construct *feedback orientation* and the organizational-level construct *feedback culture* and their interplay in organizations are discussed in detail. Feedback orientation refers to individuals' ability and willingness to receive and process feedback, whereas feedback culture refers to the formal and informal feedback infrastructure and behaviour of employees within the organization.

The literature review will conclude by identifying and summarizing managerial challenges for securing grounds for feedback orientation to grow and ways to foster a performance enhancing feedback culture. By doing so, the reader ought to be convinced why the focus of this study is important, which is to verify the promise of performance improvements through informal feedback, and to test an organization for validity of

prevailing beliefs about the qualities of informal feedback cultures. Thus, the ultimate purpose is to propose managerial actions that research deems plausible for bridging the gap between possible and actual performance improvements of employees by building a stronger feedback-friendly culture.

2.1 Feedback in education

Pedagogical research finds that frequently provided feedback serves a hugely valuable role in student learning outcomes, and the literature on feedback is in fact heavily concentrated on the teacher/student relationship (Black & Wiliam, 1998). In the classroom, researchers have found that for feedback to be useful to students it must be packaged and delivered with precision and meaning. More precisely, feedback should possess the following virtues: being timely, regular, sufficiently detailed, legible if hand-written, comprehensible, consistent, and pitched at an appropriate level (Scott, 2014). The definition of feedback has also been discussed, and in a culmination of Ende's (1983) studies on the topic, the term has been defined as "information describing students […] performance in a given activity that is intended to guide their future performance in the same or in a related activity".

Hattie and Timperley (2007) discussed the power of feedback using a conceptual analysis in an article that proposes a model of providing effective feedback in the classroom from multiple agents. Their short definition is that feedback is the consequence of performance, and their understanding of the *purpose* of feedback is to reduce the gap between current and desired performance (italics added).

On one hand, Hattie and Timperley's (2007) conceptual framework for effective feedback provision focuses on getting students to put more effort into feedback seeking strategies and managing goal setting to optimize chances of reaching their goals. On the other hand, it focuses on how teachers can aid students who want to bridge the gap from current to desired performance by setting achievable goals and providing effective learning strategies and feedback to help them along the way. That way, both teacher and student work together on making the learning process for the student more effective and simultaneously empowers the students' ability in self-assessment and error detection skills.

Additionally, the article covers a significant number of pedagogical meta-analyses on the effectiveness of various types of feedback, and finds that different types of feedback vary

greatly in effectiveness. Feedback like teacher praise, reward and punishment scores low on the effectiveness scale, whereas information-oriented types of feedback with task insights on how to execute tasks better were the top scorers (Hattie & Timperley, 2007).

Drawing from those findings one can see that teachers are a source of various types of feedback. Both formal feedback in the form of grades, rewards and punishment, and informal feedback in the form of praise and future task insight are contributions to the classrooms' feedback culture. It is a mixture of variously effective types of feedback and it is the feedback cultural background of future employees before they join the workforce in their chosen field. Hence, here starts the literature coverage on the post-education stage in life.

2.2   Feedback in the workplace

During the majority of the last century, research on feedback in organizations had been heavily focused on the *feedback provision* process through formal channels, or so called "feedback interventions", such as knowledge of performance interventions using direct messaging or performance appraisals (Kluger & DeNisi, 1996). Kluger & DeNisis's (1996) meta-analysis of historical feedback intervention (FIs) showed that over one third of FI strategies proved to reduce performance, whereas other FI strategies, though variously affective, in fact helped improve performance.

Drawing closer to the millennia, researchers Ashford and Cummings (1983) criticized the over-reliance on formal feedback provision to employees in organizations and highlighted the shortage of research on a historically ignored element of the feedback processes, which is how people *receive feedback*. It was their belief that feedback must not only be provided properly, but the receiver had to be prepared and willing to do something constructive with it for the feedback to be more effective. They directed the spotlight onto the individuals' feedback seeking activities by proposing a theoretical model called feedback-seeking behaviour (FSB) to systematically incorporate feedback seeking as an important part of the feedback process in organizations.

2.3   Feedback quality

Building on Ashford's and Cummings (1983) indication that proper feedback provision is needed to guarantee feedback effectiveness, the attention of this review turns towards the topic of feedback quality and feedback utility. Particular gaps in the literature on the connection of feedback utility to feedback quality, feedback seeking, role clarity and job performance spurred the attention of researchers Whitaker & Levy, (2012). They tested a model linking these concepts using implicit person theory, uncertainty theory and Korman's (2001) theory of work motivation. Figure 3 presents their model, showing significance results in coefficient paths derived from their study.
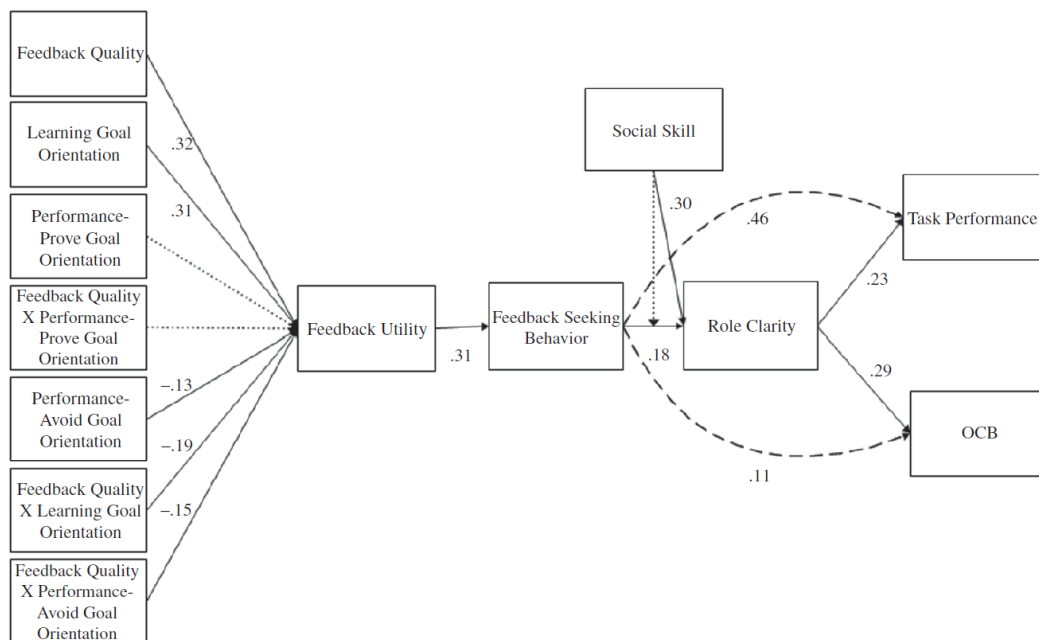
Figure 3: Whitaker & Levi's model connecting feedback utility to job performance through learning goal orientation, FSB, and role clarity (2012, p. 160)

As illustrated in Figure 3, learning goal orientation, the individual's overall inclination towards personal growth and goal achievement, and feedback quality have a strong relationship. Also, role clarity was found to be pivotal in dictating the relationship between employee's feedback seeking behaviour and feedback utility. This means that the mentioned dimensions ought to be in the foreground of consideration when organisations seek to improve performance feedback cultures in the future.
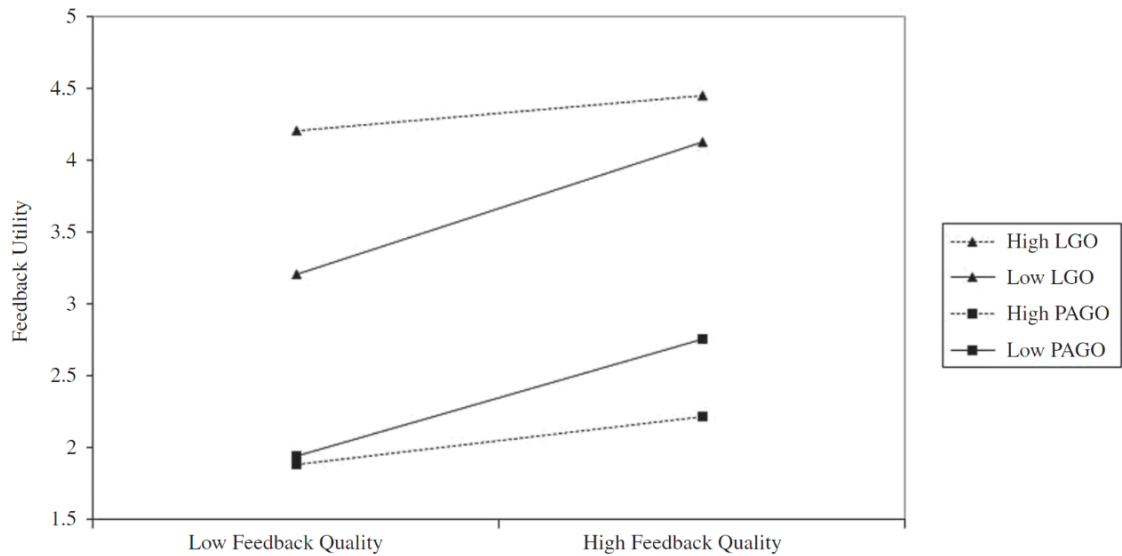
Figure 4: The interaction of feedback quality and goal orientation on feedback utility (Whitaker & Levi, 2012, p. 171)
Note: LGO = learning goal orientation; PAGO = performance-avoid goal orientation

Further, their findings specifically underline the positive correlation between increased feedback utility and higher feedback quality (Figure 4). It is noteworthy that feedback utility for those with a low learning orientation or a low performance-avoid goal orientation, is most sensitive to increased quality of feedback, whereas feedback utility is the least vulnerable to the quality of feedback for those with a high learning goal orientation. For clarification, a performance-avoid orientation refers to an individual being reluctant to seek feedback out of fear of receiving negative or destructive information about the self.

With Whitaker & Levi's contribution to the performance feedback literature, a deeper understanding has been established on the links between that which drives feedback seeking (feedback quality, feedback utility) and what constructs directly impact job performance in the feedback process (role clarity).

In summary, an important lesson from this model is that organizations must consider two primary functions for upholding a feedback culture that drives performance. Constructs such as feedback quality and role clarity are within the scope of organization's manageable resources, but constructs like feedback utility, feedback-seeking behaviour and social skills are individual-level characteristics which implies that during employee selection, organizations must consider such employee qualities in order to maximize its potential for a strong feedback culture.

2.4   Formal feedback

Most large companies have a routine based feedback system in place for goal setting and performance management. Such processes commonly have an annual cycle, where by definition, the process is formally documented in a setting that allows few distractions, like a one-on-one interview. Formal feedback is a valuable infrastructural asset to companies that they use to monitor and categorize employees by performance levels (Pearce & Porter, 1986). However, such categorization can be uncomfortable for performance managers, as Pearce & Porter (1986) hypothesized that performance labels in formal feedback processes like "satisfactory" may evoke negative connotation by the recipient, and cause employees who are performing at a satisfactory level to experience themselves as underperformers. On that note, formal feedback processes have historically had a dreaded reputation, and during most of last century, little to no consideration was given to the fragility of employees' self-esteem, and the lack of appreciation for the emotionally charged nature of individual contributions to the company was well known (Pearce & Porter, 1986).

Even since the early days of performance management research, the formal performance appraisal has been recognized as a difficult and even daunting experience for the reviewer and the reviewee. Beer & Ruth (1976) explained that hostility and resistance can surface without trust and understanding from both parties to one another, that it takes serious managerial skill to conduct a performance appraisal in appropriate manner, and purpose, methodology and processing of information are all sources of difficulties associated with the formal performance appraisal.

However, modern research and development shows that new additions to the formal feedback process have actively been rebuilding its reputation. The influence of globalization and appreciation for the term "stakeholder" has brought more attention to the diversity and range of sources of feedback. One of the most research and popular formal feedback process today is the 360-degree feedback process, where individuals and groups get feedback from multiple sources, or stakeholders, associated with their work. First introduced by Peter Ward (1997), the 360-degree feedback system was designed to capture valuable feedback from previously untapped sources, whereas feedback had traditionally been provided by supervisors of the individual who often knew the least

about the employees' performance, especially if the supervisor managed a large workforce.
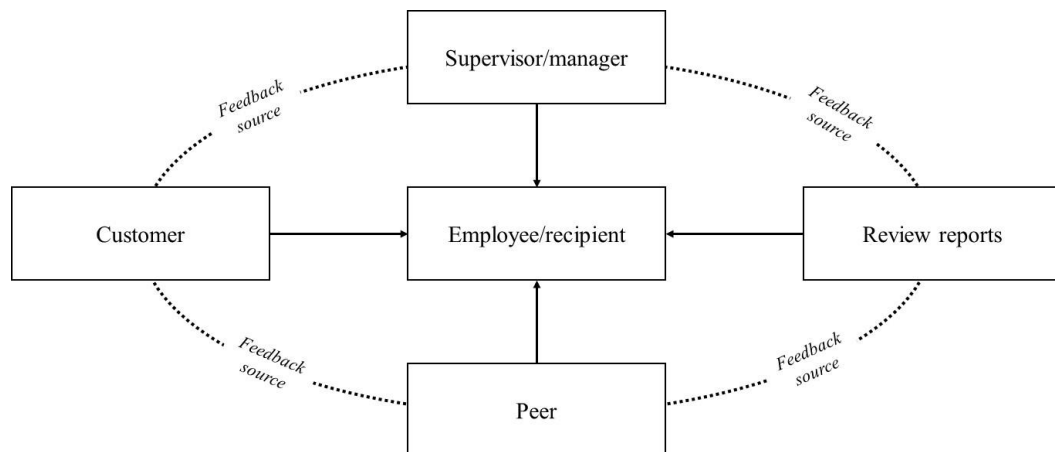
Figure 5: The 360-degree feedback model (Armstrong, 2009)
Note 1: The figure is created by the author, based on Armstrong's (2009) description of 360-degree feedback process

With the 360-degree view (Figure 5), the recipient of feedback gains access to previously unavailable sources of feedback, such as customer feedback, peer evaluations, or even pupil feedback.

Subordinates giving feedback to supervisors or managers was a relatively under-researched area in the performance management literature prior to the introduction of the 360-degree model. Employees giving feedback to managers may come across as odd or even taboo, as employees are traditionally supposed to learn from managers, and not the other way around. This is where upwards feedback was introduced. Bauer & Mulder's (2006) identified interesting benefits of upward feedback and it is the author's belief that this concept deserves an audience whereas its qualities may contribute to the empowerment of subordinates in the workplace, as mentioned here:

> *Integrating subordinates as equal communication partners and giving them opportunities to influence the existing practice of leadership is supposed to increase their job satisfaction and work motivation. It should also have a positive effect on co-operation and team building, which again supports social integration processes at work.*

> *For the supervisor who receives the feedback, it has a diagnostic, a controlling and a developmental function. It helps to identify effects and deficiencies in their leading behaviour, to change it accordingly and thus to develop their leading competence systematically.*

On the level of the organisation upward feedback is supposed to contribute to the establishment of a participatory leadership which is motivating for the subordinates as discussed above (Johannes Bauer & Regina H. Mulder, 2006).

The concept of formal feedback has thus been allowed to develop through the course of time, and formal feedback processes have begun to incorporate informal feedback features into the annual routines. For example, Larson (1984) found that informal supervisory feedback can positively influence performance and attitudes of employees.

However, Cate (2012) identifies three fundamental psychological elements that dictate self-determination toward the reception of feedback, associated with the Self Determination Theory (SDT): competence, autonomy and relatedness. The understanding is that most feedback processes do not feed into all three elements and in turn can leave some feedback initiatives short of their expected outcomes. The SDT and related practices suggest that offering feedback processes that focus on these intrinsic psychological elements is considered an option of reducing ineffective feedback reception.

Other findings by informal feedback researchers in performance driven organizations are unanimous regarding the fact that active informal feedback can play an important role in helping employees realize their goals between performance appraisals, but it is important to acknowledge that not all informal feedback processes are equally effective (Ashford & Cummings, 1983; Baker et al., 2013; Chakrabarty, Oubre, & Brown, 2008; London & Smither, 2002; Warman et al., 2014). The author of the current study provides an illustration in Figure 6 that represents the window of opportunity for an informal feedback dialogue which is an area where structured practices are scarcely available, which hold potential to become a valuable tool for informal feedback-thirsty organizations.
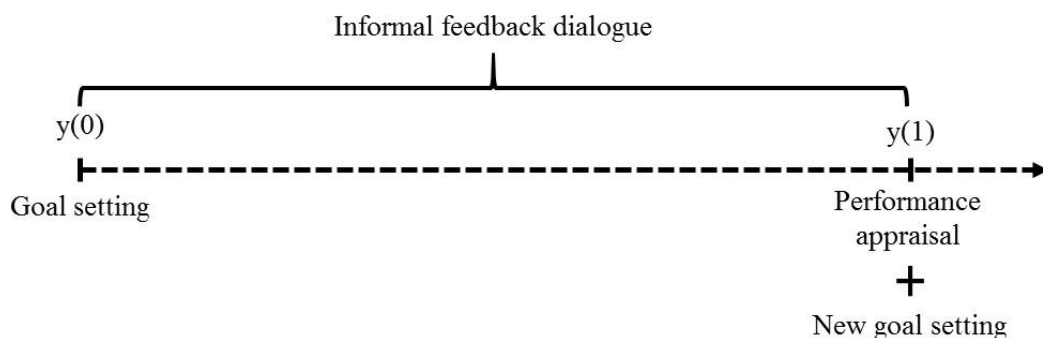
Figure 6: The window for informal feedback dialouges in organizations with formal feedback processes

2.5 Informal feedback

The task of providing feedback is a skill that managers must possess in order to make good use of information on subordinate performance. A manager who provides feedback to employees is more likely to receive questions from the recipients about their work, which can lead to a productive discussion about the business (Howe, 1999). Also, multiple feedback provision interventions are discussed by Perron et al. (2012) where the suggestion is that communication training, or simply coaching, for giving feedback leads to a positive change in the performance of recipients of feedback The overall consensus in literature on feedback provision is angled towards the notion that effective feedback yields positive results on recipient performance, but inconsiderate and impersonal types of feedback can resonate poorly with recipients (Cate, 2012).

Feedback-seeking behaviour became a topic of huge interest in management literature following the presentation of the theoretical model of FSB. Ashford et al. (2003) later conducted a thorough analysis of the FSB literature, about two decades after they originally proposed the model, and cumulated an explanation for how feedback-seeking affects one's image and one's ability for self-review, illustrated in Figure 7.
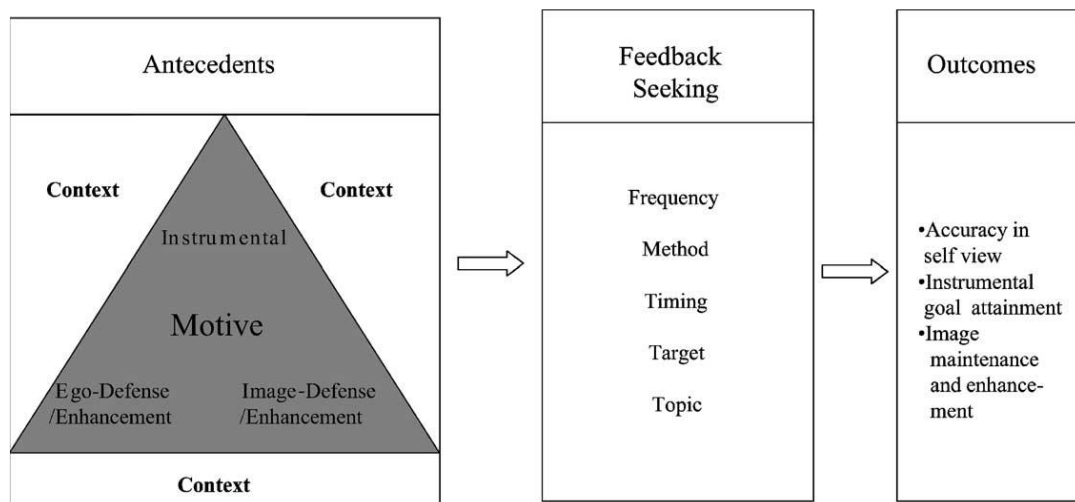
Figure 7: The feedback-seeking process (Ashford et al., 2003, p. 775)

The core of the feedback-seeking process stems from three primary motives of the feedback seeker: instrumental motives, ego-defence/enhancement motives and image-defence/enhancement. The instrumental reason for seeking feedback is for employees to get information about themselves to help them achieve their goals and improve performance, but those are merely the fundamental motives for seeking feedback. Ashford et al. (2003) introduce two additional complexities of feedback-seeking. The

intrinsic nature of the self for preserving an intact ego and the extrinsic nature for preserving a strong image is closely related to the individuals motive to seek feedback.

Baumeister (1999) touches on ego where individuals are told to be motivated to protect their egos. This means that when accurate information is provided about performance that harms the ego, the individual may be inclined to reject or reduce the harmfulness of the provided information to protect it. Therefore, individuals may be biased in their interpretation of negative feedback.

Further, Ashford et al. (2003) illustrate how the FSB literature highlights an extrinsic tendency of the self when seeking feedback that is focused on enhancing one's image in the workplace. Employees avoid "losing face" as much as possible, and are less likely to seek feedback if they believe their performance reflects poorly on their image (Tuckey, Brewer, & Williamson, 2002). The context of feedback provision plays a big role in whether employees seek feedback, for example, if feedback is given publicly the individual must be more focused on instrumental motives, whereas the self is exposed to both ego and image damage when feedback is delivered in public.

Important distinctions have been made on the benefit of informal feedback provision in companies. Studies in organizational behaviour have investigated supervisory feedback and its effects on salesperson's performance and found that positive supervisory feedback can significantly improve the performance of a salesperson on the job (Chakrabarty et al., 2008).

Also, an experienced mentor in the field of nursing notes that if an individual feels enthused and willing to improve after receiving feedback, it must have been of a constructive nature, but if that individual is left deflated and unhappy about the situation, then the feedback was most likely of a destructive nature (Percival, 2006). Therefore, a provider of feedback must consider that the manner in which he chooses to deliver the message to the receiver will greatly impact the way the receiver processes it. A receiver of feedback will react differently towards it if it is given promptly after a task is completed rather than a long time afterwards. In the case of a delayed feedback, the receiver will have had time to form a personal impression of his performance and is less likely to accept critical feedback once those impressions have already been formulated.

In the current study, the subject of one of the initiatives is the manner in which feedback ought to be delivered for maximum efficiency and potential for employee performance

improvement. Best practices are introduced from Armstrong's Handbook of Performance Management (2009), which touches on features of effective feedback like allowing the employee to express himself, give praise when deserved and encourage self-reflection during a feedback conversation. When the employee is enabled to express himself and take ownership of his own performance review he is considered to be more likely to feel enthusiastic and motivated by the feedback, as Percival (2006) explained. However, if the guidelines are ignored and the employees are lectured and receive no acknowledgement for their effort, they are less likely to feel empowered to improve.

2.5   Feedback orientation

Feedback orientation, an individual-level construct presented by London and Smithers (2002), is the ideally coined term which encapsulates the individual's desire for self-knowledge. Feedback orientation refers to the individuals' overall openness and ability to receive, process and utilize feedback to improve performance. The construct touches on features like accountability, social awareness, participation in feedback and self-efficacy to feedback (Rasheed, Khan, Rasheed, & Munir, 2015). However, organizational feedback culture levels are positively correlated with the longitudinal development of feedback orientation of employees for extended periods of time (London & Smither, 2002). This means that an employee who is unwilling to seek and process feedback – an employee who has a low feedback orientation – is subject to experiencing a positive improvement in feedback orientation. For that to happen, however, the organization needs to focus on cultivating a feedback friendly culture that inspires improvement and encourages feedback-seeking behaviour through formal and informal feedback processes.

Even though some employees are in fact not feedback oriented, people are still interested in learning about themselves. Baumeister (1999) explains that social psychology identifies three pillars that dictate how people seek self-knowledge:

1. through appraisals where accurate information is sought about the self,

2. through self-verification which is characterized by consistency where people are reluctant to alternative believes about the self,

3. and lastly, through self-enhancement bias which implies that one seeks favourable knowledge about the self to discard an unfavourable one.

The first pillar, seeking accurate appraisals about the self, is directly associated with asking for feedback. It is thus considered to be of phycological interest to people to be given feedback from someone who knows precisely how to improve one's performance.

Furthermore, feedback orientation is a multi-faceted construct, and multiple beliefs have been developed about it over the years. For example, it is believed that pending the employee feedback orientation he will react differently to developmental feedback, and therefore, coaching is considered a key function in channelling these feedback efforts in the most effective manner possible (Dahling, Chau, & O'Malley, 2012).

However, a detailed review of the longitudinal performance management process by London and Smithers (2002) presents a series of propositions on feedback orientation that they base on their granular analysis of literature on the construct. The propositions are derived from their observation of common beliefs and considerations from the feedback literature, and they provide logic to reason that resulted in the named propositions.

Table 1

Selected propositions on feedback orientation by London & Smithers (2002)

Proposition 1b	Individual levels of feedback orientation are stable over a medium time frame (several months) but shift as the individual's experiences are shaped by the organization's feedback culture.
Proposition 2	Strong feedback cultures enhance individuals' feedback orientation.
Proposition 3b	Coaching encourages feedback orientation
Proposition 5a	Over time, positive reactions and emotions following feedback lead to a sense of optimism and a will to do better, and negative reactions and emotions lead to a sense of failure and frustration.
Proposition5b	Positive feedback orientation helps the individual control and channel emotional reactions from feedback to focus on its behavioral implications.
Proposition 6	Individuals will process feedback more deeply, find more personal meaning in the feedback, and make internal attributions that lead to goal setting when they are high in feedback orientation and the organization has a strong feedback culture.
Proposition 8a	Feedback is attended to less when the individual faces other, especially conflicting, feedback and demands inside or outside work.
Proposition 8b	Over time, feedback orientation and feedback culture are mutually reinforcing, each strengthening (or in some cases diminishing) the other

A few feedback orientation propositions are listed below in Table 1, that were selected on the basis of their relevance to the current study. The author will consider these propositions when study results are being processed and check whether they comply with

London & Smither's (2002) findings. The propositions have yet to be overruled or tested inaccurate to my knowledge, and for best practices, should be considered as guidelines for managerial action towards an improved feedback culture in organizations.

2.7 Feedback culture

Culture and feedback culture, are thoroughly researched terms, but no single definition of culture is universally accepted. Through time, researchers have cultivated 164 various definitions of culture altogether, and researchers expect the number to continue growing (Clark, 2003; L & Kluckhohn, 1952). In an extensive study on the history of culture measurement, researchers Taras, Rowney & Steel (2009) covered and reviewed 121 culture measurement instruments that were used to study culture as a qualitative phenomenon. Various approaches and methods for measuring culture were derived from decades of literature and a common ground in the definition of culture was identified. Their consensus was that culture has four fundamental elements across the spectrum of culture definitions.

> *"First, it is generally agreed that culture is a complex multi-level construct. […]. Second, culture is shared among individuals belonging to a group or society. Third, culture is formed over a relatively long period. Finally, culture is relatively stable. (Taras et al., 2009)"*

These fundamentals are of importance to this research. Complexities of culture make it challenging to conduct a comprehensive culture research, and the fact that culture is a stable phenomenon indicates that initiative-based studies over a relatively short time frame have limited potential to significantly change culture of a group. However, the current study focuses on individual variables of feedback culture, such as feedback provision frequency, and by studying these micro-level cultural elements and testing them for sensitivity to feedback initiatives, it is the hope of the author to initiate what can become the starting point of a cultural shift, rather than a universal change of feedback culture in the organization.

2.7.1 Organizational culture

In relation to this review of culture, a narrower look into organizational culture as a whole is in order per the subject of the study. Edgar Schein's definition of organizational culture,

which reflects his intensive observation of the construct that interestingly exemplifies how organizational culture resembles the nature of providing feedback:

> *"A pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein, 2010)."*

However, organizations cultures all foster a certain subset of a feedback culture. An organization that focuses heavily on upholding a feedback culture is concentrated on some sort of a performance management system, career development and continuous learning. London and Smithers (2002) explain that effective feedback culture is cultivated and upheld by systematically focusing on three brackets of organizational procedures; by enhancing feedback quality, by emphasizing the importance of feedback in the organization and by providing support for using feedback (London & Smither, 2002). They continue to suggest that strong feedback cultures can improve feedback orientation of individuals over time.

Feedback appreciation and efficiency gradually increases in organizations where feedback is properly and consistently provided. Proper coaching is however a critical element of communicating and processing feedback efficiently to individuals. Coaches in organizations can be external advisors, supervisors, peers or even subordinates, whereas the purpose of coaching is to show empathy, support, encourage individual and to provide information about what is expected of the individual (London & Smither, 2002). Upholding the qualities of a strong feedback culture requires organizations to invest in rewards and appropriate training of coaches that can be carried down to prospective coaches in the future.

2.8 Summary of the literature

By probing into the concept of feedback and feedback culture, one realizes that the constructs are multi-faceted and complex in nature. It is evident that feedback plays a large role in individuals learning process through life, and researchers have explained that with performance comes feedback, and the purpose of said feedback is to assist

individuals in bringing their performance levels to a desired state (Hattie & Timperley, 2007).

However, research also tells us that not all feedback is helpful, and some types of feedback can even be unhelpful. Especially if the provider of feedback does not have the intention to build the receiver's self-esteem, but rather tell him how poorly he has performed, then feedback is much less likely to be effective in improving performance (Pearce & Porter, 1986). Also, if feedback is not provided consistently and timely after or during the performance, the receiver may have formed his own interpretation of the performance that is hard to let go of, and therefore any formative feedback given after that time frame will have lost much of its value (Scott, 2014).

Feedback and performance have several independent variables linked into their relationship. First, feedback quality dictates the level of feedback utility of employees, and thereafter, feedback-seeking behaviour, role clarity and social skills all play their part in how feedback affects performance (Whitaker & Levy, 2012). Some of these attributes (feedback-seeking behaviour and social skills) are individual constructs and others (feedback quality and role clarity) are manageable by the organization. For individuals to get the most out of feedback and improve their part in the feedback process, organizations must make sure that these variables are suited for optimum feedback effectiveness by providing high quality feedback and expressing clearly what they want from their employees.

In that regard, individuals are what makes up the fabric of an organization's feedback culture, and what researchers have found, is that their ability and willingness to seek, process and utilize feedback for performance enhancement has been referred to as feedback orientation (London & Smither, 2002). Feedback orientation has been proven to change over extended time periods pending the nature of the organization's feedback culture, meaning that strong feedback cultures can improve individual feedback orientation, and vice versa (London & Smither, 2002).

According to researchers, proper coaching in both providing and seeking feedback is what guides feedback orientation, and consequently feedback culture, into a direction of continuous improvement (Ashford et al., 2003; Ashford & Cummings, 1985; Dahling et al., 2012; London & Smither, 2002). This implies that the quality of an organization's

feedback culture depends heavily on the managerial efforts in feedback coaching, both to employees on how to seek feedback and to managers for how to provide quality feedback.

For the current study, based on the literature review above, the construct of a strong feedback culture is understood to hinge on the following: the quality and quantity of feedback coaching to employees, employee feedback orientation and manager's capacity for providing effective high quality feedback to employees. In Figure 8, I propose a framework that captures these constructs in a simple flow of activities that is intended to help managers to focus on what is important to foster a strong feedback culture. This framework will be used to guide the discussion of the study findings.
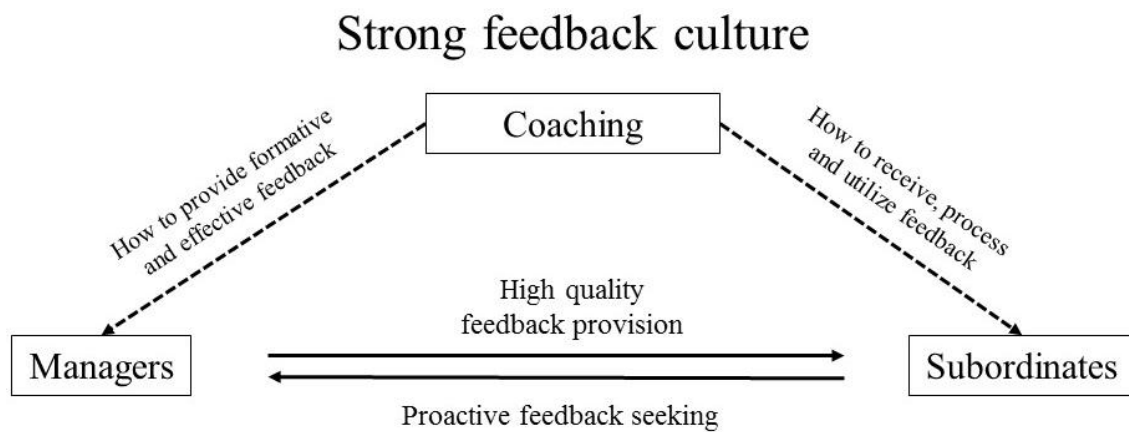
Figure 8: Illustration of the constitutes of a strong feedback culture

3   Methodology

3.1   Research model

This study uses a one group – before and after research design (EG O_1 X O_2). Two interventions (X_1 and X_2) were designed to raise awareness on the importance of providing and seeking feedback in the workplace. To measure the impact of these interventions the study uses two survey questionnaires, or observations (O_1 and O_2), designed to measure the level of feedback culture and feedback orientation in the company and what impact the interventions have on those levels. Both initiatives and the surveys are based on a feedback culture and feedback orientation measurement framework developed by Warman et al. (2014).

The first intervention was sending an information sheet, referred to as "the one-pager" hereafter, via e-mail with useful information on informal feedback provision and feedback seeking to all employees. This one-pager introduces the topic of maximizing

feedback in the company and then addresses receivers and providers of feedback, respectively, providing tips on how to effectively seek and provide feedback effectively. The ultimate intention with the one-pager was to raise awareness on the importance of informal feedback in the company and its potential to help recipients improve their performance. The one-pager full text is available in Appendix B.

The second initiative was a workshop for feedback providers, meaning managers and partners of KPMG in this case, which was developed by Warman et al. (2014). This initiative was used because its intended learning outcome for attendees are well suited to one of the main purposes of the study, which is to improve the company's feedback culture. After this workshop, attendees should be able to:

1. explain the role and importance of formative feedback,

2. describe potential barriers to effective feedback in the clinical environment,

3. identify strategies for effective feedback conversations.

A third initiative from the previous study was a task given to feedback receivers, where they were asked to submit a reflection on the feedback they received during the measurement period. Feedback receivers did not find the reflection task to be useful, and complications in collecting and processing the submissions indicated that the initiative was not of value to the study, and thus will not be applied in the current study (Warman et al., 2014).

In the previous study, two surveys were launched to measure the impact of the initiatives once they had been completed. One survey was sent to feedback providers (n=87, 42% response rate) and the other to feedback recipients (n=99, 38% response rate). The survey asked participants to rate their acceptance of various statements about the feedback culture in the clinic using a 5 point Likert scale, ranging from "strongly agree" to "strongly disagree". The questionnaire to feedback providers asked whether they:

1. felt more confident in providing verbal feedback after the initiatives,
2. agreed that being more engaged with the feedback process had improved their ability to assess recipients' performance,

3. were making a conscious effort to giving more verbal feedback than before the initiatives,

4. had trouble finding time to give verbal feedback to recipients,

5. experienced recipients being more proactive in seeking feedback after the initiative,

6. thought giving formative verbal feedback to recipients had directly improved their performance.

Questions to feedback recipients asked whether they:

1. were more aware of when they were being given formative verbal feedback after the initiatives,

2. noticed feedback providers making more effort to provide verbal feedback after the initiatives,

3. thought feedback providers had trouble finding time to give feedback,

4. had become more proactive in seeking formative feedback after the initiatives,

5. felt that formative verbal feedback had directly helped them improve their performance.

The results of Warman et al. (2014) were largely positive in favour of enhancing the feedback culture of the subject group with their initiatives. Among their findings was a significant increase in frequency of formative verbal feedback in the clinic (WSR test p = .002 for providers and $p < .001$ for recipients), providers felt significantly more competent (WSR $p < .001$) and more confident in providing feedback while recipients were more aware of when they were being provided feedback (Warman et al., 2014).

For the current study, the structure of the questionnaires has been combined into one survey that has been fitted for both participant groups using skip logic features of the survey software. The wording of the questions has also been altered to fit KPMG and its hierarchical system. Also, instead of sending a post-initiative questionnaire, the current study sends a pre-initiative survey called "the benchmark", and a post-initiative survey called "the comparison", in order to enable the current study to measure differences in feedback culture levels during the research period. Detailed explanations and reasoning for the design of the surveys and initiatives are covered in the following section.

Additionally, in the previous study, focus groups for both participant groups were conducted after survey responses had been collected. Feedback recipients explained that they were hesitant in asking for feedback out of fear of being embarrassed for exposing their deficiencies, or because they were worried about annoying their supervisors when asking for feedback (Warman et al. 2014). These sort of concerns regarding feedback seeking strongly support the claim of Baker et al. (2013) that feedback-seeking behaviour is limited to employees' psychological safety and affective trust within the workplace.

3.2 Research design and setting

The following sections describe the order of methodological actions taken in the study. Each step of the research is addressed in separate sub-sections to help the reader comprehend how the author conducted his research.

3.2.1 Summary of research procedure

The first questionnaire, referred to hereafter as "the benchmark survey" or "O_1", was e-mailed to all employees prior to the initiatives on February 10th. The sample includes all associates, senior associates, managers, senior managers and partners based in KPMG's Borgartún office (n=191). The second questionnaire, hereafter referred to as "the comparison survey" or "O_2", was e-mailed to the same sample on March 27th. The first initiative (a one-page e-mail document), hereafter referred to as "the one-pager", or "X_1", was launched on February 20th and the second initiative (a manager and partner feedback workshop), hereafter referred to as "the workshop", or "X_2", was held on March 2nd.

O_1	X_1	X_2	O_1
Benchmark questionnaire **February 10th**	One-page email document **February 20th**	Managers and partners feedback workshop **March 2nd**	Comparison questionnaire **March 27th**
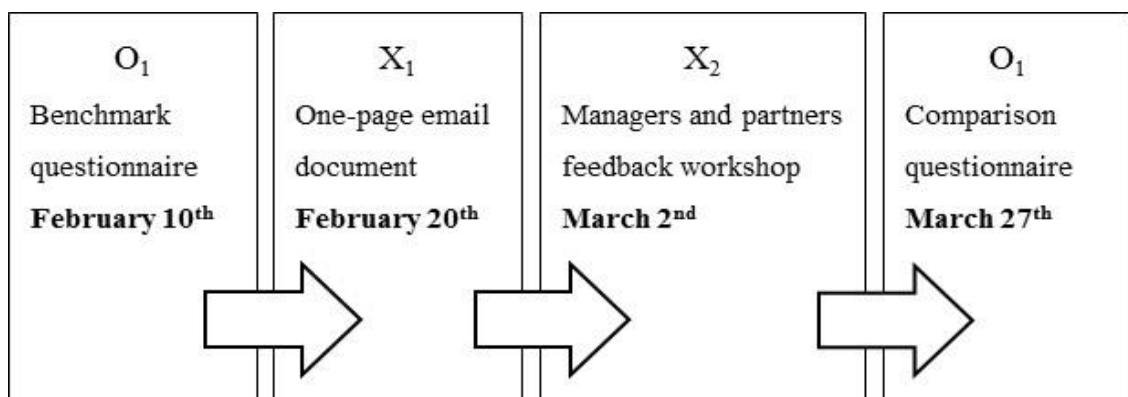
Figure 9: Research design

3.2.2 Surveys

Two surveys, the benchmark and the comparison, were e-mailed to the sample before and after the initiatives had been executed, respectively. Both surveys were created using the

online questionnaire software Survey Monkey Pro. Participants were split into two groups. Group one included associates and senior assoicates and group two had managers, senior managers and partners. To enable the author to use only one survey for all employees, a skip logic feature was used to direct participant groups to their questions. All questions are listed in section 3.3.2.3. for clarification.

3.2.3 The benchmark

The first two questions were multiple choice demographic questions (A-B). The first one asked what department the participant worked in (advisory, audit, tax or support) and the second asked about hierarchy (associate, senior associate, manager, senior manager, or partner). By using a skip logic feature, the survey directed associates and senior associates to a question page for feedback recipients (Q1-Q6) and directed managers, senior managers and partners to a page for feedback providers (Q7-Q13).

3.2.4 The comparison

The comparison survey was identical to the benchmark survey, and issued to the same sample as the benchmarking survey six weeks after the benchmark survey was sent. However, once participants had completed their respective questions they were directed to a final questions page with open-ended questions.

There were four open-ended questions on the final questions page (Q14-Q17). The first one asked what managers and partners could do to improve the feedback culture at KPMG, the second asked what associates could do to improve the feedback culture at KPMG and the third asked whether participants had additional comments about feedback culture at KPMG. The fourth, and last, open-ended question offered participants to leave comments on the execution of this research. The reason for adding the last question with an open answer box was not only to collect participants' thoughts on the research, but also to demonstrate that asking for feedback is both simple and harmless.

3.2.5 Survey questions

As mentioned, both surveys had identical questions. They were designed to address and assess the following elements:

- feedback provision frequency, from both feedback providers and receivers' perspectives (Q2 and Q8),

- feedback providers' capacity for feedback provision (Q7 and Q9-Q13), and

- the feedback orientation of associates and senior associates (Q1 and Q3-Q6).

These three elements will be addressed in the results section independently to estimate the current feedback level in the organization. They will be objectively analysed from the author's point of view as an associate of the organization and they will also be subjectively analysed in the context of the literature on the qualities of a strong feedback culture. The survey questions are listed here below in the order they appear to respondents. Note that by using skip logic, answers for question B sends associates and senior associates to questions Q1-Q6 and managers, senior managers and partners to questions Q7-Q13.

Questions for associates and senior associates;
A   In what department do you work?
B   What is your hierarchical level?

Questions for associates and senior associates;
Q1   It is easy for me to ask for verbal feedback in the workplace
Q2   How often are you given formative verbal feedback on a weekly basis?
Q3   Managers and partners make an effort to give formative verbal feedback to associates
Q4   Managers and partners seem to find it difficult to give any feedback to associates
Q5   I am proactive in asking for feedback from partners and managers
Q6   Formative verbal feedback has directly helped me improve my job performance

Questions for managers, senior managers and partners:
Q7   It is easy for to give formative verbal feedback to associates
Q8   How often do you give formative verbal feedback to associates on a weekly basis?
Q9   I feel prepared to assess associates' performance and provide feedback accordingly

Q10 I am making a conscious effort to give associates formative verbal feedback during or after projects

Q11 Giving formative verbal feedback has directly improved associates' performance

Q12 I find it difficult to find time to provide formative verbal feedback to associates

Q13 Associates are proactive in asking for feedback during or after projects in a timely manner

Open-ended question for all participants in the comparison survey:

Q14 What can managers and partners do to improve the feedback culture of KPMG in Borgartún?

Q15 What can associates do to improve the feedback culture of KPMG in Borgartún?

Q16 Do you have any other comment regarding the feedback culture of KPMG in Borgartún?

Q17 Do you have any comment regarding the execution of this research?

3.3 Initiatives

Two initiatives were employed in the company: X_1 and X_2. X_1 was a one-page information sheet to all employees (Appendix B), and X_2 was a feedback workshop for managers and partners. Managers and partners were tutored about effective feedback provision techniques and presented with the results of the benchmark survey. A slides-deck was created for the workshop that explained the topic of the research, introduced results of the benchmark survey and provided guidelines to keep in mind when providing informal feedback. The slide-deck is available in Appendix C.

3.3.1 The one-pager

This document starts with an introduction that explains KPMG's dedications to upholding a feedback-friendly working environment where subordinates and superiors are encouraged to have informal feedback conversations. It specifically mentions that managers and partners at KPMG are willing to share their expertise with associates at their request. Further, it explains how verbal constructive feedback is not a supervisor giving a subordinate an order, but a conversation among colleagues on how to improve performance.

Following the introduction, there is a section that addresses associates directly. It provides useful tips and hints for how to efficiently seek informal feedback by suggesting simple probing questions about their performance, which they can use when engaging a project manager or an expert on the subject.

Thereafter the document addresses managers and partners. It starts by mentioning that providing feedback is an important improvement tool for the company. It then outlines ways for managers and partners to provide effective feedback to associates; that it has to be timely, precise and objective, it should include an action plan for how to perform better next time, and some useful guidelines for different ways to provide verbal constructive feedback. Finally, the one-pager mentions that managers and partners are also encouraged to seek feedback on their own performance. This ties back to upward feedback, as discussed in the literature review, because people should always be able to seek feedback to improve their performance, no matter how highly they rank in the company's hierarchy (Johannes Bauer & Regina H. Mulder, 2006).

3.3.2 The workshop

All managers, senior managers and partners (n=102) were invited to attend a feedback culture workshop. The invitation for the workshop was sent by the author, who was the conductor of the workshop, via Microsoft Outlook e-mail software with the option of virtual attendance through a Skype conference call. The workshop was held on the 8th floor of KPMG in Borgartún on March 2nd at 8:30. The workshop duration was advertised to be 60 minutes, but the actual duration of the presentation and exercises was 50 minutes. To improve chances of a higher attendance, the event advertised that breakfast would be served before the meeting so participants were incentivized to attend with the promise of a morning refreshment. Attendance to the workshop was 41% of all invited parties (n=42). Before starting the workshop, the author encouraged attendees to participate in all discussions freely, and explained that the concept of this workshop was intended for participants to engage in the topic, rather than being lectured on it.

The workshop structure was inspired by the previous study as mentioned in the research model section above. The primary focus was to explain the role and importance of formative feedback, to describe potential barriers to effective feedback in the workplace, and to identify strategies for effective feedback conversations.

However, contrary to the previous study, the workshop started by briefly presenting the concept of feedback culture and feedback orientation to give attendees a firm idea for what the topic of the study was. Then, the focus was shifted onto presenting the results of the benchmark survey, of which all attendees were aware, and in which most of them participated. The results of the benchmark, indicating the current feedback culture level of the company, are discussed at length in the corresponding section of the results chapter. Then the actual workshop took place, which included instructions on how to provide effective informal feedback to employees, using a scenario and attendee participation for demonstration. See Figure 10 for a visual illustration of the workshop structure.

Feedback culture workshop for managers and partners at KPMG	
Stage 1	Introduction to *feedback culture* and "feedback orientation"
Stage 2	Presentation of "benchmark survey" results
Stage 3	Presentation of useful guidelines for informal feedback provision
Stage 4	Scenario exercise in feedback provision
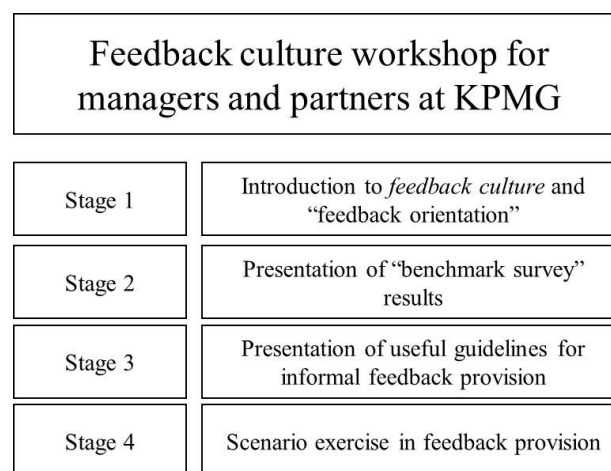
Figure 10: The structure of the workshop initiative

Once the presentation of the benchmark results was completed, the actual workshop took place. The conductor transitioned into an introduction of an informal feedback provision guideline. The guideline was built on Armstrong's "golden rules for conducting a review meeting" from his Handbook of Performance Management (Armstrong, 2009). It included nine useful tips, listed in Table 2, for how to provide effective informal feedback to associates.

Following the introduction and explanation of the feedback guidelines, the conductor presented a real-life scenario with an opportunity for a manager to provide feedback to an associate. This scenario was in fact built on the presentation of the benchmark results in that workshop. The conductor, acting as the associate, had composed the slide-deck out of survey data and presented the results for the attending managers and partners, who acted as the audience.

Table 2

Guidelines for how to provide effective informal feedback

1	Be prepared	Managers should refer to previously agreed goals and compare with the performance of the employee. They should decide what parts of the performance should be mentioned before the conversation takes place.
2	Choose an appropriate context	A successful meeting depends on creating an informal environment where a frank, but friendly exchange of views can take place.
3	Provide feedback in a timely manner	Feedback on performance should be immediate. If it is delayed, the employee's perception of the performance will be firmly shaped, and hard to change.
4	Use appropriate language	Employees are sensitive to the words you choose to describe their performance. Deliver the desired message using carefully selected words.
5	Use praise	Give only deserved and sincere compliments. Praise helps people relax.
6	Let the employee do most of the talking	This allows employees to get things off their chest. Use open-ended questions. This helps employees feel like they are getting a fair chance to express themselves about their perspective of their own performance.
7	Talk performance – not personality	Talk about facts, evidence or actual events, not opinions. Compare performance to previously agreed goals.
8	Encourage self-reflection	Analyze jointly and objectively about the performance and agree on how to maintain a high standard of performance in the future
9	Agree measurable objectives and a plan of action	End the meeting on a positive and optimistic note by setting a plan in place for continuous improvement.

Once the scene was set, the conductor called for a volunteer to provide immediate feedback to the performance. A volunteer, who presented himself from the audience, was reminded about the feedback provision guidelines, and then the conductor had a seat with the volunteer in front of the audience and started an informal feedback conversation about the conductor's performance on the presentation.

Granted, the setting of this feedback demonstration was not according to the first two guidelines. The context for informal feedback provision is not ideal in public and the volunteer was not prepared to provide feedback at the time, but the feedback was nevertheless provided in a timely manner (guideline 3). Regardless of those limitations, the feedback provision simulation was largely successful. The volunteer started off with complimenting the layout of the presentation (guideline 5) and proceeded to ask what the conductor thought he could have done better (guideline 4, 6 and 8). Then the volunteer gave a useful tip for how to improve the performance on a future assignment (guideline 7). He then concluded by mentioning that he looked forward to seeing the conductors next presentation (guideline 9). The feedback provision simulation duration was 3:20 minutes, and I mentioned to attendees that an ideal informal feedback conversation typically lasted for less than five minutes.

Managers and partners who attended the workshop later commented in passing to the conductor that the demonstration had been cleverly designed. It was commonly agreed that too little attention had been given to providing informal feedback, that the workshop

had successfully raised the awareness on the topic, and that it exemplified the simplicity of what it takes to engage in an informal feedback dialogue with associates.

3.4   Anonymity and ethical permission

Full anonymity in survey responses and workshop participation was promised to all employees. For that reason, the study was not able to conduct a paired-sample t-test analysis of survey data, whereas IP addresses, names or any other identification information was not collected from participants.

Research results and analyses will only be made available to relevant Reykjavík University faculty and KPMG representatives. Further publication of the contents of this research requires written consent from KPMG. Permission for surveying and exposing employees at KPMG to initiatives was granted by KPMG's human resource manager.

3.5   Participants & data collection

At the start of the research period during the benchmark survey the number of employees at KPMG was 184 in the Borgartún office. Once the comparison survey was closed seven weeks later the number of employees in Borgartún had risen to 191. The increase in the number of employees may have caused inaccuracies when considering response rates presented.

Table 3

Number of employees at KPMG Borgartún by department and hierarchy

	Associate	Senior associate	Manager	Senior manager	Partner	Total
Advisory	5	8	14	11	5	43
Audit	9	15	6	11	21	62
Support & IT	18	24	10	5	2	59
Tax	3	5	7	8	4	27
Total	35	52	37	35	32	191

Note 1: Employee data provided by the company on April 11th, 2017

Table 3 presents the number of participants in their respective department and hierarchy according to information provided to the author by the company on April 11th, 2017. Using this information, participation rates are calculated for both surveys.

Participants are employees from four departments at KPMG; advisory, audit, support & IT or tax. The number of associates, senior associates, managers, senior managers and partners by departments is also listed in Table 3.

3.6   Questionnaire participation

The benchmark was emailed by the author using a group email address for all employees at KPMG in Borgartún on February 10th, 2017. A reminder for answering the survey was sent on February 16th using the same channel, and at midnight on the 16th of February the survey was closed for participation. Response collection is presented in Figure 11. The survey received 147 responses (n=147, 77% response rate).

A total of 81 responses were received on Friday, February 10th, which was the first day of the benchmark response collection (Figure 11). Such a strong reaction indicates that employees showed immediate interest in the topic of the study. Later that evening an unrelated employee entertainment event was held in a sports bar where the author was inquired about the study. My co-workers were curious to know what the research question of the study was and asked what could be done to facilitate an improvement in the feedback culture of the company.
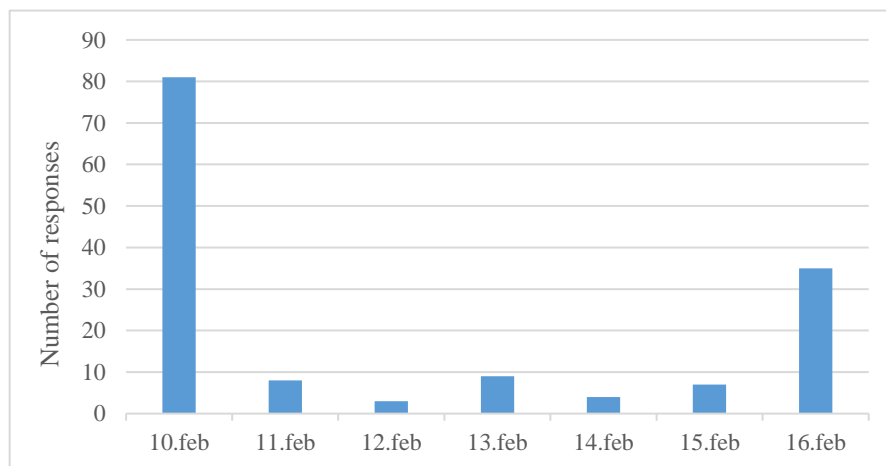
Figure 11: Numer of responses on benchmark survey by date

The comparison was e-mailed by the author using the same channel as the benchmark for all employees at KPMG in Borgartún on March 27th, 2017. A reminder for answering the comparison survey was also sent to employees on March 31st and a second reminder was sent on April 4th. At midnight on the 5th of April the survey was closed for participation. The number of responses collected by date is presented in Figure 12. The survey received 121 responses (n=121, 66% response rate).

Only 44 responses were collected on the first day of the comparison survey (see Figure 12), which is a considerate drop from the 81 responses on the first day of the benchmark. The 27th of March was a Monday which may explain the drop from the benchmark survey,

because Mondays are typically days when employees are busier than at the end of the week. However, on Friday, March 31ˢᵗ, another 37 responses were collected following the first reminder the author sent out.
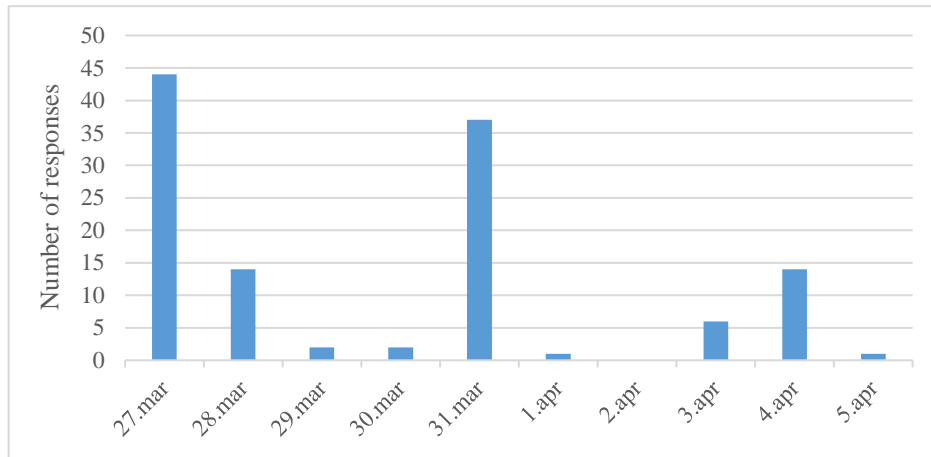
Figure 12: Numer of responses on comparison survey by date

For a total of 66% company-wide response rate, the interest for study participation may have dropped slightly from the 77% participation from the benchmark. Nevertheless, the response rates of both surveys are high enough to say that employees are genuinely interested in the topic of feedback culture in the company.

3.7   Data analysis

All gathered data from both surveys was analysed using IBM's SPSS statistical analysis software. The study uses independent-sample t-tests to measure differences in t-scores between surveys. The study also examines survey responses in the context of the literature to examine where the company is situated with regards to feedback culture and feedback orientation. Also, open-ended questions from the end of the comparison survey are reviewed and summarized by the author and presented in the results section in accordance to relevance to the study.

Responses from all departments were statistically analysed comprehensively and separately for each of the four departments of KPMG. Complete SPSS outputs are listed in following order in Appendix D.

1. Advisory, audit, support & IT and tax respondents together

2. Audit respondents

48

3. Advisory respondents

4. Support & IT respondents

5. Tax respondents.

4   Presentation of results

Study results are presented in this section in two primary categories. The first one is an objective analysis of employee responses to the surveys in regards to the current feedback culture level at KPMG. Responses to each survey question are analysed in the order they appear. Questions A and B ask respondents about their hierarchy and what department they work in, and questions Q1 to Q17 ask associates and senior associates (Q1-Q6) and managers, senior managers and partners (Q7-Q13) about the company's feedback culture. Questions Q14 to Q17 are open-ended questions that give participants an option to comment further on aspects of the company's feedback culture. The second category is a statistical analysis which measures whether employee responses have changed in the period between the two surveys in which the feedback initiatives were launched.

Response data is presented in tables from both surveys that include full question texts, answer options, response percentage, response count, total number of answered questions and total number of skipped questions. The number of answered and skipped questions shows the number of responses to each question and how many respondents skipped each question. Note that by using skip logic, associates and senior associates all automatically skip questions for managers, senior managers and partners, and vice versa. Also, some respondents may have chosen to skip the question they were supposed to answer, which will register as a skipped answer.

Study results are presented in three ways. Firstly, the survey response information tables are analysed for each multiple-choice question (A, B and Q1-Q13). Secondly, open-ended questions at the end of the comparison survey (Q14-Q17) are reviewed. The responses are categorized by hierarchy of respondents and summarized by grouping them into themes. And lastly, a summary of results from the independent-sample t-test analysis of Q1-Q13 is presented.

4.1 Analysis of study results

In question A, which asks what department participants work in, respondent ratio by department holds relatively constant between surveys. Respondents from advisory and tax were the most constant between surveys, but there was a larger drop in participation from audit and support & IT employees between surveys.

What is more noteworthy is that even though 31% of employees at KPMG work in support & IT, only 11,6% and 9,9% of respondents worked in that department in the benchmark and comparison surveys, respectively. Also, even though audit employees make up 32% of KPMG's total employees, audit employees made up for between 46,9% and 43% of survey respondents, indicating that the topic of the study may be of far more interest to the audit employees rather than support & IT employees (see figure 13).

Table 4

A) What department do you work in?

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	Response Count	Response Percent	Response Count
Audit	46,9%	69	43,0%	52
Advisory	27,2%	40	31,4%	38
Tax	14,3%	21	15,7%	19
Support & IT	11,6%	17	9,9%	12
answered question		*147*		*121*
skipped question		*0*		*0*

The variation in interest levels may be explained by the nature of work performed in those department, whereas audit employees work on a project basis, meeting regularly face-to-face with clients, but support & IT employees work on infrastructure and maintenance related operations where contact with clients is minimal or even none. Advisory and tax employees also spend more time with clients on the job than support & IT employees,
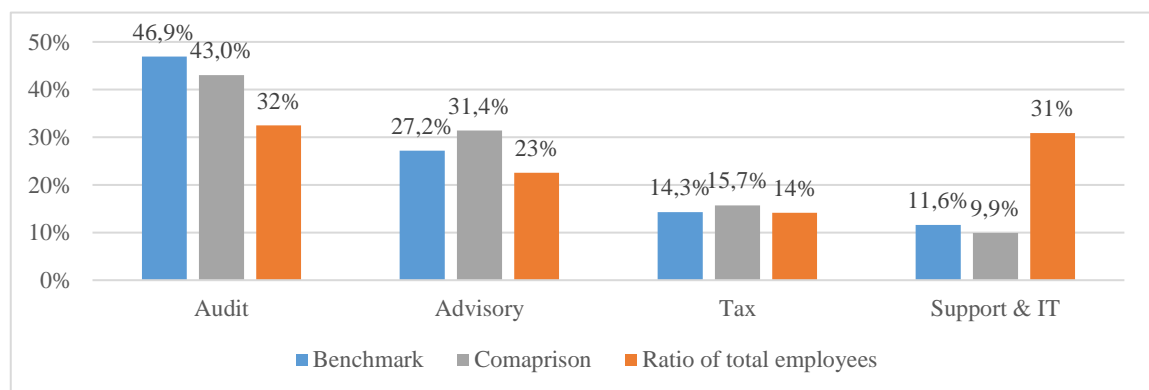
Figure 13: Ratio of survey respondents to ratio of total employees by department

and their participation in the study is more representative of the ratio of advisory and tax employees at KPMG, illustrated in Figure 13.

When responses are viewed in regards to hierarchy, in question B, one can see that the ratio of hierarchies remains quite stable between surveys. Associates and senior associates were 43,5% of respondents in the benchmark and 41,3% in the comparison, who are regarded as feedback recipients, or feedback seekers, in the study. Managers, senior managers and partners totalled 56,5% of respondents in the benchmark and 58,7% of respondents in the comparison, who represent feedback providers in the study. The distribution of participation between feedback recipients and providers is thus relatively equal which gives added strength to the study's validity.

Table 5

B) What is your hierarchy level?

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	Response Count	Response Percent	Response Count
Associate	25,2%	37	25,6%	31
Senior associate	18,4%	27	15,7%	19
Manager	19,7%	29	20,7%	25
Senior manager	18,4%	27	19,0%	23
Partner	18,4%	27	19,0%	23
answered question		*147*		*121*
skipped question		*0*		*0*

In regards to whether survey responses fairly represent the company's hierarchical composition, one can see in Figure 14 that associates and senior associates make up 46% of employees at KPMG and a total of 43,5% and 41,3% of survey respondents. Managers, senior managers and partners at KPMG represent 54% of total employees and 56,5% and 58,7% of survey respondents. Therefore, survey respondents do in fact fairly reflect KPMG's hierarchical employee composition, as illustrated in Figure 14.

Figure 14: Ratio of survey respondents to total employees by hierarchy

Now begins the review of survey questions regarding feedback at KPMG. Questions Q1 to Q6 are solely answered by associates or senior associates, referred to as "associates" hereafter, and indirectly inquires respondents about their feedback orientation and their perception of feedback provision frequency and superior's capacity for providing feedback. Questions Q7 to Q13 are only answered by managers, senior manager and partners, referred to as "M&P's" hereafter. M&P's are inquired about the frequency of feedback they provide to associates and their capacity to provide informal verbal feedback.

4.1.1 Associates results

The first feedback related question, Q1, asks whether associates find it easy to ask for verbal informal feedback at work. While half of the associates claim to find it easy to ask for informal feedback, the remaining respondents do not indicate a clear response or find that asking for informal verbal feedback is somewhat challenging.

Table 6

Q1 It is easy for me to ask for verbal feedback in the workplace

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	Response Count	Response Percent	Response Count
Strongly agree	19,0%	11	13,6%	6
Agree	31,0%	18	31,8%	14
Neither agree or disagree	36,2%	21	38,6%	17
Disagree	6,9%	4	15,9%	7
Strongly disagree	6,9%	4	0,0%	0
answered question		*58*		*44*
skipped question		*89*		*77*

About 15% of associates do not find it easy to ask for informal feedback before and after the initiatives. Fewer respondents strongly disagree with the statement after receiving the one-pager, which could mean that some level of positivity has resulted from the initiative, but no significant change is detected between surveys. However, the majority of associates does not seem to have a problem with asking for informal verbal feedback.

Q2 ask associates about the frequency of formative feedback they receive per week. About 88% of associates report receiving suck feedback once, or less than once, per week before the initiatives and over 15% of them do not receive any formative feedback from M&P's. These numbers are relatively constant in both surveys. This question clearly demonstrates that associates feel that they rarely receive formative verbal feedback. However, the reason for the low feedback provision frequency could be that:

- M&P's are unaware that associates expect them to provide feedback unasked, or

- associates do not proactively seek formative verbal feedback frequently, or

- neither M&P's nor associates are proactive in providing and seeking formative verbal feedback, respectively.

Table 7

Q2 How often are you given formative verbal feedback on a weekly basis?

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	**Response Count**	**Response Percent**	**Response Count**
I don't receive formative verbal feedback	15,5%	9	13,6%	6
Less than once per week	55,2%	32	52,3%	23
Once per week	17,2%	10	20,5%	9
Twice per week	3,4%	2	4,5%	2
Three times per week	5,2%	3	4,5%	2
Four times per week	0,0%	0	4,5%	2
Five times per week	0,0%	0	0,0%	0
More than five times per week	3,4%	2	0,0%	0
answered question		*58*		*44*
skipped question		*89*		*77*

In Q3, associates are asked to indicate whether M&P's try to provide formative verbal feedback to them. The majority of respondents are indecisive towards this question in both surveys, but lean more toward agreeing with the statement. About 20% of associates are dissatisfied with M&P's effort in providing feedback to associates, so these results show that there seems to be room for improvement from M&P's in terms of making associates feel like M&P's are willing to engage in feedback conversations.

Table 8

Q3 Managers and partners make an effort to give formative verbal feedback to associates

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	**Response Count**	**Response Percent**	**Response Count**
Strongly agree	6,9%	4	4,5%	2
Agree	20,7%	12	22,7%	10
Neither agree or disagree	50,0%	29	56,8%	25
Disagree	10,3%	6	9,1%	4
Strongly disagree	12,1%	7	6,8%	3
answered question		*58*		*44*
skipped question		*89*		*77*

As an associate, I would like M&P's to view associates response to this question as a chance to put increased effort into making themselves more available to associates, during or immediately after projects, for a formative feedback discussion. This can be achieved,

for example, by asking associates how they felt about their performance and suggesting how they could perform better in future projects. This suggestion was among the information in the one-pager that employees received in the first initiative (X_1).

The next question, Q4, follows the previous one by asking associates whether they feel like M&P's have difficulties with providing feedback. Associates appear to have mixed feelings about this statement, though a large percentage of respondents neither agree or disagree to it. Such inconsistency indicates that some M&P's find it difficult to provide formative feedback to associates while others do not. This means that M&P's have an opportunity to help each other in getting more comfortable in providing formative feedback by sharing tips on effective feedback provision methods from their own experiences.

Table 9

Q4 Managers and partners seem to find it difficult to give any feedback to associates

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	Response Count	Response Percent	Response Count
Strongly agree	10,3%	6	4,5%	2
Agree	22,4%	13	22,7%	10
Neither agree or disagree	34,5%	20	43,2%	19
Disagree	29,3%	17	25,0%	11
Strongly disagree	3,4%	2	4,5%	2
answered question		*58*		*44*
skipped question		*89*		*77*

Question Q5 asks associates to self-reflect on their own feedback-seeking behaviour by asking if they are proactive in asking for formative feedback from M&P's, to which most of associates neither agree or disagree (37,9% in the benchmark and 43,2% in the comparison). The reasons for limited feedback-seeking behaviour in the company can be

Table 10

Q5 I am proactive in asking for feedback from partners and managers

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	Response Count	Response Percent	Response Count
Strongly agree	10,3%	6	6,8%	3
Agree	24,1%	14	27,3%	12
Neither agree or disagree	37,9%	22	43,2%	19
Disagree	19,0%	11	18,2%	8
Strongly disagree	8,6%	5	4,5%	2
answered question		*58*		*44*
skipped question		*89*		*77*

numerous, and as hypothesized, the bottom line might be related to a lack of a trusting

climate and affective trust in the workplace. However, based on responses to all survey questions, a more precise picture can be drawn of what specifically hinders associates in seeking feedback proactively.

Based on associates responses and my experience from working closely with M&P's, they may either have difficulties with providing formative verbal feedback due to time restrictions or lack of feedback provision skills. Another reason could be that M&P's do not make enough effort to make themselves available to associates for a feedback discussion. In the next result section, M&P's provide answers to those factors which gives the study an understanding about the subject from both perspectives for a 360-degree view of the company's feedback culture.

Q6 is another self-reflection question for associates where they are asked to comment on whether formative verbal feedback has directly contributed to their performance improvements. Interestingly, 63,8% and 77,3% of associates in the benchmark and comparison surveys, respectively, report that such feedback has indeed directly helped them improve their performance. Even though associates do not seem to frequently receive formative feedback, the feedback they do receive has positively affected their performance development.

Table 11

Q6 Formative verbal feedback has directly helped me improve my job performance

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	Response Count	Response Percent	Response Count
Strongly agree	36,2%	21	31,8%	14
Agree	27,6%	16	45,5%	20
Neither agree or disagree	29,3%	17	20,5%	9
Disagree	3,4%	2	2,3%	1
Strongly disagree	3,4%	2	0,0%	0
answered question		58		44
skipped question		89		77

This finding is an important distinction in the study in regards to understanding that the majority of associates are able to utilize the feedback they receive to improve their performance. Further, this finding indicates that associates are high in feedback orientation to some extent, and as discussed in the literature review, for a strong feedback culture to thrive requires employees to be high in feedback orientation (London & Smither, 2002).

4.1.2 M&P's results

The remaining seven multiple-choice questions are solely answered by M&P's. They are designed to match associates responses to M&P's perspective of their own feedback provision behaviour. By comparing M&P's responses to associates responses, the study can identify gaps in opinions on selected aspects of KPMG's feedback culture from the perspectives of the two employee groups.

Q7 asks M&P's whether they find it easy to provide formative verbal feedback to associates. This question provides responses to associates answers to Q4, which raised the concern that M&P's may have difficulties with providing formative feedback to associates. In contrast, M&P's indicate that they have virtually no problem with providing formative verbal feedback to associates.

It appears that despite M&P's ability to provide feedback, they have not been successful in communicating to associates that providing feedback is not a problem to them. To me, it is not surprising to find that communication failure between associates and M&P's has caused associates to believe that M&P's struggle with providing feedback. However, as mentioned in Q4's review, rather than sharing tips on effective feedback provision methods with each other, M&P's may be better advised to focus on communicating to associates that proving feedback to them is in fact no problem at all.

Table 12

Q7 It is easy for me to give formative verbal feedback to associates

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	Response Count	Response Percent	Response Count
Strongly agree	30,7%	23	25,4%	15
Agree	61,3%	46	72,9%	43
Neither agree or disagree	6,7%	5	1,7%	1
Disagree	1,3%	1	0,0%	0
Strongly disagree	0,0%	0	0,0%	0
answered question		75		59
skipped question		72		62

Question Q8 asks M&P's to indicate how frequently they provide formative verbal feedback to associates using the same answer options as Q2, which asked associates to indicate how often M&P's provide such feedback to them. In the benchmark, 60% of M&P's say they provide formative verbal feedback once or less per week. In the comparison, this number increased to 72,9%. Considering associates answers in Q2, who

said 88% of them receive feedback once or less per week, one can see that associates and M&P's are more or less unanimously of the opinion that feedback provision frequency in the company is quite low.

Table 13

Q8 How often do you give formative verbal feedback to associates on a weekly basis?

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	Response Count	Response Percent	Response Count
I don't provide formative verbal feedback	1,3%	1	1,7%	1
Less than once per week	32,0%	24	39,0%	23
Once per week	26,7%	20	32,2%	19
Twice per week	12,0%	9	15,3%	9
Three times per week	13,3%	10	8,5%	5
Four times per week	8,0%	6	1,7%	1
Five times per week	0,0%	0	0,0%	0
More than five times per week	6,7%	5	1,7%	1
answered question		*75*		*59*
skipped question		*72*		*62*

Question Q9 addresses how comfortable M&P's are in providing formative verbal feedback to associates by asking them whether they feel prepared to assess associates' performance and provide relative feedback. A comforting response from M&P's says that about 90% of them are prepared to do so in both surveys. More specifically, according to responses to Q7 and Q9, M&P's find it easy and feel prepared to assess the associates' performance and provide formative feedback to them based on their performance. Thus, KPMG's M&P's report having the needed capacity to provide formative verbal feedback to associates, furthering the company's potential for upholding a strong feedback culture.

Table 14

Q9 I feel prepared to assess associates' performance and provide feedback accordingly

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	Response Count	Response Percent	Response Count
Strongly agree	21,3%	16	20,3%	12
Agree	70,7%	53	69,5%	41
Neither agree or disagree	8,0%	6	8,5%	5
Disagree	0,0%	0	1,7%	1
Strongly disagree	0,0%	0	0,0%	0
answered question		*75*		*59*
skipped question		*72*		*62*

In question Q10, M&P's are asked to state whether they agree that they are making a conscious effort to give associates formative verbal feedback either during or after a performance. It is a recognized fact from the literature that maintaining a strong feedback

culture is a managerial task and requires managers to hone their skills of actively provide feedback to employees (Beer & Ruh, 1976).

In KPMG's case, over 70% of M&P's claim to be making a conscious effort to provide feedback in both surveys, but as previously noted from questions Q2 and Q8, feedback provision frequency is relatively low at KPMG, given that associates and M&P's work closely together in an open office space where they converse frequently on a daily basis. Therefore, even though M&P's in fact agree to the statement in Q10, there may be a misconception as to how much formative verbal feedback is needed to actively maintain a strong feedback culture in the company.

Table 15

Q10 I am making a conscious effort to give associates formative verbal feedback during or after projects

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	**Response Count**	**Response Percent**	**Response Count**
Strongly agree	8,0%	6	6,8%	4
Agree	73,3%	55	64,4%	38
Neither agree or disagree	14,7%	11	27,1%	16
Disagree	4,0%	3	1,7%	1
Strongly disagree	0,0%	0	0,0%	0
answered question		75		59
skipped question		72		62

Question Q11 asks M&P's whether giving associates formative verbal feedback has directly improved their performance. In the benchmark survey, 85,3% of M&P's claim that such feedback has indeed directly helped associates improve their performance. After the initiatives, this number increases to 93,2% in the comparison survey, suggesting that M&P's are aware of how valuable their feedback is to associates at KPMG.

Table 16

Q11 Giving formative verbal feedback has directly improved associates' performance

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	**Response Count**	**Response Percent**	**Response Count**
Strongly agree	37,3%	28	40,7%	24
Agree	48,0%	36	52,5%	31
Neither agree or disagree	14,7%	11	6,8%	4
Disagree	0,0%	0	0,0%	0
Strongly disagree	0,0%	0	0,0%	0
answered question		75		59
skipped question		72		62

By comparing associates answers to question Q6, which asks associates about whether feedback improves their performance, one can see that M&P's and associates generally agree that providing formative verbal feedback in the workplace directly improves associates' performance (Figure 15).
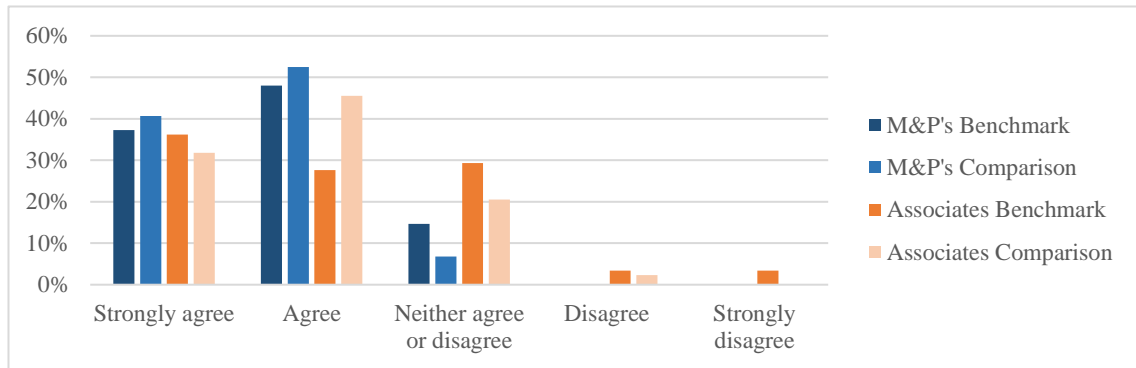
Figure 15: M&P's and associates response to whether formative verbal feedback has directly improved associates performance (Q6 and Q11)

These findings describe a strong appreciation to the value of informal feedback at KPMG. Employees are aware of the fact that informal feedback can help improve performance, despite limited frequency of feedback provided in the company (Q2 and Q8). However, no clear reason has been found that explains why feedback is not utilized more actively for performance enhancement, which is an important question to answer for KPMG's management if it desires to foster a strong feedback culture.

Question Q12 relates back to M&P's capacity for providing feedback to associates by asking whether they have difficulties in finding time to provide formative verbal feedback to associates. More M&P's say they do not have such difficulties than those who do, and fluctuations in responses before and after initiatives are minimal.

Table 17

Q12 I find it difficult to find time to provide formative verbal feedback to associates

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	**Response Count**	**Response Percent**	**Response Count**
Strongly agree	1,3%	1	1,7%	1
Agree	18,7%	14	22,0%	13
Neither agree or disagree	26,7%	20	28,8%	17
Disagree	45,3%	34	39,0%	23
Strongly disagree	8,0%	6	8,5%	5
answered question		75		59
skipped question		72		62

However, in the feedback workshop M&P's attended, I specifically outlined that these feedback conversations typically took less than five minutes. Plausible reasons for the fact that M&P's were unable to find minutes to spare for informal feedback conversations after the workshop may be that an insignificant number of M&P's attended the workshop, or that attendees need more time to change their routine to provide more feedback to associates. The latter suggestion is reasonable, whereas cultural habits are stable and take time and dedication to change (Taras et al., 2009). Also, M&P's may lack motivation to prioritize their time in favour of spending time on providing feedback.

The final question on feedback to M&P's asks whether they believe associates are proactive in seeking feedback, but this question provides M&P's perspective to associates feedback-seeking behaviour. In Q5, associates were indecisive about whether they were proactive feedback seekers and mostly chose to neither agree nor disagree. However, in Q13, M&P's say that associates are not proactive in seeking feedback during or after projects. As indicated in question Q1, associates find it easy to ask for formative verbal feedback, and in question Q6, associates say that such feedback directly improves their performance. However, regardless ofthe apparent ease of asking for informal feedback and how valuable it is to associates, something prevents them from proactively seeking feedback from M&P's.

Table 18

Q13 Associates are proactive in asking for feedback during or after projects in a timely manner

Answer Options	Benchmark survey		Comparison survey	
	Response Percent	**Response Count**	**Response Percent**	**Response Count**
Strongly agree	2,7%	2	0,0%	0
Agree	6,7%	5	8,5%	5
Neither agree or disagree	22,7%	17	22,0%	13
Disagree	48,0%	36	52,5%	31
Strongly disagree	20,0%	15	16,9%	10
answered question		75		59
skipped question		72		62

4.1.3 Open-ended questions results

All participants received four open-ended questions at the end of the comparison survey (Q14-Q17). The questions asked participants for comments on ways to improve the feedback culture at KPMG and whether they had any comment on how the study had been conducted.

Responses to these questions will be analysed by separating associates' answers from M&P's and summarizing their comments into common themes. The number of M&P's and associates' responses is listed in Table 19.

Table 19

Number of responses to questions Q14, Q15, Q16, Q17

	Q14	Q15	Q16	Q17
Number of responses from M&P's	28	25	17	14
Number of responses from associates	14	14	12	8
Total number of responses	42	39	29	22

Question Q14 asked respondents to comment on how M&P's could help improve the company's feedback culture. M&P's made 28 comments in total. Four of those comments mentioned that M&P's should receive coaching in how to effectively provide formative feedback to associates, and 10 comments mentioned that an informal feedback conversation should be added to routine procedures of every project.

Another 12 comments mentioned that making an increased conscious effort to provide feedback to both peers and associates could help improve the feedback culture. Also, by using praise and not only focusing on underperformance, M&P's could start taking more initiative in making associates aware that they are available for feedback conversations. Lastly, two comments from M&P's to Q14 stressed the importance of actively utilizing the MyPD framework for formal feedback provision. That way, maintaining a conversation about the importance of feedback in the workplace is easier so employees are aware that feedback is an important part of the day-to-day operations at KPMG.

Associates made 14 comments to Q14. Half of them stressed that M&P's could take more initiative to provide informal feedback to associates either during or after projects, and make it a habit of theirs. Four associates said that M&P's should focus evenly on feedback for good and poor performances, noting that underperformance is often the only type of performance that M&P's provide feedback on. Closely related to the previous point, three associates suggested that M&P's could use compliments more often when associates perform well and improve their own performance.

Question Q15 asked participants how associates could help improve the feedback culture at KPMG. A total of 25 comments were collected from M&P's to this question, and 21 of them noted that associates should be more proactive in asking for feedback from M&P's. Three more comments mentioned that associates should know that receiving

feedback is meant to help them, not to discipline them, and that they should be open to criticism to build on their past experiences, utilizing M&P's expertise feedback to improve performance.

One respondent believed that it was unrealistic to expect associates to proactively ask for feedback, as the project manager might be unprepared to provide it. The same respondent continued, suggesting that a software solution, where associates could request feedback from a project manager, could help solve that problem. Interestingly, KPMG already offers such a solution to its employees through MyPD, the company's performance management framework. However, it appears that MyPD's features are being overlooked by employees.

Associates made 12 comments to this question, and 10 of them also suggested that associates could be more proactive in asking for feedback from M&P's. One associate mentioned that preserving positive communication was important, especially when workload is heavy and positive communications often diminish. Finally, one associate noted that M&P's were responsible for improving the feedback culture at KPMG because associates were supposed to receive feedback from their managers. This response signals that perspectives on feedback-seeking behaviour can vary greatly among associates at KPMG.

The next question, Q16, asked respondents for additional comments on the feedback culture at KPMG. 17 responses from M&P's were collected, and seven of them specifically mentioned that the feedback culture at KPMG could be improved in one or more ways. Four comments were "no" or a variation of the same response. Another five comments mentioned that feedback had been of a negative nature at KPMG, meaning that M&P's mainly focused on what needed to be done better and that there was a lack of constructive criticism included in feedback.

One M&P had a curious comment. He said that in the previous survey, respondents had been recklessly positive in their responses to how frequently they provide feedback. That in the years he had worked at the company he had received little or no feedback from superiors, and noted that other employees complained that they were never complimented on their strong performances. This employee concluded by saying that M&P's had either not completely understood what the term "feedback" meant, or had responded with the

intention of drawing an image of the feedback culture at the company to their liking, rather than giving a truthful answer.

Associates made 12 comments to this question, but three of them simply said "no", two of them mentioned that the feedback culture could be better, and one associate felt that the feedback culture at KPMG was weak and hardly existed at all. The remaining six comments were all different from each other in nature. One associate said that M&P's were variously qualified to provide formative feedback and another said that M&P's should try not to make it look like they were being interrupted when being asked for feedback. He mentioned that sometimes associates work out of office and it can be hard for M&P's to provide feedback when they do not have oversight of associates' performance.

One associate had an interesting point, as he mentioned that a strong feedback culture was a part of the company's values, but not a part of the actual organizational culture, and wondered how this gap could be bridged. Finally, two associates said that employee interviews were very irregular and sometimes not conducted at all, and that M&P's were responsible for approaching associates for all feedback related communications.

The last open-ended question, Q17, was not feedback related. Rather, it gave participants a chance to voice concerns or make remarks on the method and execution of this study. A total of 22 comments were made, and 16 of them simply said "no". The remaining six comments either complimented the initiative of conducting the study or said they felt the study was very interesting to them.

4.1.4 Summary of survey findings

From the analysis above, the study finds that associates and M&P's agree that formative verbal feedback is a valuable resource to the company in regards to performance development of employees. M&P's believe they are capable and qualified to provide feedback to associates but they also recognize that associates are not proactive in seeking feedback. Also, in responses to the open-ended questions, M&P's encourage associates to approach them more often to engage in a feedback dialogue if they want feedback on their performance, but in contrast, associates would also like M&P's to make themselves more available for informal feedback discussions.

KPMG's offices are open spaces where associates have direct access to M&P's. Since it is easy for associates to ask for feedback, they may lack the confidence to approach M&P's for a feedback conversation. The other side of the coin is that since associates do not proactively seek feedback, M&P's might believe that associates are not interested in receiving it. However, judging on these findings, and as an associate at KPMG, I believe that this stalemate in feedback communication is the result of not making feedback a priority in day-to-day operations, which is mutually important for both associates and M&P's to strategically strengthen the company's feedback culture.

These findings will be tied together with the study's literature review in a discussion of results, following the statistical analysis of survey data here below. The discussion will aim to put the study findings into relative context for future research on how companies can strengthen feedback culture along with recommendations for KPMG in the same regard.

4.2   Statistical analysis

The second category of examination in this study is an independent-sample t-test analysis to compares feedback level scores from both surveys in the hopes of finding a statistically significant difference in responses from participants in favour of increased feedback culture levels. An analysis was made in five brackets, the first bracket (B1) included all participants and the remaining four brackets (B2-B5) included advisory, audit, support & IT and tax, respectively, and questions Q1-Q13 were analysed in each bracket.

The statistical analysis found only one area with a statistically significant difference in scores between surveys. This was in questions Q8 in bracket B1. There, M&P's in the comparison survey claim that they provide more formative verbal feedback to associates after the initiatives ($M = 3.03$, $SD = 1.25$; $t(130,72) = 2.23$, $p = 0.03$, two-tailed) than before the initiatives ($M = 3.61$, $SD = 1.75$), resembling a similar finding by Warman et al. (2014). All other questions in all brackets did not have any statistically significant difference in scores. A detailed listing of the t-test analysis scores are available in Appendix D.

Unfortunately, the study failed to produce more significant results than anticipated. In the following section, research limitations will address the plausible reasons for why feedback culture levels have not been affected more significantly by the initiatives, and

in conjunction with that, the discussion will also contribute suggestions for how to improve the study's methodology in a way that may facilitate stronger feedback level t-test scores in future case studies.

5 Discussion of results

As the study has detailed, fostering a strong feedback culture is a multi-faceted resource. The literature review cited multiple angles of what constitutes a strong feedback culture, such as high feedback orientation of employees, managers' skill and capacity for providing high quality feedback, feedback coaching and more (Ashford et al., 2003; Beer & Ruh, 1976; London & Smither, 2002).

The review also noted some features of the workplace that may hinder a strong feedback culture to thrive, namely Bakers et al's. (2013) article on feedback-friendly cultures in organizations, which suggests that if an employee does not feel psychologically safe in making himself vulnerable to criticism from managers, he is less likely to ask for feedback. Further, Bakers et al's. (2013) findings recognize that affective trust in the workplace is required for employees to feel more secure in asking for help to reduce deficiencies in their work and improve performance. In some cases, they note that the absence of affective trust may even reduce performance improvements.

This discussion will focus on explicit findings from the study and interpret them with the intention of furthering the existing literature on how organizations can foster a strong feedback culture. In Figure 8, I have proposed a framework of the primary constructs of a strong feedback culture and what functions are needed to maintain it. This framework will support the discussion of survey findings in the section below.

5.1 Study findings

The current study has three primary research questions. The first two address the current feedback culture level at KPMG and the third asks whether the feedback initiatives can improve the feedback culture at KPMG. All research questions and hypothesis are recited in Table 20.

The findings of the study have provided results that decisively answer Rq 1a. Based on the review of questions Q1 and Q7, associates and M&P's can ask for and provide

formative verbal feedback, respectively, with ease. Also, as seen from responses to Q5 and Q6, even though associates do not seem to proactively seek feedback from M&P's, they do appear to be able to process the limited feedback they receive to improve their performance at work.

Research questions (Rq) and hypothesis (Hp)	
Rq 1a	Do the employees of the company possess the necessary means for maintaining a strong feedback culture?
Rq 1b	Is there an active informal feedback dialogue between employees in the company?
Hp 1	The company has a weak feedback culture – informal formative verbal feedback is not frequently provided in the organization.
Rq 2	Can feedback initiatives X_1 and X_2 improve the feedback culture at the company?
Hp 2	Feedback initiatives have caused a statistically significant positive change to the feedback culture at KPMG

M&P's say in Q9 that they feel capable and prepared to provide feedback to associates based on their performance and in Q10 M&P's consider themselves to be consciously making an effort to provide feedback to associates as well. Also, M&P's agree with associates about the notion that formative verbal feedback does improve their performance.

These responses indicate that associates have a medium to high feedback orientation, and M&P's have sufficient capacity to provide quality feedback to associates. Therefore, KPMG employees are recognized in this study for possessing the necessary means to maintain a strong feedback culture. However, proposition 6 by London & Smither's (2002) from the literature review claims that employees that are high in feedback orientation are indeed able to "make internal attributions that lead to goal setting when they are high in feedback orientation" but only if the company has a strong feedback culture.

Moreover, in regards to Rq 1b, responses to questions Q2 and Q8 express that 88% of associates and 72,9% of M&P's claim that formative verbal feedback is provided once per week or less to associates. In a workplace where associates and M&P's converse frequently on a daily basis it is fair to say that this feedback provision frequency is very low. Also, several comments made by both associates and M&P's in the open-ended

questions about the company's feedback culture suggested that feedback was rarely or hardly used at all.

Therefore, the study finds that there is not an active informal feedback dialogue between employees at KPMG. These findings are largely in favour of hypothesis 1 which states that KPMG has a weak feedback culture and formative verbal feedback is not frequently provided in the company. In proposition 8b by London & Smither's (2002) they state that feedback culture and feedback orientation are mutually reinforcing. In the case of KPMG, where feedback culture is considered weak, some level of concern should be raised regarding the long-term effect a weak feedback culture can have on the feedback orientation of employees.

The final research question (Rq 2) directs the attention to the results of the statistical analysis of changes in KPMG's feedback culture before and after the initiatives. As explained in the corresponding results section above, the initiatives appear to have had very limited significant effect on the feedback culture levels at KPMG. Though results from the statistical analysis do not support hypothesis 2, the initiatives met no objection from participants, and the attitudes of employees towards the study were generally optimistic. However, optimism towards the subject of this study appears to be insufficient to change the feedback culture at KPMG, but understanding how to foster a strong feedback culture is perhaps the lesson to be learned here.

The literature review began by addressing the nature of effective feedback, where feedback is defined as the provision of information on a performance to someone with the intention of guiding future performance to a desired outcome (Ende, 1983). Also, feedback should be precise and provided regularly in a timely manner (Scott, 2014). It is of great importance that feedback provision is carefully executed by managers, whereas improper feedback provision practices can indeed leave the feedback recipient unhappy and deflated and can even have a negative impact on employees' performance (Ashford & Cummings, 1983; Kluger & DeNisi, 1996; Percival, 2006).

For those reasons, M&P's at KPMG, who reportedly are qualified and capable of providing feedback, need to be aware that the quality of the feedback they provide directly affects the utility of the feedback to associates (Whitaker & Levy, 2012). This point is one of the main constructs of the strong feedback culture framework in Figure 8, which

insists that managers provide high quality feedback to associates to maximize the potential of feedback effectiveness. Also, as proposition 2 by London & Smither's (2002) states, "strong feedback cultures enhance individuals' feedback orientation" and where quality feedback is provided regularly in a timely manner, employees are more likely to grow in feedback orientation. This proposition also implies that once feedback orientation starts growing among employees, they will become more comfortable with proactively seeking feedback from managers. However, to manage expectations, it is noteworthy to mention that London & Smither's (2002) proposition 1b says that feedback orientation levels are stable in the short-term timeframe, and only start changing when feedback culture levels have systematically improved over time.

Finally, I draw attention to the final construct of the strong feedback culture framework in Figure 8, which is coaching. Reading between the lines of survey findings I argue that some level of resistance keeps KPMG's employees from proactively seeking and providing feedback. It is uncertain why M&P's do not proactively provide formative feedback to associates on a regular basis, but it is certain that M&P's do not receive any technical coaching in how to effectively provide informal feedback. The topic of feedback is rarely spoken of, but several responses to Q14, an open-ended question about how M&P's could improve the company's feedback culture, specifically identified that feedback provision coaching was needed so M&P's would be more comfortable with the process.

Proposition 3b by London & Smither's (2002) reads, "coaching encourages feedback orientation". Other researchers also find that training managers in providing feedback is critical to make sure feedback is communicated effectively which can lead to a positive reaction in employee performance (Dahling et al., 2012; Perron et al., 2012). Therefore, the study concludes that the missing link in cultivating a strong feedback culture at KPMG is coaching M&P's in how to facilitate and maintain an active feedback dialogue with associates. Additionally, associates are not excluded from the need of coaching. When employees receive feedback from multiple sources, not only from M&P's but from clients, peers or in written reports as well, the employee may not be sufficiently trained in attending to all the feedback he receives (Armstrong, 2009; London & Smither, 2002). Therefore, associates are also in need of coaching for how to receive, process and utilize

all feedback to improve their performance and grow in feedback orientation, which ultimately leads to a stronger feedback culture.

5.2   Research limitations and literature contributions

In this section, I will address what academic contribution the current study will present to the literature on feedback culture. I will also discuss research limitations and provide suggestions for how researchers can avoid the frustration of finding limited significant t-test score differences in future research on feedback culture in organizations using a similar method.

As mentioned in the M&P's results section, feedback cultures are stable and take time and dedication to change (Beer & Ruh, 1976). The first limitation to address is of time restrictions. The research duration from start to end took just under seven weeks, which gave the feedback initiatives only a few weeks to have an effect on feedback culture levels at the company. I suggest for future researchers who adopt this model to allow more time to pass from employing the initiatives to surveying the sample for post-initiative data. It is my belief that following this suggestion will result in more significant differences in t-test scores. The study which the current one is modelled after was generally successful in improving the feedback culture in its groups, which allowed about four to five months to pass from employing its initiatives to collecting participant data for analysis (Warman et al., 2014).

The second limitation I will address is regarding feedback provision frequency. During the evaluation of associates responses to the surveys I realized that they were only asked how often they receive feedback, but not how often they *would like* to receive feedback. That sort of information would have been helpful in assessing the gap between actual and desired feedback provision frequency, which could have provided more accurate information about the company's feedback culture level. For future research, I recommend adding an additional question in the survey to bridge this gap. Additionally, associates may receive feedback from more than one M&P at KPMG. The surveys asked for associates opinion on all M&P's as a whole, but nothing at an individual basis. For future researchers, it might be useful to ask associates whether M&P's are inconsistently competent in providing feedback. Such information could help the company decide

whether it needs to focus its coaching efforts on those who need it the most, rather than focusing equally on all M&P's.

Also, as noted in the methodological approach section, a number of uncontrollable elements are embedded in the case study method (Campbell & Stanley, 1966). Ideally, to project the most accurate representation of the company's feedback culture level, all employees ought to participate in the surveys and initiatives, but the current study is limited to the opinions of those employees who spared moments of their time to take the surveys, read the e-mailed one-pager and attended the workshop. Also, in the time that passed between surveys, other variables could have contributed to changes in participants opinions on the company's feedback culture. Therefore, it is difficult to generalize about the impact these initiatives have, but without a case study like the current one, one is left without any grounds to support a hypothesis. Thus, this study is important for future researchers for two reasons.

Firstly, in order to be able to generalize on the basis of expertise knowledge of a phenomenon like feedback culture, more case studies need to be conducted to support the argument, and the current one provides a good precedent, or benchmark, for such studies. Secondly, what the current study contributes to theories like Baker et al.'s (2013) on the necessity to foster a trusting climate for feedback-friendly culture to thrive, is to strengthened its validity by presenting a case that identifies a void between managers and employees regarding feedback-seeking and feedback provision that the theory may be able to explain.

A case study is by definition limited to a single case for observation and experimentation. However, as Bent Flyvberg (2006) mentions, a great number of good case studies can help remedy a discipline that is without systematic production of exemplars. Therefore, the current study plays its academic role by contributing a case study to the field of feedback culture studies in organizations, and hopefully, more will follow.

5.3   Conclusion

Employees at KPMG are proven to possess all the bearings required to cultivate a strong feedback culture. However, the window of opportunity for maintaining an active informal feedback dialogue between performance appraisals (see Figure 6) has the potential to be used with greater ambition by both associates, who can seek formative feedback from

their M&P's, and by M&P's who can make themselves more available for such discussions to associates on a regular basis.

The study concludes that if employees at KPMG put feedback as a higher priority, for example with goal setting in performance appraisals, the company should by all considerations of this study be able to strengthen its feedback culture in the coming years. Additionally, a surge of comments was made about the need for feedback to be brought to the surface in all project work at KPMG. Executive managers at KPMG may find the strong feedback culture framework in Figure 8 useful to conceptualize how feedback coaching can motivate employees to include feedback conversations in the fabric of routine project procedures.

Finally, though measurable changes in feedback culture levels at KPMG were scarce, it is the consensus of the author and KPMG's CEO, Jón S. Helgason, that the topic of feedback has been brought up to the top of people's minds at KPMG. Before the initiatives, employees may have underestimated the impact of feedback they were providing, either in the form of conversations in passing or other performance related comments. However, after the feedback initiatives, M&P's are more aware of how valuable and important feedback can be to associates in regards to performance improvements (Helgason, 2016). So, for the sake of silver lining, it is my belief that this study may have started a movement into the direction of a stronger feedback culture at KPMG, and hopefully it gains momentum with time.

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7 Appendix

Appendix A

Appendix B

Áherslur á endurgjöf innan KPMG

Endurgjöf er mikilvægur hluti af þjálfun starfsmanna hjá KPMG. KPMG vill stuðla að fyrirtækjamenningu þar sem auðvelt er fyrir nýja starfsmenn að kalla eftir aðstoð og leiðsögn frá reyndari starfsmönnum.

Starfsmenn KPMG fá formlega skriflega endurgjöf árlega í gegnum MyPD. Hinsvegar er mikilvægt að starfsmenn fái reglulega munnlega endurgjöf yfir allt árið. Regluleg endurgjöf milli starfsmanna eykur líkur á að koma auga á hnökra sem hægt er að vinna úr í sameiningu, auðveldar starfsmönnum að bæta sig í starfi og virkar sem sterk hvatning til framfara.

Munnleg endurgjöf eru ekki tilmæli yfirmanns til undirmanns, heldur samskipti milli samstarfsaðila. Þannig skapast grundvöllur til þess að bera saman eigin skilning á frammistöðu sinni saman við skoðun reyndari starfsmanns og nýta hana til markmiðasetningar.

Meðfram því að hvetja fólk í starfi getur endurgjöf leitt til bættrar sjálfsmatshæfni starfsmanna.

Fyrir Associates og Senior Associates

Starfsmenn eru ábyrgir fyrir því að læra sem mest af störfum sínum hjá KPMG til þess að hámarka eigin framfarir. Ásamt því að sýna áhuga á eigin framförum í starfi eru Associates hvattir til þess að kalla eftir endurgjöf frá reyndari starfsmönnum. Eftirfarandi atriði er gott að hafa í huga í því samhengi:

- Nýttu tækifærið til þess að spyrja nákvæmra spurninga sem kalla eftir skýrum svörum. Sem dæmi má nefna að betra er að spyrja: „Hvernig hefði ég geta gert þetta öðruvísi / betur?" í stað „Var þetta í lagi?"
- Við lok verkefna má spyrja ábyrgðarmann verkefnisins eftirfarandi spurninga:
  - Hvað hefði ég átt að gera / gat ég gert betur?
  - Hvað ætti ég að gera öðruvísi næst til að standa mig betur?
  - Hvað hefði ég geta gert til þess að auðvelda mér verkið?
  - Hvaða hluta verksins þarf ég að æfa mig mest í?
- Ef þú vilt bæta þig í ákveðinni hæfni eða í ákveðnum verkefnum skaltu gera yfirmanni grein fyrir því sem fyrst til þess að fá tímanlega leiðsögn í því sem skiptir þig mestu máli.
- Ef að aðstæður eru óhagstæðar til þess að óska eftir endurgjöf, eins og í návist viðskiptavina, skaltu starfa innan þinna þægindamarka og ræða atvikið þegar aðstæður leyfa á ný.
- Reyndir starfsmenn KPMG vilja miðla þekkingu og kunnáttu sinni til þess að efla fyrirtækið sem heild. Vertu því ófeimin(n) við að leita ráðlagningar þeirra um hvernig þú getur bætt þig í starfi.

Fyrir Managera og Partnera

Að veita starfsmönnum endurgjöf er umbótavinna sem eflir starfsmenn í starfi og styrkir fyrirtækið sem heild. Samtöl um endurgjöf gefa starfsmönnum tækifæri til þess að endurspegla eigin frammistöðu og koma auga á hvað það er sem þeir þurfa að vinna í. Eftirfarandi eru nokkrir punktar um endurgjöf sem er gott að hafa í huga:

- Endurgjöf þarf að vera tímanleg, nákvæm og hlutlæg. „Aðgerðaáætlun" til umbóta er mikilvægur hlekkur samtalsins sem einskonar leiðarvísir að framförum.
- Að loknu samstarfsverkefni skaltu spyrja starfsmanninn hvað hann telur sig hafa gert vel og hvað hann telur sig þurfa að bæta. Ræddu stuttlega um styrkleika hans og einnig hvað hann þarf að vinna betur í. Legðu svo til tillögu um hvernig hægt væri að gera betur næst. Reyndu að gera þetta í hvert skipti sem þú starfar með viðkomandi starfsmanni svo það verði honum eðlislegt; slíkt samtal mun aðeins taka 2-3 mínútur.
- Hafi starfsmaður lokið verkefni einsamall (til dæmis farið einn á fund hjá viðskiptavini) máttu spyrja hvað starfsmanninum hafi fundist hann gera vel og hvað hann hefði viljað gera betur. Forgangsröðun hans kann að vera önnur en þín.
- Við lok vinnuvikunnar má biðja starfsmenn um að skrifa niður þau atriði sem þeir vilja bæta í næstu viku.
- Til þess að ýta undir uppbyggilega endurgjafarmenningu skaltu hvetja til óformlegrar rökræðu og endurspeglunar um hvernig verkefnum hefur verið stýrt – getum við gert eitthvað öðruvísi eða betur næst?

Til viðbótar:

- Ekki hika við að biðja kollega um leiðsögn við að veita endurgjöf.
- Ef þú hefur leitt verkefni eða verkferla skaltu spyrja kollega þína hvað þeim fannst gagnlegt og hvað hefði mátt fara fram betur undir þinni leiðsögn.

Appendix C

Endurgjöf innan KPMG
Vinnustofa

Endurgjafarmenning
(e. feedback culture)

"Feedback appreciation and efficiency gradually increases in organizations where feedback is properly and consistently provided"
(e. feedback culture)
"The purpose of coaching is to show empathy, support, encourage individual and to provide information about what is expected of the individual"
(London & Smither, 2002)

Móttækileiki einstaklinga
(e. feedback orientation)

"an individual-level construct [that] has a great deal to do with self-knowledge as the individual's overall openness and ability to receive and utilize feedback"
(Rasheed, Khan, Rasheed, & Munir, 2015)
(e. feedback orientation)
"However, organization's feedback cultures are said to be able to influence feedback orientation of individuals over extended periods of time"
(London & Smither, 2002)

Niðurstöður vefkönnunar

Skoðun

Associates

Skoðun

Ykkar

Ég legg mig meðvitað fram við að veita aðstoðarmönnum (associates) uppbyggilega munnlega endurgjöf á meðan á verkefnum stendur eða tímanlega eftir að verkefnum líkur.

Mér finnst erfitt að finna tíma til þess að veita aðstoðarmanni (associates) uppbyggilega munnlega endurgjöf.

Að veita uppbyggilega munnlega endurgjöf hefur haft bein áhrif á framfarir aðstoðarmanns (associates) í starfi

Aðstoðarmenn (associates) eiga reglulega frumkvæði að því að biðja um endurgjöf á meðan á verkefnum stendur eða tímanlega eftir að verkefnum líkur

Skoðum Samhengið

Hvað er
til taks?

Takk fyrir þátttökuna!

Appendix D

T-Test for all participants

Notes

Output Created		11-MAY-2017 12:25:37
Comments		
Input	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	278
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Könnun('1' '2') /MISSING=ANALYSIS /VARIABLES=Mérfinnstauðveltaðkall aeftirmunnlegriendurgjöfávin Hversuoftívikuerþérveittuppbyggileg munnlegendurgjöf Managerarogpartnerarleggjasigfram viðaðveitaaðstoðar Managerarogpartnerarvirðasteigaíerf iðleikumviðaðve Égáfrumkvæðiaðþvíaðleitaeftirendur gjöffráman Uppbyggilegmunnlegendurgjöfhefurh aftbeináhrifáframfar Mérfinnstauðveltaðveitaaðstoðarman niassociatesuppb Hversuoftveitirþúaðstoðarmanniasso ciatesuppbyggilega Égtelmigundirþaðbúinaðmetaframmi stöðuaðstoðarm Égleggmigmeðvitaðframviðaðveitaað stoðarmönnuma Aðveitauppbyggilegamunnlegaendur gjöfhefurhaftbeináhri Mérfinnsterfittaðfinnatímatilþessaðve itaaðstoða Aðstoðarmennassociateseigareglule gafrumkvæðiaðþví...
Resources	Processor Time	00:00:00,03
	Elapsed Time	00:00:00,01

Group Statistics

	1_fyrri 2_seinni	N	Mean	Std. Deviation	Std. Error Mean
Q1	fyrri_könnun	58	2,52	1,096	,144
	seinni_könnun	44	2,57	,925	,139
Q2	fyrri_könnun	58	2,45	1,416	,186
	seinni_könnun	44	2,48	1,210	,182
Q3	fyrri_könnun	58	3,00	1,043	,137
	seinni_könnun	44	2,91	,884	,133
Q4	fyrri_könnun	58	2,93	1,041	,137
	seinni_könnun	44	3,02	,927	,140
Q5	fyrri_könnun	58	2,91	1,097	,144
	seinni_könnun	44	2,86	,955	,144
Q6	fyrri_könnun	58	2,10	1,054	,138
	seinni_könnun	44	1,93	,789	,119
Q7	fyrri_könnun	75	1,79	,622	,072
	seinni_könnun	59	1,76	,468	,061
Q8	fyrri_könnun	75	3,61	1,754	,203
	seinni_könnun	59	3,03	1,245	,162
Q9	fyrri_könnun	75	1,87	,528	,061
	seinni_könnun	59	1,92	,596	,078
Q10	fyrri_könnun	75	2,15	,608	,070
	seinni_könnun	59	2,24	,597	,078
Q11	fyrri_könnun	75	1,77	,689	,080
	seinni_könnun	59	1,66	,605	,079
Q12	fyrri_könnun	75	3,40	,930	,107
	seinni_könnun	59	3,31	,969	,126
Q13	fyrri_könnun	75	3,76	,942	,109
	seinni_könnun	59	3,78	,832	,108

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q1	Equal variances assumed	,922	,339	-,248	100
	Equal variances not assumed			-,254	98,814
Q2	Equal variances assumed	,050	,824	-,109	100
	Equal variances not assumed			-,111	98,533
Q3	Equal variances assumed	,501	,481	,465	100
	Equal variances not assumed			,476	98,708
Q4	Equal variances assumed	1,368	,245	-,462	100
	Equal variances not assumed			-,469	97,366
Q5	Equal variances assumed	,712	,401	,242	100
	Equal variances not assumed			,246	98,061
Q6	Equal variances assumed	5,382	,022	,904	100
	Equal variances not assumed			,940	99,989
Q7	Equal variances assumed	2,616	,108	,246	132
	Equal variances not assumed			,255	131,763
Q8	Equal variances assumed	10,559	,001	2,146	132
	Equal variances not assumed			2,233	130,724
Q9	Equal variances assumed	,001	,972	-,500	132
	Equal variances not assumed			-,492	116,932
Q10	Equal variances assumed	1,065	,304	-,863	132
	Equal variances not assumed			-,865	125,703

Independent Samples Test

		t-test for Equality of Means			95% Confidence ...
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q1	Equal variances assumed	,804	-,051	,205	-,458
	Equal variances not assumed	,800	-,051	,200	-,449
Q2	Equal variances assumed	,913	-,029	,266	-,557
	Equal variances not assumed	,912	-,029	,261	-,546
Q3	Equal variances assumed	,643	,091	,196	-,297
	Equal variances not assumed	,635	,091	,191	-,288
Q4	Equal variances assumed	,645	-,092	,199	-,486
	Equal variances not assumed	,640	-,092	,195	-,480
Q5	Equal variances assumed	,810	,050	,208	-,362
	Equal variances not assumed	,806	,050	,204	-,354
Q6	Equal variances assumed	,368	,172	,190	-,205
	Equal variances not assumed	,349	,172	,183	-,191
Q7	Equal variances assumed	,806	,024	,097	-,169
	Equal variances not assumed	,799	,024	,094	-,162
Q8	Equal variances assumed	,034	,579	,270	,045
	Equal variances not assumed	,027	,579	,259	,066
Q9	Equal variances assumed	,618	-,049	,097	-,241
	Equal variances not assumed	,623	-,049	,099	-,244
Q10	Equal variances assumed	,390	-,091	,105	-,298
	Equal variances not assumed	,389	-,091	,105	-,298

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q1	Equal variances assumed	,356
	Equal variances not assumed	,347
Q2	Equal variances assumed	,499
	Equal variances not assumed	,488
Q3	Equal variances assumed	,479
	Equal variances not assumed	,470
Q4	Equal variances assumed	,302
	Equal variances not assumed	,296
Q5	Equal variances assumed	,462
	Equal variances not assumed	,454
Q6	Equal variances assumed	,548
	Equal variances not assumed	,534
Q7	Equal variances assumed	,216
	Equal variances not assumed	,210
Q8	Equal variances assumed	1,113
	Equal variances not assumed	1,093
Q9	Equal variances assumed	,144
	Equal variances not assumed	,147
Q10	Equal variances assumed	,117
	Equal variances not assumed	,117

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q11	Equal variances assumed	,479	,490	,988	132
	Equal variances not assumed			1,003	130,378
Q12	Equal variances assumed	,123	,726	,576	132
	Equal variances not assumed			,573	122,184
Q13	Equal variances assumed	,689	,408	-,126	132
	Equal variances not assumed			-,128	130,199

Independent Samples Test

		t-test for Equality of Means			95% Confidence ...
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q11	Equal variances assumed	,325	,112	,114	-,113
	Equal variances not assumed	,318	,112	,112	-,109
Q12	Equal variances assumed	,566	,095	,165	-,231
	Equal variances not assumed	,568	,095	,166	-,233
Q13	Equal variances assumed	,900	-,020	,156	-,328
	Equal variances not assumed	,898	-,020	,154	-,323

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q11	Equal variances assumed	,337
	Equal variances not assumed	,334
Q12	Equal variances assumed	,421
	Equal variances not assumed	,423
Q13	Equal variances assumed	,289
	Equal variances not assumed	,284

```
DATASET ACTIVATE DataSet5.
T-TEST GROUPS=Könnun('1' '2')
  /MISSING=ANALYSIS
  /VARIABLES=MérfinnstauðveltaðkallaeftirmunnlegriendurgjöfáviðHversuoftíviku
erþérveittuppbyggilegmunnlegendurgjöfManagerarogpartnerarleggjasigframviðaðve
itaaðstoðar ManagerarogpartnerarvirðasteigaíerfiðleikumviðaðvÉgáfrumkvæðiaðþ
víaðleitaeftirendurgjöffrámarUppbyggilegmunnlegendurgjöfhefurhaftbeináhrifáfr
amfar MérfinnstauðveltaðveitaaðstoðarmanniassociatesuppbHversuoftveitirþúaðst
oðarmanniassociatesuppbyggilegaÉgtelmigundirþaðbúinaðmetaframmistöðuaðstoðarm
Égleggmigmeðvitaðframviðaðveitaaðstoðarmönnumaðveitauppbyggilegamunnlegaendu
rgjöfhefurhaftbeináhriMérfinnsterfittaðfinnatímatilþessaðveitaaðstoðaaðstoða
rmennassociateseigareglulegafrumkvæðiaðþví
  /CRITERIA=CI(.95).
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T-Test for audit participants

Notes

Output Created		11-MAY-2017 12:27:59
Comments		
Input	Active Dataset	DataSet5
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	122
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Könnun('1' '2') /MISSING=ANALYSIS /VARIABLES=Mérfinnstauðveltaðkall aeftirmunnlegriendurgjöfávin Hversuoftívikuerþérveittuppbyggileg munnlegendurgjöf Managerarogpartnerarleggjasigfram viðaðveitaaðstoðar Managerarogpartnerarvirðasteigaíerf iðleikumviðaðve Égáfrumkvæðiaðþvíaðleitaeftirendur gjöffráman Uppbyggilegmunnlegendurgjöfhefurh aftbeináhrifáframfar Mérfinnstauðveltaðveitaaðstoðarman niassociatesuppb Hversuoftveitirþúaðstoðarmanniasso ciatesuppbyggilega Égtelmigundirþaðbúinaðmetaframmi stöðuaðstoðarm Égleggmigmeðvitaðframviðaðveitaað stoðarmönnuma Aðveitauppbyggilegamunnlegaendur gjöfhefurhaftbeináhri Mérfinnsterfittaðfinnatímatilþessaðve itaaðstoða Aðstoðarmennassociateseigareglule gafrumkvæðiaðþví...
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,02

[DataSet5]

Group Statistics

	1_fyrri 2_seinni	N	Mean	Std. Deviation	Std. Error Mean
Q1	fyrri_könnun	31	2,61	1,174	,211
	seinni_könnun	21	2,71	1,007	,220
Q2	fyrri_könnun	31	2,32	1,351	,243
	seinni_könnun	21	2,19	1,167	,255
Q3	fyrri_könnun	31	3,35	1,112	,200
	seinni_könnun	21	3,14	1,108	,242
Q4	fyrri_könnun	31	2,74	1,125	,202
	seinni_könnun	21	3,00	1,183	,258
Q5	fyrri_könnun	31	3,00	1,095	,197
	seinni_könnun	21	2,76	,995	,217
Q6	fyrri_könnun	31	2,19	1,108	,199
	seinni_könnun	21	1,90	,768	,168
Q7	fyrri_könnun	33	1,79	,600	,104
	seinni_könnun	26	1,77	,430	,084
Q8	fyrri_könnun	33	3,70	1,862	,324
	seinni_könnun	26	2,96	1,311	,257
Q9	fyrri_könnun	33	1,91	,522	,091
	seinni_könnun	26	2,00	,632	,124
Q10	fyrri_könnun	33	2,12	,331	,058
	seinni_könnun	26	2,19	,491	,096
Q11	fyrri_könnun	33	1,64	,653	,114
	seinni_könnun	26	1,62	,637	,125
Q12	fyrri_könnun	33	3,45	,905	,157
	seinni_könnun	26	3,35	,892	,175
Q13	fyrri_könnun	33	3,91	,805	,140
	seinni_könnun	26	3,92	,796	,156

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q1	Equal variances assumed	,389	,536	-,323	50
	Equal variances not assumed			-,333	47,141
Q2	Equal variances assumed	,040	,843	,365	50
	Equal variances not assumed			,376	46,987
Q3	Equal variances assumed	,083	,774	,675	50
	Equal variances not assumed			,676	43,186
Q4	Equal variances assumed	,002	,966	-,795	50
	Equal variances not assumed			-,787	41,583
Q5	Equal variances assumed	,000	,987	,797	50
	Equal variances not assumed			,812	45,754
Q6	Equal variances assumed	7,420	,009	1,036	50
	Equal variances not assumed			1,110	49,952
Q7	Equal variances assumed	2,333	,132	,134	57
	Equal variances not assumed			,139	56,551
Q8	Equal variances assumed	6,582	,013	1,707	57
	Equal variances not assumed			1,778	56,369
Q9	Equal variances assumed	,034	,854	-,605	57
	Equal variances not assumed			-,591	48,206
Q10	Equal variances assumed	4,761	,033	-,662	57
	Equal variances not assumed			-,633	41,921

Independent Samples Test

| | | t-test for Equality of Means | | | 95% Confidence ... |
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q1	Equal variances assumed	,748	-,101	,314	-,732
	Equal variances not assumed	,741	-,101	,305	-,714
Q2	Equal variances assumed	,717	,132	,362	-,595
	Equal variances not assumed	,709	,132	,352	-,576
Q3	Equal variances assumed	,503	,212	,314	-,418
	Equal variances not assumed	,503	,212	,314	-,421
Q4	Equal variances assumed	,430	-,258	,325	-,910
	Equal variances not assumed	,436	-,258	,328	-,920
Q5	Equal variances assumed	,429	,238	,299	-,362
	Equal variances not assumed	,421	,238	,293	-,352
Q6	Equal variances assumed	,305	,289	,279	-,271
	Equal variances not assumed	,272	,289	,260	-,234
Q7	Equal variances assumed	,894	,019	,139	-,261
	Equal variances not assumed	,890	,019	,134	-,250
Q8	Equal variances assumed	,093	,735	,431	-,127
	Equal variances not assumed	,081	,735	,414	-,093
Q9	Equal variances assumed	,548	-,091	,150	-,392
	Equal variances not assumed	,557	-,091	,154	-,400
Q10	Equal variances assumed	,510	-,071	,107	-,286
	Equal variances not assumed	,530	-,071	,112	-,298

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q1	Equal variances assumed	,529
	Equal variances not assumed	,511
Q2	Equal variances assumed	,859
	Equal variances not assumed	,840
Q3	Equal variances assumed	,842
	Equal variances not assumed	,844
Q4	Equal variances assumed	,394
	Equal variances not assumed	,404
Q5	Equal variances assumed	,838
	Equal variances not assumed	,828
Q6	Equal variances assumed	,849
	Equal variances not assumed	,812
Q7	Equal variances assumed	,298
	Equal variances not assumed	,287
Q8	Equal variances assumed	1,598
	Equal variances not assumed	1,564
Q9	Equal variances assumed	,210
	Equal variances not assumed	,218
Q10	Equal variances assumed	,144
	Equal variances not assumed	,156

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q11	Equal variances assumed	,021	,886	,124	57
	Equal variances not assumed			,124	54,383
Q12	Equal variances assumed	,144	,706	,460	57
	Equal variances not assumed			,461	54,154
Q13	Equal variances assumed	,007	,935	-,067	57
	Equal variances not assumed			-,067	54,076

Independent Samples Test

		t-test for Equality of Means			95% Confidence ...
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q11	Equal variances assumed	,902	,021	,169	-,318
	Equal variances not assumed	,902	,021	,169	-,318
Q12	Equal variances assumed	,647	,108	,236	-,364
	Equal variances not assumed	,647	,108	,235	-,363
Q13	Equal variances assumed	,947	-,014	,210	-,435
	Equal variances not assumed	,947	-,014	,210	-,435

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q11	Equal variances assumed	,360
	Equal variances not assumed	,360
Q12	Equal variances assumed	,580
	Equal variances not assumed	,580
Q13	Equal variances assumed	,407
	Equal variances not assumed	,407

```
T-TEST GROUPS=Könnun('1' '2')
  /MISSING=ANALYSIS
  /VARIABLES=Mérfinnstauðveltaðkallaeftirmunnlegriendurgjöfávi Hversuoftíviku
erþérveittuppbyggilegmunnlegendurgjö Managerarogpartnerarleggjasigframviðaðve
itaaðstoðar Managerarogpartnerarvirðasteigaíerfiðleikumviðaðvi gáfrumkvæðiaðþ
víaðleitaeftirendurgjöffrámar Uppbyggilegmunnlegendurgjöfhefurhaftbeináhrifáfr
amfar Mérfinnstauðveltaðveitaaðstoðarmanniassociatesupp Hversuoftveitirþúaðst
oðarmanniassociatesuppbyggilegá Égtelmigundirþaðbúinaðmetaframmistöðuaðstoðarm
Égleggmigmeðvitaðframviðaðveitaaðstoðarmönnum Aðveitauppbyggilegamunnlegaendu
rgjöfhefurhaftbeináhri Mérfinnsterfittaðfinnatímatilþessaðveitaaðstoð Aðstoða
rmennassociateseigareglulegafrumkvæðiaðþví
  /CRITERIA=CI(.95).
```

T-Test for advisory participants

Notes

Output Created		11-MAY-2017 12:43:08
Comments		
Input	Active Dataset	DataSet7
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	79
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Könnun('1' '2') /MISSING=ANALYSIS /VARIABLES=Mérfinnstauðveltaðkall aeftirmunnlegriendurgjöfávin Hversuoftívikuerþérveittuppbyggileg munnlegendurgjöf Managerarogpartnerarleggjasigfram viðaðveitaaðstoðar Managerarogpartnerarvirðasteigaíerf iðleikumviðaðve Égáfrumkvæðiaðþvíaðleitaeftirendur gjöffráman Uppbyggilegmunnlegendurgjöfhefurh aftbeináhrifáframfar Mérfinnstauðveltaðveitaaðstoðarman niassociatesuppb Hversuoftveitirþúaðstoðarmanniasso ciatesuppbyggilega Égtelmigundirþaðbúinaðmetaframmi stöðuaðstoðarm Égleggmigmeðvitaðframviðaðveitaað stoðarmönnuma Aðveitauppbyggilegamunnlegaendur gjöfhefurhaftbeináhri Mérfinnsterfittaðfinnatímatilþessaðve itaaðstoða Aðstoðarmennassociateseigaregluleg afrumkvæðiaðþví...
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,00

Group Statistics

	1_fyrri 2_seinni	N	Mean	Std. Deviation	Std. Error Mean
Q1	fyrri_könnun	13	2,69	1,182	,328
	seinni_könnun	12	2,42	,793	,229
Q2	fyrri_könnun	13	2,31	,751	,208
	seinni_könnun	12	2,75	,965	,279
Q3	fyrri_könnun	13	2,54	,776	,215
	seinni_könnun	12	2,75	,452	,131
Q4	fyrri_könnun	13	3,15	1,068	,296
	seinni_könnun	12	3,17	,718	,207
Q5	fyrri_könnun	13	2,77	,927	,257
	seinni_könnun	12	2,83	,835	,241
Q6	fyrri_könnun	13	1,85	,987	,274
	seinni_könnun	12	2,08	,900	,260
Q7	fyrri_könnun	22	1,82	,733	,156
	seinni_könnun	21	1,86	,478	,104
Q8	fyrri_könnun	22	2,95	1,290	,275
	seinni_könnun	21	3,00	1,183	,258
Q9	fyrri_könnun	22	1,82	,664	,142
	seinni_könnun	21	1,81	,602	,131
Q10	fyrri_könnun	22	2,27	,827	,176
	seinni_könnun	21	2,33	,730	,159
Q11	fyrri_könnun	22	1,95	,722	,154
	seinni_könnun	21	1,67	,577	,126
Q12	fyrri_könnun	22	3,14	1,037	,221
	seinni_könnun	21	3,43	1,121	,245
Q13	fyrri_könnun	22	3,50	1,185	,253
	seinni_könnun	21	3,57	,926	,202

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q1	Equal variances assumed	1,792	,194	,679	23
	Equal variances not assumed			,689	21,085
Q2	Equal variances assumed	,704	,410	-1,284	23
	Equal variances not assumed			-1,271	20,780
Q3	Equal variances assumed	4,779	,039	-,823	23
	Equal variances not assumed			-,840	19,563
Q4	Equal variances assumed	3,736	,066	-,035	23
	Equal variances not assumed			-,035	21,102
Q5	Equal variances assumed	,076	,786	-,181	23
	Equal variances not assumed			-,182	22,990
Q6	Equal variances assumed	,437	,515	-,626	23
	Equal variances not assumed			-,628	22,998
Q7	Equal variances assumed	2,173	,148	-,205	41
	Equal variances not assumed			-,207	36,325
Q8	Equal variances assumed	,174	,679	-,120	41
	Equal variances not assumed			-,120	40,938
Q9	Equal variances assumed	,245	,623	,045	41
	Equal variances not assumed			,045	40,891
Q10	Equal variances assumed	,092	,763	-,254	41
	Equal variances not assumed			-,255	40,762

Independent Samples Test

		t-test for Equality of Means			95% Confidence ...
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q1	Equal variances assumed	,504	,276	,406	-,565
	Equal variances not assumed	,498	,276	,400	-,556
Q2	Equal variances assumed	,212	-,442	,344	-1,155
	Equal variances not assumed	,218	-,442	,348	-1,166
Q3	Equal variances assumed	,419	-,212	,257	-,743
	Equal variances not assumed	,411	-,212	,252	-,738
Q4	Equal variances assumed	,972	-,013	,367	-,773
	Equal variances not assumed	,972	-,013	,362	-,764
Q5	Equal variances assumed	,858	-,064	,354	-,796
	Equal variances not assumed	,857	-,064	,352	-,793
Q6	Equal variances assumed	,538	-,237	,379	-1,021
	Equal variances not assumed	,536	-,237	,377	-1,018
Q7	Equal variances assumed	,838	-,039	,190	-,422
	Equal variances not assumed	,837	-,039	,188	-,420
Q8	Equal variances assumed	,905	-,045	,378	-,809
	Equal variances not assumed	,905	-,045	,377	-,807
Q9	Equal variances assumed	,965	,009	,194	-,382
	Equal variances not assumed	,964	,009	,193	-,381
Q10	Equal variances assumed	,801	-,061	,238	-,542
	Equal variances not assumed	,800	-,061	,238	-,541

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q1	Equal variances assumed	1,116
	Equal variances not assumed	1,107
Q2	Equal variances assumed	,270
	Equal variances not assumed	,282
Q3	Equal variances assumed	,320
	Equal variances not assumed	,314
Q4	Equal variances assumed	,747
	Equal variances not assumed	,739
Q5	Equal variances assumed	,668
	Equal variances not assumed	,665
Q6	Equal variances assumed	,547
	Equal variances not assumed	,544
Q7	Equal variances assumed	,344
	Equal variances not assumed	,342
Q8	Equal variances assumed	,718
	Equal variances not assumed	,716
Q9	Equal variances assumed	,400
	Equal variances not assumed	,399
Q10	Equal variances assumed	,421
	Equal variances not assumed	,419

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q11	Equal variances assumed	,011	,915	1,439	41
	Equal variances not assumed			1,447	39,800
Q12	Equal variances assumed	,442	,510	-,888	41
	Equal variances not assumed			-,886	40,367
Q13	Equal variances assumed	1,011	,321	-,220	41
	Equal variances not assumed			-,221	39,487

Independent Samples Test

		t-test for Equality of Means			95% Confidence ...
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q11	Equal variances assumed	,158	,288	,200	-,116
	Equal variances not assumed	,156	,288	,199	-,114
Q12	Equal variances assumed	,380	-,292	,329	-,957
	Equal variances not assumed	,381	-,292	,330	-,959
Q13	Equal variances assumed	,827	-,071	,325	-,729
	Equal variances not assumed	,826	-,071	,324	-,726

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q11	Equal variances assumed	,692
	Equal variances not assumed	,690
Q12	Equal variances assumed	,373
	Equal variances not assumed	,374
Q13	Equal variances assumed	,586
	Equal variances not assumed	,583

```
GET DATA
  /TYPE=XLS
  /FILE='C:\Users\sveinbjorng14\Desktop\Fyrri_stoðdeild.xls'
  /SHEET=name 'Sheet1'
  /CELLRANGE=full
  /READNAMES=on
  /ASSUMEDSTRWIDTH=32767.
EXECUTE.
DATASET NAME DataSet8 WINDOW=FRONT.
DATASET ACTIVATE DataSet3.
DATASET CLOSE DataSet8.

GET DATA
  /TYPE=XLS
  /FILE='C:\Users\sveinbjorng14\Desktop\Fyrri_stoðdeild.xls'
  /SHEET=name 'Sheet1'
  /CELLRANGE=full
  /READNAMES=on
  /ASSUMEDSTRWIDTH=32767.
EXECUTE.
DATASET NAME DataSet9 WINDOW=FRONT.
T-TEST GROUPS=Könnun('1' '2')
```

```
/MISSING=ANALYSIS
 /VARIABLES=Mérfinnstauðveltaðkallaeftirmunnlegriendurgjöfávi Hversuoftíviku
erþérveittuppbyggilegmunnlegendurgjö Managerarogpartnerarleggjasigframviðaðve
itaaðstoðar Managerarogpartnerarvirðasteigaíerfiðleikumviðaðve gáfrumkvæðiaðþ
víaðleitaeftirendurgjöfframan Uppbyggilegmunnlegendurgjöfhefurhaftbeináhrifáfr
amfar Mérfinnstauðveltaðveitaaðstoðarmanniassociatesupp Hversuoftveitirþúaðst
oðarmanniassociatesuppbyggilega Égtelmigundirþaðbúinaðmetaframmistöðuaðstoðarm
Égleggmigmeðvitaðframviðaðveitaaðstoðarmönnum aðveitauppbyggilegamunnlegaendu
rgjöfhefurhaftbeináhri Mérfinnsterfittaðfinnatímatilþessaðveitaaðsto aðstoða
rmennassociateseigareglulegafrumkvæðiaðþví
 /CRITERIA=CI(.95).
```

T-Test for support & IT participants

Notes

Output Created		11-MAY-2017 12:48:49
Comments		
Input	Active Dataset	DataSet9
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	30
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.

Notes

Syntax		T-TEST GROUPS=Könnun('1' '2') /MISSING=ANALYSIS /VARIABLES=Mérfinnstauðveltaðkall aeftirmunnlegriendurgjöfávin Hversuoftívikuerþérveittuppbyggileg munnlegendurgjöf Managerarogpartnerarleggjasigfram viðaðveitaaðstoðar Managerarogpartnerarvirðasteigaíerf iðleikumviðaðve Égáfrumkvæðiaðþvíaðleitaeftirendur gjöffráman Uppbyggilegmunnlegendurgjöfhefurh aftbeináhrifáframfar Mérfinnstauðveltaðveitaaðstoðarman niassociatesuppb Hversuoftveitirþúaðstoðarmanniasso ciatesuppbyggilega Égtelmigundirþaðbúinaðmetaframmi stöðuaðstoðarm Égleggmigmeðvitaðframviðaðveitaað stoðarmönnuma Aðveitauppbyggilegamunnlegaendur gjöfhefurhaftbeináhri Mérfinnsterfittaðfinnatímatilþessaðve itaaðstoða Aðstoðarmennassociateseigareglule gafrumkvæðiaðþví...
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,00

[DataSet9]

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Group Statistics

	1_fyrri 2_seinni	N	Mean	Std. Deviation	Std. Error Mean
Q1	fyrri_könnun	9	2,11	,782	,261
	seinni_könnun	5	2,60	,894	,400
Q2	fyrri_könnun	9	2,11	1,269	,423
	seinni_könnun	5	2,40	1,517	,678
Q3	fyrri_könnun	9	2,89	,782	,261
	seinni_könnun	5	2,80	,447	,200
Q4	fyrri_könnun	9	3,00	,500	,167
	seinni_könnun	5	2,80	,447	,200
Q5	fyrri_könnun	9	2,89	1,167	,389
	seinni_könnun	5	3,00	,000	,000
Q6	fyrri_könnun	9	2,44	1,130	,377
	seinni_könnun	5	1,80	,837	,374
Q7	fyrri_könnun	6	1,50	,548	,224
	seinni_könnun	5	1,20	,447	,200
Q8	fyrri_könnun	6	4,00	1,265	,516
	seinni_könnun	5	3,60	1,517	,678
Q9	fyrri_könnun	6	1,83	,408	,167
	seinni_könnun	5	1,60	,548	,245
Q10	fyrri_könnun	6	2,00	,632	,258
	seinni_könnun	5	2,20	,837	,374
Q11	fyrri_könnun	6	1,83	,983	,401
	seinni_könnun	5	1,60	,894	,400
Q12	fyrri_könnun	6	3,83	,408	,167
	seinni_könnun	5	3,20	,837	,374
Q13	fyrri_könnun	6	3,83	,753	,307
	seinni_könnun	5	3,80	,447	,200

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q1	Equal variances assumed	,030	,865	-1,068	12
	Equal variances not assumed			-1,024	7,445
Q2	Equal variances assumed	,150	,705	-,382	12
	Equal variances not assumed			-,361	7,176
Q3	Equal variances assumed	,107	,749	,231	12
	Equal variances not assumed			,271	11,925
Q4	Equal variances assumed	,200	,663	,742	12
	Equal variances not assumed			,768	9,253
Q5	Equal variances assumed	5,212	,041	-,209	12
	Equal variances not assumed			-,286	8,000
Q6	Equal variances assumed	,236	,636	1,109	12
	Equal variances not assumed			1,214	10,716
Q7	Equal variances assumed	2,761	,131	,980	9
	Equal variances not assumed			1,000	9,000
Q8	Equal variances assumed	,072	,795	,478	9
	Equal variances not assumed			,469	7,867
Q9	Equal variances assumed	2,399	,156	,811	9
	Equal variances not assumed			,788	7,308
Q10	Equal variances assumed	1,107	,320	-,452	9
	Equal variances not assumed			-,440	7,378

Independent Samples Test

		t-test for Equality of Means			95% Confidence ...
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q1	Equal variances assumed	,307	-,489	,458	-1,487
	Equal variances not assumed	,338	-,489	,477	-1,604
Q2	Equal variances assumed	,709	-,289	,757	-1,938
	Equal variances not assumed	,728	-,289	,799	-2,170
Q3	Equal variances assumed	,821	,089	,384	-,748
	Equal variances not assumed	,791	,089	,328	-,627
Q4	Equal variances assumed	,472	,200	,269	-,387
	Equal variances not assumed	,462	,200	,260	-,386
Q5	Equal variances assumed	,838	-,111	,531	-1,269
	Equal variances not assumed	,782	-,111	,389	-1,008
Q6	Equal variances assumed	,289	,644	,581	-,622
	Equal variances not assumed	,251	,644	,531	-,528
Q7	Equal variances assumed	,353	,300	,306	-,392
	Equal variances not assumed	,343	,300	,300	-,379
Q8	Equal variances assumed	,644	,400	,837	-1,494
	Equal variances not assumed	,652	,400	,852	-1,572
Q9	Equal variances assumed	,438	,233	,288	-,418
	Equal variances not assumed	,456	,233	,296	-,461
Q10	Equal variances assumed	,662	-,200	,442	-1,200
	Equal variances not assumed	,673	-,200	,455	-1,264

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q1	Equal variances assumed	,509
	Equal variances not assumed	,626
Q2	Equal variances assumed	1,360
	Equal variances not assumed	1,592
Q3	Equal variances assumed	,926
	Equal variances not assumed	,805
Q4	Equal variances assumed	,787
	Equal variances not assumed	,786
Q5	Equal variances assumed	1,047
	Equal variances not assumed	,786
Q6	Equal variances assumed	1,910
	Equal variances not assumed	1,817
Q7	Equal variances assumed	,992
	Equal variances not assumed	,979
Q8	Equal variances assumed	2,294
	Equal variances not assumed	2,372
Q9	Equal variances assumed	,884
	Equal variances not assumed	,928
Q10	Equal variances assumed	,800
	Equal variances not assumed	,864

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q11	Equal variances assumed	,247	,631	,408	9
	Equal variances not assumed			,412	8,896
Q12	Equal variances assumed	2,869	,125	1,646	9
	Equal variances not assumed			1,546	5,569
Q13	Equal variances assumed	1,073	,327	,087	9
	Equal variances not assumed			,091	8,276

Independent Samples Test

		t-test for Equality of Means			95% Confidence ...
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q11	Equal variances assumed	,693	,233	,572	-1,061
	Equal variances not assumed	,690	,233	,567	-1,051
Q12	Equal variances assumed	,134	,633	,385	-,237
	Equal variances not assumed	,177	,633	,410	-,388
Q13	Equal variances assumed	,933	,033	,385	-,837
	Equal variances not assumed	,930	,033	,367	-,807

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q11	Equal variances assumed	1,527
	Equal variances not assumed	1,518
Q12	Equal variances assumed	1,504
	Equal variances not assumed	1,655
Q13	Equal variances assumed	,904
	Equal variances not assumed	,874

```
GET DATA
  /TYPE=XLS
  /FILE='C:\Users\sveinbjorng14\Desktop\Fyrri_skattasvið.xls'
  /SHEET=name 'Sheet1'
  /CELLRANGE=full
  /READNAMES=on
  /ASSUMEDSTRWIDTH=32767.
EXECUTE.
DATASET NAME DataSet10 WINDOW=FRONT.
T-TEST GROUPS=Könnun('1' '2')
  /MISSING=ANALYSIS
  /VARIABLES=Mérfinnstauðveltaðkallaeftirmunnlegriendurgjöfáví Hversuoftíviku
erþérveittuppbyggilegmunnlegendurgjöf Managerarogpartnerarleggjasigframviðaðve
itaaðstoðar Managerarogpartnerarvirðasteigaierfiðleikumviðaðve Égáfrumkvæðiaðþ
víaðleitaeftirendurgjöffrámar Uppbyggilegmunnlegendurgjöfhefurhaftbeináhrifáfr
amfar Mérfinnstauðveltaðveitaaðstoðarmanniassociatesupp Hversuoftveitirþúaðst
oðarmanniassociatesuppbyggileg Égtelmigundirþaðbúinaðmetaframmistöðuaðstoðarm
Égleggmigmeðvitaðframviðaðveitaaðstoðarmönnum Aðveitauppbyggilegamunnlegaendu
rgjöfhefurhaftbeináhri Mérfinnsterfittaðfinnatímatilþessaðveitaaðstoða Aðstoða
rmennassociateseigareglulegafrumkvæðiaðþví
  /CRITERIA=CI(.95).
```

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T-Test for Tax participants

Output Created		11-MAY-2017 12:52:07
Comments		
Input	Active Dataset	DataSet10
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	42
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Könnun('1' '2') /MISSING=ANALYSIS /VARIABLES=Mérfinnstauðveltaðkall aeftirmunnlegriendurgjöfávin Hversuoftívikuerþérveittuppbyggileg munnlegendurgjöf Managerarogpartnerarleggjasigfram viðaðveitaaðstoðar Managerarogpartnerarvirðasteigaíerf iðleikumviðaðve Égáfrumkvæðiaðþvíaðleitaeftirendur gjöffráman Uppbyggilegmunnlegendurgjöfhefurh aftbeináhrifáframfar Mérfinnstauðveltaðveitaaðstoðarman niassociatesuppb Hversuoftveitirþúaðstoðarmanniasso ciatesuppbyggilega Égtelmigundirþaðbúinaðmetaframmi stöðuaðstoðarm Égleggmigmeðvitaðframviðaðveitaað stoðarmönnuma Aðveitauppbyggilegamunnlegaendur gjöfhefurhaftbeináhri Mérfinnsterfittaðfinnatímatilþessaðve itaaðstoða Aðstoðarmennassociateseigareglule gafrumkvæðiaðþví...
Resources	Processor Time	00:00:00,02
	Elapsed Time	00:00:00,01

[DataSet10]

Group Statistics

	1_fyrri 2_seinni	N	Mean	Std. Deviation	Std. Error Mean
Q1	fyrri_könnun	5	2,20	,837	,374
	seinni_könnun	6	2,33	1,033	,422
Q2	fyrri_könnun	5	4,20	2,387	1,068
	seinni_könnun	6	3,00	1,549	,632
Q3	fyrri_könnun	5	2,20	,837	,374
	seinni_könnun	6	2,50	,837	,342
Q4	fyrri_könnun	5	3,40	1,140	,510
	seinni_könnun	6	3,00	,632	,258
Q5	fyrri_könnun	5	2,80	1,643	,735
	seinni_könnun	6	3,17	1,472	,601
Q6	fyrri_könnun	5	1,60	,548	,245
	seinni_könnun	6	1,83	,753	,307
Q7	fyrri_könnun	14	1,86	,535	,143
	seinni_könnun	7	1,86	,378	,143
Q8	fyrri_könnun	14	4,29	2,091	,559
	seinni_könnun	7	3,00	1,155	,436
Q9	fyrri_könnun	14	1,86	,363	,097
	seinni_könnun	7	2,14	,378	,143
Q10	fyrri_könnun	14	2,07	,730	,195
	seinni_könnun	7	2,14	,378	,143
Q11	fyrri_könnun	14	1,79	,579	,155
	seinni_könnun	7	1,86	,378	,143
Q12	fyrri_könnun	14	3,50	,941	,251
	seinni_könnun	7	2,86	,900	,340
Q13	fyrri_könnun	14	3,79	,893	,239
	seinni_könnun	7	3,86	,900	,340

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q1	Equal variances assumed	,190	,673	-,232	9
	Equal variances not assumed			-,237	8,999
Q2	Equal variances assumed	1,459	,258	1,008	9
	Equal variances not assumed			,967	6,645
Q3	Equal variances assumed	,011	,919	-,592	9
	Equal variances not assumed			-,592	8,643
Q4	Equal variances assumed	2,756	,131	,739	9
	Equal variances not assumed			,700	5,999
Q5	Equal variances assumed	,217	,652	-,391	9
	Equal variances not assumed			-,386	8,204
Q6	Equal variances assumed	,136	,721	-,576	9
	Equal variances not assumed			-,594	8,887
Q7	Equal variances assumed	,588	,453	,000	19
	Equal variances not assumed			,000	16,421
Q8	Equal variances assumed	2,618	,122	1,503	19
	Equal variances not assumed			1,813	18,657
Q9	Equal variances assumed	,000	1,000	-1,678	19
	Equal variances not assumed			-1,654	11,669
Q10	Equal variances assumed	,470	,501	-,241	19
	Equal variances not assumed			-,295	18,904

Independent Samples Test

		t-test for Equality of Means			95% Confidence ...
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q1	Equal variances assumed	,822	-,133	,576	-1,436
	Equal variances not assumed	,818	-,133	,564	-1,409
Q2	Equal variances assumed	,340	1,200	1,191	-1,494
	Equal variances not assumed	,367	1,200	1,241	-1,767
Q3	Equal variances assumed	,568	-,300	,507	-1,446
	Equal variances not assumed	,569	-,300	,507	-1,453
Q4	Equal variances assumed	,479	,400	,542	-,825
	Equal variances not assumed	,510	,400	,572	-,999
Q5	Equal variances assumed	,705	-,367	,939	-2,490
	Equal variances not assumed	,709	-,367	,949	-2,546
Q6	Equal variances assumed	,579	-,233	,405	-1,150
	Equal variances not assumed	,567	-,233	,393	-1,124
Q7	Equal variances assumed	1,000	,000	,227	-,475
	Equal variances not assumed	1,000	,000	,202	-,427
Q8	Equal variances assumed	,149	1,286	,855	-,504
	Equal variances not assumed	,086	1,286	,709	-,200
Q9	Equal variances assumed	,110	-,286	,170	-,642
	Equal variances not assumed	,125	-,286	,173	-,663
Q10	Equal variances assumed	,812	-,071	,296	-,692
	Equal variances not assumed	,771	-,071	,242	-,578

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q1	Equal variances assumed	1,169
	Equal variances not assumed	1,142
Q2	Equal variances assumed	3,894
	Equal variances not assumed	4,167
Q3	Equal variances assumed	,846
	Equal variances not assumed	,853
Q4	Equal variances assumed	1,625
	Equal variances not assumed	1,799
Q5	Equal variances assumed	1,757
	Equal variances not assumed	1,813
Q6	Equal variances assumed	,684
	Equal variances not assumed	,657
Q7	Equal variances assumed	,475
	Equal variances not assumed	,427
Q8	Equal variances assumed	3,076
	Equal variances not assumed	2,772
Q9	Equal variances assumed	,071
	Equal variances not assumed	,092
Q10	Equal variances assumed	,549
	Equal variances not assumed	,435

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Q11	Equal variances assumed	1,872	,187	-,295	19
	Equal variances not assumed			-,339	17,328
Q12	Equal variances assumed	,059	,811	1,497	19
	Equal variances not assumed			1,520	12,610
Q13	Equal variances assumed	,096	,760	-,172	19
	Equal variances not assumed			-,172	12,015

Independent Samples Test

		t-test for Equality of Means			95% Confidence ...
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower
Q11	Equal variances assumed	,772	-,071	,243	-,579
	Equal variances not assumed	,739	-,071	,211	-,515
Q12	Equal variances assumed	,151	,643	,430	-,256
	Equal variances not assumed	,153	,643	,423	-,274
Q13	Equal variances assumed	,865	-,071	,414	-,938
	Equal variances not assumed	,866	-,071	,415	-,976

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the ...
		Upper
Q11	Equal variances assumed	,436
	Equal variances not assumed	,372
Q12	Equal variances assumed	1,542
	Equal variances not assumed	1,559
Q13	Equal variances assumed	,796
	Equal variances not assumed	,834