

THE VERBAL EXPRESSION OF COMPASSION IN AN ACADEMIC SETTING

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Abstract

This case study aimed at exploring procedures to capture the verbal expression of compassion in an academic setting. Data was collected through semi-structured interviews addressing the informants' perceptions of current working environment conditions, at a medical education and research faculty. The informants represented management teams, research group leaders, researchers, doctoral students and administrative staff (n=46). The interviews were coded focusing on expressions of compassion, using and comparing two different instruments: the Neff Self-Compassion Scale and SAVI, System for Analysing Verbal Interaction. Data were also gathered through earlier surveys concerning the work environment and bibliometrics. The findings suggested a link between the two instruments used, as well as a link between expressed compassion through verbal behaviour and reported stress levels. Some informants indicated that compassion would contradict productivity. Comparing measures for compassion with bibliometrics did not indicate such a trade-off.

Keywords Compassion, Neff Self-Compassion Scale, SAVI, Organisation, Leadership

Following the definition of compassion by Cosley, McCoy, Saslow and Epel (2010) compassion can be seen as concern for the wellbeing of others. Compassion motivates support giving and is evoked by perceiving others as vulnerable, distressed or in need. College students who are more concerned about their peers show higher self-esteem, self-efficacy, and lower ambulatory blood pressure (Cosley et al., 2010).

One way through which compassion may be related to wellbeing is by improving the perception and actualization of available social support. Individuals who show greater compassion for others also perceive others to have greater compassion for them (Cosley et al., 2010).

During 2012 a research team at a medical faculty of a Swedish university gathered data to investigate possible follow-ups to a work environment questionnaire. The faculty was positioned above the stated reference values for all indexes of sleeping difficulties. The proportion exposed to bullying and harassment had increased somewhat in comparison with previous measurements, and 15 % stated that they had observed this type of behaviour in the workplace. The indexes for work satisfaction and work motivation were high (AHA, Arbete och Hälsa, 2011-12).

The referred figures were of importance for this study taking into consideration a study by Emdad, Alipour, Hagberg, and Jensen (2012) where the impact on bullying not only on the direct targets, but also on the bystanders was investigated.

The results support the notion that bullying is not only a dyadic target-bully issue. It has to be seen as a triadic relationship between bully, victim, and bystander and as a structural, organisational problem where many bystanders as well as targets suffer and are at risk of future stress related health problems. Bystanders and the whole organisation are involved in the process of bullying behaviour, and, in turn, intervention programs should address the whole workplace system (Emdad et al., 2012).

In some cases, bystanders choose not to get involved, which may lead to feelings of guilt. In other instances, they may try to help the target by finding ways to retaliate against the bully. In any case, the witnesses spend a great deal of time pondering the bullying, resulting in potentially lower productivity for the organisation (Pearson & Porath, 2005).

Previous research on compassion

The construct of compassion can be understood from many different perspectives. Goetz, Keltner, and Simon-Thomas (2010) defined compassion as “a distinct affective experience”. In this model, compassion is thought to constitute an evolutionarily advantageous trait evolved as part of a caregiving response to vulnerable offspring leading to the preferential selection of compassionate individuals in mating. Correspondingly, compassion emerged as a desirable trait in cooperative relations between non-kin. In this sense, Goetz et al. (2010) link the evolution of compassion with the development of positive reputations — i.e. if you get a reputation for being kind-hearted this is good for your survival.

A recent study (Breines & Chen, 2013) have investigated whether self-compassion is a stable trait or if it is influenced by the social context. The study shows that it is influenced by context; one way to increase compassion for the self is to give it to others.

Compassion in an academic setting

How can compassion be promoted and applied in an academic setting? Successful academic environments, (successful defined as conducting breakthrough research pushing the frontiers of human knowledge, but not necessarily producing the largest volume of articles), are characterised by a high degree of autonomy, flexibility, social integration, cooperation and employee security (Hollingsworth, 2003). This assumes the existence of leadership that can both identify the most central research issues and developmental trends, and simultaneously contribute to good spirit and job satisfaction amongst colleagues.

In the academic environment, much work is conducted in teams. A model for team leadership is based on the functional leadership claim that the leader’s function is to monitor the team and then take whatever action is necessary to ensure

team effectiveness (Hill Kogler & Northouse, 2010). Organisational research shows that contextual factors (history, culture, control and reward systems etc.) have a decisive influence on work and cooperative processes in all types of organisations (Pettigrew & Whipp, 1991).

Compassion measurement

Neff (2003) argues for the concept of compassion and self-compassion being interchangeable: “In the West, compassion is usually conceptualized in terms of compassion for others, but in Buddhist psychology, it is believed that it is as essential to feel compassion for oneself as it is for others. The definition of self-compassion... is not distinguished from the more general definition of “compassion” (Neff, 2003). According to Neff’s extensive research on non-clinical populations, self-compassion is associated with increased wellbeing as reflected in lower feeling of depression, lower anxiety and greater satisfaction with life.

The Neff Self-Compassion Scale (SCS), widely applied in research on compassion, focuses on six areas: Self-Kindness (e.g., “I try to be loving towards myself when I am feeling emotional pain”); Self-Judgment (“I’m disapproving and judgmental about my own flaws and inadequacies”); Common Humanity (“When things are going badly for me, I see the difficulties as part of life that everyone goes through”); Isolation (“When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world”); Self-Compassion Mindfulness (“When something upsets me I keep my emotions in balance”); and over identification (“When I’m feeling down I tend to obsess and fixate on everything that’s wrong”) (Neff, 2003). The SCS shows strong internal reliability (consistently above .90) as well as test-retest reliability (.93 over a three-week interval; Neff 2003). Convergent validity for the scale is strong, with self-reported SCS scores substantially overlapping with observer reports (Neff, 2006; Neff, Kirkpatrick, & Rude, 2007). The scale also shows discriminant validity – practicing Buddhists report higher SCS scores than non-Buddhists (Neff, 2003).

To strengthen the claim that self-compassion is a valid proxy for compassion, Longe, Maratos, Gilbert, Evans, Volker, Rockliff, and Rippon Longe (2009) showed activity in the same brain area for both.

Methods for analyses of verbal expression of compassion

Compassion being a relatively new and not that thoroughly researched concept, the research group in this project discussed the possibility of capturing expressions of compassion by measuring it in a couple of different ways; hereby creating a triangulation. One option was to focus on the core areas in the self-compassion scale i.e. expressions of kindness, non-judgment, common humanity, feelings of isolation, emotional balance and over-identification (the latter two could be interpreted as

distress tolerance thereby using an overlapping terminology with Neff and Gilbert (2009)) rating the verbal expressions of our informants. Hereby using the previously referred to self-compassion scale as a base.

Compassion can be demonstrated in different ways: through facial expressions, temporal pole activity, compassionate acts and verbal behaviour. Since our main source of information was interviews we decided to focus on the verbal expression of compassion (research team meeting Oct. 2012). Inspired by a data triangulation approach (Yin, 2009) we decided to use both an adaption of the self-compassion scale focusing on the core areas: expressions of kindness, non-judgment, common humanity, feelings of isolation, emotional balance and over identification, and an instrument developed for analysing verbal behaviour called SAVI, System for Analysing Verbal Interaction, developed by Simon and Agazarian (1969).

The SAVI instrument is based on general systems and information theory. SAVI was developed by Simon and Agazarian (1969) in order to describe communication to understand what is actually happening when people are talking to each other; that verbal behaviour is more than just the contents of the words people utter (Benjamin, Yeager & Simon, 2012). The idea is that all human communication can be described as behaviour that either facilitates or avoids information getting across, and that avoidance creates stress in the system. SAVI is an observation and classification instrument that estimates the probability that information will be transferred. Based on this analysis it is possible to predict the potential for problem solving in the communication. It is also possible to decide if the verbal acts used will contribute to problem solving or in themselves contribute to the problem (Sandahl, Lindgren & Herlitz, 2000).

The theory behind SAVI assumes that noise in the communication will reduce the probability of information getting across from sender to the receiver. Noise is defined as ambiguities, contradictions and redundancies. The concept of noise comes from information theory; the technical study of how quantities of information are measured, stored and transmitted, and was first used in an article by Shannon and Weaver in 1949 called the Mathematical Theory of Communication (Benjamin et al., 2012).

In SAVI all utterances and human sounds are regarded as verbal behaviours to be coded in nine discrete categories, each containing sub-categories. Both content and how something is said is taken into account. The vertical scoring depends on if the sounds are assumed to contribute to approaching or avoiding problem solving. Avoidance behaviours are coded as red, they introduce noise, making it less likely the communication will transfer information and more likely it will create stress. Neutral behaviours are coded as yellow; mostly information, and the effect it has depends on the context, yellow behaviours can be used as ammunition if the context is red, or as a resources if it is green, since green behaviours give evidence that

information has been transferred. Green behaviours tend to create a positive, productive climate and thus increase the chances of information being transferred and integrated (Simon & Agazarian, 2008). If the content is personal, factual or orienting it is scored horizontally. Personal information influences the system in terms of degree of intimacy related to the past or the present. Factual information influences the system's capacity to organise and integrate data and facts. Orienting information gives the system a direction (Sandahl et al., 2000). In Sandahl, Lindgren and Herlitz' study (2000) inter-rater agreement for novice raters varied between 75 and 77 %. Here follows a simplified illustration of the SAVI-grid:

Table 1

A simplified illustration of System for Analysing Verbal Interaction developed Simon and Agazarian (1969). SAVI is a registered trademark of Agazarian, Simon, Byram and Carter

	<i>Direction towards Person</i>	<i>Direction towards Facts</i>	<i>Orienting of facts and person</i>
Avoidance behavior	Fighting, attack	Obscuring	Competing
Neutral behavior	Personal information, opinions, questions	Facts & figures General information	Influencing
Facilitating behavior	Resonating	Responding	Integrating

Simon and Agazarian did not use the concept of compassion expressively; the research team discussed this dilemma and came to the conclusion that the green verbal behaviours acknowledging that information is received could be interpreted as an expression of compassion in the sense that they break isolation. According to Simon and Agazarian an interchange between green and yellow behaviours integrating different opinions, is a typical pattern for actual problem solving. This pattern could also be estimated as a proxy for compassion since compassion includes desire to relieve someone of their troubles (research team meeting, 2012).

Research questions for this study

The main research question in this study was to explore procedures to capture the verbal expression of compassion in an academic setting. If such procedures could be found, could anything be said about whom, under which circumstances and to what effect compassion was expressed?

Study design and theoretical framework

During the fall of 2012 a team of four researchers initiated a project as a part of a follow up of the AHA-survey of the psychosocial work environment at the medical faculty of a Swedish university, as an important part of the AHA-method is to develop a method of reinforcing and supporting sustainable health (Emdad et al., 2012). Two departments volunteered to take part, in the following called Depart-

ment 1 and Department 2. Interviews were conducted on many hierarchical levels: division leaders and other key personnel, doctoral students, and post-docs.

A case study approach (Yin, 2009) was used to describe and explain the planning, formation, and results. The framework used to decide what data to gather was based on Pettigrew and Whipp (1993) model of strategic change. The Pettigrew and Whipp framework is frequently used in analysing change programmes in organisations (Stetler, Ritchie, Rycroft-Malone, Achults, & Charns, 2007; Øvretveit, Andreen-Sachs, Carlsson, Gustafsson, Hansson, Keller, Lofgren, Mazzocato, Tolf & Brommels, 2012). It focuses the data collection on the content of the change, how the actions taken to implement the change is received and developed, the context, along with intermediate and final outcomes (Iles & Sutherland, 2001; Stetler et al., 2007; Walshe, 2007).

Data were gathered in semi-structured interviews conducted with a sample of key persons at different organisational levels, selected by the management of the departments (In total 46 persons were interviewed of which 29 were women. Of these 46, 17 (12 men) held positions as members of management teams either for the departments or for sections within the departments). The interview protocol addressed the informants' perception of current working environment conditions, with special focus on psychosocial aspects such as leadership and organisational climate. The concluding question in all the interviews was whether there was someone else the informant suggested to be interviewed – this led to an additional 7 interviews. The majority of the interviews were conducted September-November 2012, and some in February and March of 2013. All interviews were recorded and conducted by two interviewers. All informants were assured confidentiality.

The interview guide covered the following questions:

- Q1. Describe your current position at work.
- Q2. What functions well and less so at Department 1,2?
- Q3. How would you describe the research climate at Department 1,2?
- Q4. How would you describe the social climate at Department 1,2?
- Q5. If you for one day were the head of department, mention three areas to prioritize.
- Q6. Are there any work environment problems at Department 1,2, we (in the research group) should know about?
- Q7. How are deficiencies in the psychosocial work environment defined at Department 1,2 today?
- Q8. How are identified deficiencies in the psychosocial work environment at Department 1,2 handled?
- Q9. Anything we have forgotten to ask that is important to know?
- Q10. Some one else you think we should interview?

Returning to Yin on case study analysis: one of the fundamental techniques is to find logic based on pattern matching (Yin, 2009). This method can be compared

with the judicial process based on circumstantial evidence, comparing an empirically found pattern with an expected. If the patterns match, the internal validity of the case study is strengthened. In a descriptive case study as this one, pattern matching is a relevant technique, according to Yin, as long as expected patterns of specific variables are defined before the data collection. An expected pattern in this specific context could be that the high degree of motivation might diminish some problems and exaggerated others.

In constructing the above questions an expected outcome was that the informants would be able to show compassion on a rising scale from questions 2, 3, 4, 5 and to question 6 giving the informant ample room to express compassion, to questions 1, 7 and 8 being more neutral in that they deal more with the structural level.

One of the critiques of case studies is that they mostly produce a lot of paper (Yin, 2009). To not fall into that trap questions 1,2,3,5,6 were analysed in more depth, as they were the questions rendering the answers containing most information. Maybe this also reveals something of the informants' profiles. The first 6 questions concern the individuals point of view, whereas questions 7 and 8 are on a level, which might not interest the informants that much.

Do the questions carry different weight? Apart from the administrative personnel, all informants either had their own research group, or participated in one or many. This could imply that the question on research-climate was the over-ruling one: if you identify yourself as a researcher and the research climate is good then maybe the rest is less important? Hereby strengthening the pre-perception of motivation being a key factor.

Using the qualitative content approach as described by Graneheim and Lundmark (2004) the research group gathered for in all three days reading the interview transcripts and creating categories and uncovering themes. Some of the identified themes were: Struggle for structure and control, interaction as a process of respecting or invading each other's areas, inclusion or exclusion in the group. Categories defined were: motivation, resource allocation, organisational structure, leadership and harassment.

Data analysis

All interviews were transcribed and analysed in two steps thereby finding both underlying themes and expressed verbal behaviour displaying compassion. For the first step qualitative content analysis was used as defined by Graneheim and Lundman (2004) and for the second step the SAVI-system (Agazarian, 1969, 2000) as well as the six areas of Neff's self-compassion scale (Neff, 2003). The first step could be described as a qualitative content analysis when the whole research group went through all the answers finding categories, i.e. groups of content sharing a commonality (Krippendorff, 1980). Categories refer mainly to a descriptive level of

content and can be seen as the manifest content of the text. The latent content can be captured in themes, finding themes were the next step in the research group's work. The exact verbal expressions by the informants in those parts of the interviews being considered as carrying most information were then analysed by SAVI, System for Analyzing Verbal Interaction (Agazarian 1969, 2000) and by the six central areas of the self-compassion scale (Neff, 2003). Thus using the Neff items as a sort of filter: could the utterances coded as proxy for compassion by SAVI, i.e. "green" and an interaction of "green and yellow" behaviours be coded as expressions of compassion or not? One could argue for a triangulation taking place in the intersection between the qualitative analysis of the interviews and the coding with SAVI and the Neff-scale.

In analysing with SAVI it is not only of interest what is said, but how it is said, and since the interviews were recorded it was possible to analyse such items as tone of voice. Using two coders coding eight interviews in minute detail started the coding; the inter-rater reliability was, after the first interview 0.91. (The first statement below is an example of a deviation.) The research group contained two very experienced coders, which could explain the high inter-rater reliability. Examples drawn from eight interviews coded in detail by two coders can be found in Table 2.

Since context presumably has an impact on compassion (Breines & Chen, 2013) the model for "Realistic evaluation" (Pawson & Tilley, 1997) was used in this study. The content of the interviews were analysed in relation to the external environment (context), and patterns and explanatory mechanisms were sought out. The evaluation model is hypothesis-driven insofar as assumptions regarding causes and consequences are formulated and tested against the data gathered. At the same time, the results are reported successively to the environment in order for it to be possible to immediately make corrections and modifications. This was done on several occasions and led to some adjustments in the presentation of the data, and to interesting discussions on the differences in interpretations of observations depending on point of view; whether the interpreter belonged to the studied group or not.

Archive data and bibliometrics

Data were gathered from official documents acquired from the department's home pages and intra-net. This working method corresponds to established models for quality assurance and can provide supporting data for continued research. All data were archived in a study database, which included the taped and transcribed interviews, minutes of meetings, observation protocols, and study notes.

Table 2

A comparison of SAVI with Neff coding, examples from eight interviews coded by two coders. Apart from the first extract there was inter-rater fit

Interview	Example	Tone of voice	Savi code	Compassion code
1	My shoulder is always a bit humid from someone crying on it	Sad	Green or yellow Resonating or fact	Kindness/ Common humanity
2	I worry over people feeling harassed	Sad	Green/resonating	Kindness/common humanity
3	Some people are allowed to do whatever they like!	Sarcastic	Red/fighting	Judgmental
	I have heard extremely nasty verbal harassment	Upset	Green/resonating	Common humanity
4	The group-leader is always travelling. This creates stress and frustration in the group, but the leader gets lots of funding, so who will say anything?	Downcast	Green/resonating	Common humanity
5	Everything in this section is transparent and structured. Here is no harassment. I came from a section where obscurity and ostracism ruled, so this is a great change	Matter of fact	Yellow/information, personal opinion	Lifting feeling of isolation
6	I can't do anything against the harassments since I only get second-hand information	Neutral	Red/fighting	Convey feeling of isolation
6	The problems we know of don't show in the AHA. Maybe people don't dare answer honestly?	Thoughtful	Yellow/information & Green/resonating	Kindness, common humanity
7	I like my work the drawback is the insecurity, I have a feeling that I never do enough. I think it's the same for many of us.	Thoughtful	Green/resonating	Common humanity
8	We have all the components in place: great people, funding, good communication. It's easy and fun to interact.	Happy	Green/resonating	Breaking feeling of isolation

Ethical issues

The Regional Ethical Review Board at KI, Stockholm, Sweden, approved the study (2012/2061-31/5). The data were gathered according to the ethical principles and code of conduct prescribed by the American Psychological Association (2010).

Results

The presentation of the findings is organised as such: first some general facts on the participating departments, then the results of the interviews grouped in five different categories: motivation, resource allocation, organisational structure, leadership and harassment.

Characteristics of the case departments

Two departments volunteered to take part in the pilot, in the following called Department 1 and Department 2 (below dept.1 and dept.2). Both departments are quite large with over 300 employees, time and money divided between research and education with emphasis on research. Dept.1 has a little tighter budget than Dept.2, with 0.6 million s.kr/employee compared to 0.8 s.kr/employee. In bibliometric terms dept. 1 published 530 journal articles in 2011-12, and during the same time Dept.2 published 690 journal articles. The departments are divided into sections.

Interviews were conducted on complementary hierarchical levels: division leaders and other key personnel, doctoral students, post-docs, and management teams. Their position is identified after the quotes, and numbers separates people at the same hierarchical level.

Findings from interviews

Motivation. Our pre-conception of a pattern would be that the high work motivation displayed in the AHA-poll would show in the answers, and it did:

I really love my job and people are so friendly and helpful. I have been here for 8 years, and the drawback is the instability, now I'm on a 6-month contract. It's a bit rough after 12 years of university studies that you can't get a permanent position, but I don't want to leave research! ...You know that you enter a world of short contracts and tough competition. I've been on a stipend, and then you don't have social security, so when I had my child I saved up so I could take 6 months unpaid leave, but that's ok. It's how it is. (Senior researcher 1)

I am Professor on a combination appointment: 30 % at the county council clinic and 70 % at the faculty. I am on the executive board and on the research advisory board, I'm head of the section and I'm leader of my research-group. The clinic is physically located in 6 different hospitals, and sometimes I show up as my own boss. Not one day is like the next, it never gets dull! (professor and head of sec-

tion 1)

For the research group it was noteworthy that even if the informants reveal quite disturbing facts, they rarely turn them into allegations:

I have a great boss now who shows that he cares about us and that we are not exchangeable. It's not always like that... I got pregnant when I was a post-doc. I used to work with Toxoplasmosis, not so good when you're pregnant. I told my boss, and he said he would check the security routines. Every time I met him in the corridor and my stomach got larger and larger, he said: oh, yes, the security. I'll check it... He never did. I felt like I was the first lab-worker in the history of the institute getting pregnant. But I can't have been? The place is full of women. (Senior researcher 1)

Analysing this last statement with the SAVI system, taking into consideration both what is said and how it is said: listening to the interview the informant tells this story in a very calm voice, showing genuine surprise that maybe she might actually have been the first lab worker getting pregnant. The verbal content is in the yellow section, which is conveying personal and general information, questions, proposals and opinions, and in the green section resonating and integrating. Despite the quite serious content she never goes into the red section of communication fighting, obscuring or competing. Looking at the statement from a compassion point of view it is non-judgmental. This indicates a possible positive correlation between the Neff compassion scale and the SAVI-grid.

The bosses send the signal that there is a surplus of young researchers in the world wanting to come here, maybe they do care about our welfare, but it's not always obvious. (Doctoral student 1)

Analysing this statement with SAVI starts with an attack, that is a red communication strategy. Whether the latter part of the statement is red or a yellow or even green communication depends on the tone of voice. In this case it was quite harsh leading to the statement being registered as in the red. Would we say that the statement displays compassion? No, it seems quite judgmental, thus showing a connection between the SAVI-system and the Neff compassion scale.

There were also signs of worry that the high work motivation does not stimulate necessary changes:

The faculty does not spend much on HR, I think the idea is that the researchers are so motivated they work even if you make them eat shit, so to speak, so why spend "unnecessary" money? (Post-doc 1)

This statement starts with general information (yellow), moving into attack (red). It is neither kind nor non-judgmental thus it is not displaying compassion.

Resource allocation. This leads into the next category: the impact of the faculty's resource allocation policies. According to a majority of the informants the policies are basically that the research group leaders must fund their own research:

I don't have time to do much research, since at least half of my time is spent applying for funds. You never get a 100 % funding from one source. There are like 35 000 different stipend funds you can apply to and it takes forever. (professor, research group leader 1)

The faculty has the policy that you shall find your own money for your research. This creates a feeling of this being a research-franchise: a research-hotel. I think the idea is that by creating this very harsh climate you will get only the best people. But the side effect is that if you finance your own work, why should you abide to rules you might not approve of? (professor, head of section 2)

Our vision at the faculty is to be number one, that's a great vision but it doesn't work as a strategy. My role as head of the section is to foster future researchers, but there is a lack of structure over career possibilities at the faculty, it's hard to explain to my young researchers why there are so many investments in beautiful new buildings, but not in employment for young researchers. We want to be like an elite US-University, but we lack the security and transparency they can offer there. Connections and nepotism plays a too important role in the absence of a structure. (professor, head of section 1)

When you just see these statements they might read as quite harsh and you might code them as red attacks, but listening to them they are delivered in tones that are full of concern, they are almost said with sadness turning them into green verbal behaviours. Analysing them from a compassion perspective they convey a feeling of isolation thus pointing away from compassion, but again the tone of the voices show kindness thus pointing towards compassion.

Despite the world-class research resources was a source of anxiety and a worry for the future, both for the informant's own, as well as for the research groups and for that of the faculty:

Scientists like me in the middle of our careers we don't know what is going to happen tomorrow. I am an assistant professor, and it is still difficult for me, but then think how it is for a research assistant to have a family - not possible! In this university it's difficult to go to the top and that's ok, but they should define a ten year track where it is up to you to think "can I make it or not", and if I make it I will be secure. (assistant professor, research group leader 2)

Worry number one: the insecurity, what am I going to do in the future? Number two: Not sleeping, could be related to the first one. (post-doc 2)

These statements were delivered in soft, non-aggressive voices. They were presented as facts and with proposals for solutions and some personal resonating putting the statements in the yellow and green SAVI-verbal behaviours. Compassion was demonstrated by distress tolerance and common humanity.

Organisational structure. Salas, Tannenbaum, Kraiger and Smith-Jensen's (2012) researched academic environments finding them unusually stable systems with great resistance to attempts at change. The informants at the medical faculty in question confirmed this view:

It is very old fashioned with hierarchic structures, but the institute need not be afraid of change, they are afraid that if they abandon their old ways they will not be a research institute anymore, but that will not happen. You can get good research, and have leaders who know about how to handle personnel, economy and administration. (Post-doc 1)

The section used to be like a kingdom with the king, serfs and no one in between. Then the king retired and there was a total void of structure. I started my work as the new section-leader by building structures. This gives a sense of security but also of frustration; as long as you are not aware of any borders you can do what you want, but now people get a yes or a no... People suffer if they are not seen, and without structures the risk is great that that will happen. Structure gives people a sense of identity and of belonging and it gives you a clear role. The organisation in general has too little structure, or at least too little of a transparent structure. This is not good because it gives room for nepotism. They say that cream always floats to the top, but so does something else as well... and that something else thrives on obscurity. (professor and head of section 1)

These statements are solution focused, communicating in yellow giving information and also in green resonating. They display compassion in common humanity and also of breaking feelings of isolation.

The structure is very hierarchic, people are not treated equally. Some can do what ever they want, you don't mess with them because they are great researchers publishing in high impact journals, getting massive funding. It is common knowledge at the department that some researchers treat their PhD-students badly, but nothing is done about it. I'm just amazed how they can do such great research when people are treated so badly? (senior researcher 2)

This statement is one of many on the same theme; that as long as a leader of a research group gets the research published in high impact journals deficiencies in

leadership is of minor concern. The statements are formulated as red attacks in SAVI, and displays judgment and feelings of isolation, i.e. does not display compassion.

How can we increase the involvement? The structure is not built to foster the feeling of belonging. Take the different elections, for example the position as prefect where 50 % of the employees can't vote because they don't have a doctoral degree! This breeds a sense of inequality. (researcher, member of management team 1)

Statements like these were not uncommon stressing the feeling of being a victim to unpredictable decisions higher up in the organisation. The statement showed a wish for a clearer structure, bordered on whining coded in the SAVI as red/blame interlaced with yellow/information, compassion wise pointing towards feelings of isolation and judgment.

But the notion of a stable system was also disputed:

Researchers are extremely flexible. You can announce a new system for acquiring research grants one day and the next everyone has adapted to it. What we lack is not flexibility but funnily enough critical thinking. We tend to accept authority a little too quickly. (professor, member of department's management team 5)

The picture painted by the doctoral students varied between those who were content, and those who are not:

If you don't agree and let it be known you can get in trouble.

We are not doctoral students; we are just badly treated servants.

I see my supervisor as often as I want; my supervisors' door is always open.

The attitude conveyed by the tutors differed from:

I don't take that many doctoral students since this is an education and I want to give them the best. This is an elite institution, but you cannot be elite when you are still being educated. My role is to foster them into the next generation of elite researchers. (professor, research group leader 2)

To:

You can never work too much, just too little. Those who consider research a 9 to 5 job and it being important to attend all the meetings and courses, they will never become any good and it is still impossible for me to fire them once they've

been accepted as doctoral students. (professor, head of section 2)

This last statement was said in a harsh tone, coded as a SAVI-red fighting/attack, and it did not convey compassion.

Leadership. Our pre-understanding of academic leadership was based on Hollingsworth (2003): as leadership characterised by a high degree of autonomy, flexibility, social integration, and cooperation. This view could be contradictory to the functional leadership claim: in the academic environment, much work is conducted in teams, and a model for team leadership is that the leader's function is to monitor the team and then take whatever action is necessary to ensure team effectiveness (Hill & Northouse, 2010). Our informants gave examples:

The Institute is in a transition phase where many of the old professors are retiring... These guys, born in the 1930-40's have prioritized their own career at the expense of for example ethical issues, and I think that's why we have this extremely elitist system with finding your own money for research. (professor and head of section 1)

After many years I changed division and came to this place where people actually help me when I need it. It's such a change, like they take happy-pills! I have been thinking a lot about the section I left, and I still can't understand how we could do such good research when the psychosocial environment was so bad. (senior researcher 3)

We get too little encouragement! I think I can speak for all at the faculty; the working climate has become much harsher. It would make a world of difference if my boss once in a while told me: well done! (senior researcher 4)

These answers were delivered in soft voices, being more solution oriented than attacking, coded as SAVI yellow and resonating in green. They also conveyed a wish for breaking feelings of isolation.

Some answers pointed towards the academic setting being a very special (exclusive) one:

I have given academic leadership a lot of thought. I do believe that we want a researcher to lead the department, even if an external might be a better leader he or she will lack the knowledge and respect from the research-community. But a lot of academic leaders are not that great: lacking basic knowledge of labour laws, being quite impossible to reach, and having a hard time making decisions. This could probably be solved with training. (senior researcher 4)

Working here is like being on a roller-coaster; if you have the resources you can

do any research you like, but it's tough when you have employees on longer contracts and suddenly there is no funding, and then you risk tampering with the labour laws, which are ill suited for this kind of work. (professor, research group leader 3)

What characterizes an academic setting compared to other organisations' was mentioned by many of the informants:

One has to remember that research is a job without limits, you can go on 24/7, and that can be a problem. We have arranged seminars dealing with this issue, but it is difficult to separate work from ones private life! (professor, head of section 4)

This statement shows a lot of concern and is coded in green/resonating, where as the next two are more matter of fact communication in SAVI-yellow categories, not displaying compassion:

For me it's no different than coaching a football-team. I am the coach. If people don't appreciate it they can leave. Work environment is nothing separate, to me it's a good project ... Many researchers have large egos, but they do push the research forward, and we have some weirdoes, but they have a lot of ideas and are needed in a creative climate which I think we have here. (senior professor 1, research group leader)

... if you finance your own work, why should you follow the rules if you don't like them? (professor, head of section 2)

These statements are countered by:

Our group differs in that we have a lot of psychosocial issues, with a leader that doesn't encourage people to develop, so many leave the group. Other groups in the department cooperate, but that is not encouraged in our group. We can cooperate with groups from other countries, but I think there is a lot of bad-will between our professor and other researchers here preventing a local cooperation. So we are a highly performing, dysfunctional group. I love research; it takes years to build a career in research, but I'm considering other options. It is sad, but that's the way it is ... I feel ashamed to admit it; but I give up. I don't try to change things any longer. (assistant professor 2)

Listening to this statement it was delivered in a soft, sad tone of voice. Just reading the transcript it could be coded as a red attack, but since the tone differs it is coded as yellow information and green resonating. On the Neff compassion scale it can be coded as displaying non-judgment, indicating compassion. The wordings "I feel ashamed..." points towards a lack of self-compassion however.

Questions 7 and 8, concerning departmental handling of psychosocial work environment issues, were hard to answer for most informants. The above statements may point to the reason why many informants had difficulties in expressing opinions of the department level: the lack of cohesion, of a reason to look and work beyond their own research-group.

Harassment. Many of the informants emphasised the competitive nature of research work and thereby many risks of conflicts. If we accept the idea that compassion can be demonstrated when people observe harassment, the departments had some sections where the incidence of observing harassment, according to the AHA-results, was above 45 %. This correlated with high points on work related sleep problems (62 %) (AHA, 2011). An observation during the interviews was that informants having witnessed or having been victims of harassment had given the incidents a lot of thought and energy and wanted to talk at length about what had happened and why, thus confirming Pearson and Porath's (2005) findings of harassments impeding productivity.

It is very hard to know how to handle these problems with harassments, many more than two people are often involved, and I cannot say that the organisation is giving us a very active support. We encourage cooperation between the research groups, but what has happened many times is that people take each other's ideas, and instead of cooperation there is a big conflict. (professor, research group leader and member of department's management team 2)

I worry a lot that some people feel harassed. I know personally of some and I've asked them to tell their superiors, but they are afraid of reprisals. It makes me feel really bad, I don't know what to do. It is just grinding - what can I do? (professor, research group leader, member of department's management team 3)

I hear a lot of things but some are rumours and I can't act on rumours, and sometimes people tell me things and they forbid me to take it further. But a few times I have actually had all the paperwork and I have taken it to what I thought was the right people and then nothing has happened. I don't know what it takes to change things? (professor, research group leader, member of department's management team 3)

There are some obvious problems that everyone seems to know about, but no one does anything to stop. Some people are allowed to do whatever they want. If you are a great scientist publishing a lot and getting the grants, you can obviously behave, as you like. (senior researcher 4)

Some sections have this culture of excluding people; there are no real reasons why you're excluded and this creates a feeling of insecurity. I was excluded and

was not able to do my work. The only one standing up for me and helping me was the administrative chief, the other leaders just ducked or tried to use my vulnerable position against me. (senior researcher 5)

I think the lack of encouragement and good leadership is worse for us who are working here long-time. I have a feeling that the doctoral students don't care that much; they just stick their head between their shoulders and try to get on with their work and get out of here as quickly as possible. (senior researcher 6)

There is no one in our group who wants to continue in research after their dissertation. (doctoral student 1)

For many years I worked in a section where decisions were just dumped on you, and the boss disappeared if there was a conflict. I felt very alone and tense. During this time I had to see a therapist. Now I work in a section where the boss almost exaggerates transparency; no decisions can be made without everybody concerned being involved. It can feel a bit winded, but the advantage is that you feel secure in the knowledge that there won't be any nasty surprises and I know that if there ever is a conflict this boss will sort it. I don't go to the therapist anymore, I don't need it. (senior researcher 4)

There is a jargon at our section which is less respectful towards researchers with other ethnical backgrounds than Swedish; they are assumed to work harder for less money. There is also a status divide between those with a medical background who are considered more valuable, than those with only a chemical or biological background. (senior researcher 7)

SAVI-coding these answers actually put many of them in the red attack (self defend) category. The answers also convey feelings of isolation, of helplessness, thus not displaying compassion even though they do show concern for the well being of others. But there are a few answers that differ on the concern aspect:

Researchers are not supposed to sleep, they are supposed to worry about their research. Some people cannot handle the pressure, if they are doctoral students, it's a problem since they are here for at least four years. They will not thrive and as a supervisor you end up with a bad apple in the barrel. (professor, head of section 2)

Listening to this statement it starts out as information and therefore coded in SAVI yellow behaviour, continuing with a red attack. It does not point to any display of compassion.

Some people say we should mix more, but it's not easy. I have 8-10 doctoral students from China and they always have lunch together speaking Chinese. It's very unfortunate, they want to be only with each other and I don't know why. Swedes

would never sit in a group like that. (professor, research group leader 6)

Listening to this statement it is said in a rather accusing tone of voice, it is thus coded as a red fighting attack in SAVI, followed by a red behaviour called oughtitude defined as comments expressing superiority and that the speaker has a direct line to the truth, which everybody “ought to know” (Benjamin et al. 2012). Analysing it’s compassion content none is found.

The interviews grouped together: Analysing the 46 interviews with the SAVI-grid, using the green, and the interplay of yellow and green behaviours as proxy for compassion, compassion is demonstrated through concern for others’ situation, through a wish to do something about it, a sadness if this is not possible, through an expressed intention to change things and through an account on things having been done.

Does compassion matter? Again judged by the SAVI-grid the people using the most green, and green-yellow behaviours are the ones expressing most satisfaction with their workplace, both displayed in the interviews, and in the AHA-survey as shown in the items bullying and harassments, sleep problems, and leadership items:

At our section we don’t have sleeping difficulties or problems with harassment, but we’re probably not elitist enough. The Institute’s model is to be a hotshot researcher at an elite university, but we don’t buy into that, we tread our own path. (professor, leader of section and member of department’s management team 4)

Running all the 46 interviews through SAVI showed a majority of yellow (neutral) verbal behaviour with a lot of factual information being conveyed, green resonating, responding and integrating behaviour and a few red fighting and competing behaviours. For research purposes a SAVI-label is coded every time there is a category change (Simon & Agazarian, 2008) that implies that an informant could be coded in just one category.

Table 3
SAVI-coding of the 46 interviews

SAVI	Green	Yellow	Red
46 interviews	150	310	40

Compassion was demonstrated on the subject of people getting caught in the institutional structures or lack of structures, of others perceiving that someone was not treated fairly, of trying to help when the workload got too heavy, and of facilitating the demands created by the stress of financial strains and diversified tasks. The concept of compassion was exhibited in slightly different ways in the two de-

partments, with dept.1 focusing more on an interpersonal level than dept.2. An attempt to capture these differences is shown in Table 4.

Table 4
Summary of compassion display at the two departments

	Example of compassion display	Organisational levels important for compassion display	Suggested changes	Exhibited problems with the compassion construct
Dept.1	"I worry a lot about people being harassed"	Within the research groups, sections, and common departmental platform.	More structures in how doctoral students are introduced, more structures in sections. Building common departmental platform. Leadership training. More transparency in the whole organisation.	"The thing is that those who are really nasty do some really good research, maybe the best?"
Dept.2	"I'm working for a structure where people not able to handle power should be relieved of that power"	Fewer mentions of research groups than dept.1, more mentions of inter departmental platforms	Building interdepartmental platforms. Leadership training.	None voiced in the interviews

Discussion and conclusions

One significant finding that emerged from this study was that for the informants, being very ambitious striving to create breakthrough research, working in a quite complex structure where some found their way and others got lost, one of the main culprits was leadership. The deficiencies were expressed as vague, imperceptible or

authoritarian leadership creating feelings of uncertainty and worry. According to the research by Lawrence and Lorsch (1967), the management you are dealing with becomes obvious in situations of decision-making and conflict resolution, judging by the interviews these areas seemed in some cases to be wanting.

Is leadership is important for display of compassion? Going back to Hollingsworth (2003) a characteristic for research groups doing breakthrough research is a visionary leadership with social and emotional skills. Hemlin, Allwood, and Martin (2008) describe creative research environments, as having a positive group- and organisational climate, according to these findings leadership is important for creating a prosperous ambience. Difficulties might lie ahead however as shown by Salas et al.'s (2012) find that academic environments are unusually stable systems with great resistance to attempts at change, which was confirmed by the informants. Stable systems can develop and change, but this occurs best through slow transformation processes where systematic work is based on a holistic approach (Salas et al., 2012). The inertia was quite evident in the feedback to the departments. Signals were given on some occasions that change was slow and cumbersome, so cumbersome that an idea was to disqualify the information obtained by the interviews as invalid.

Another significant finding that emerged from this study relates to verbal expression of compassion in an academic setting. Spending a lot of time at the two departments demonstrated for the research team that the context in it self constitutes a challenge for the expression of compassion; being one of extreme competitiveness, often with financial uncertainties and obscure structures and leadership. Still the research team found displays of compassion, such as group- and section leaders wanting to and trying to help other researchers in their work and trying to better the circumstances for those less fortunate in the sometimes harsh financial system.

Our analyses of the interviews by the SAVI-grid showed that a vast majority of the verbal interaction was being done in the yellow, and in a mix between yellow and green verbal behaviours, thus pointing towards a problem solving behaviour. Very few informants got into the red category. An observation concerning the red category was that it seemed to leave traces, informants working in the vicinity of and in a position of dependency to the person communicating in red, conveyed a feeling of sadness. This is consistent with the earlier mentioned study by Emdad et al. (2012) showing the impact on bullying not only on the direct targets, but also on the bystanders. They write: "frequent by-standing to bullying may be a warning sign for developing future symptoms of depression".

Was there a positive or negative link between team-leaders expressing compassion and team performance, here measured both in bibliometric terms and in reported stress levels? Take bibliometrics first. Going to the official site at the faculty

and comparing with the SAVI-grid there was no correlation. The leaders communicating in green and yellow got as many articles published as the ones communicating in red. The, by quite a few of the informants, explicitly implied connection between aggressive leadership and larger than average productivity might thus be false. Adding the AHA-scores there was a positive correlation between green communication and fewer stress related factors. Could this then constitute as an indication both of Cosley et al.'s (2010) of compassion reducing stress and that the way people communicate, here registered by the SAVI-system, has implications for reducing stress levels?

Finally, was using SAVI and the Neff Self compassion scale as proxies for compassion a viable route, for analysing expressions of compassion? By analysing the interviews both through the SAVI-system (Agazarian, 1969), and the adaptation of the Neff Self-Compassion Scale (Neff, 2003), as well as the AHA-results (2011-2012) we had the opportunity to study the same phenomena with more than two methods thus creating a cross verification. The results from the different methods supported one another, thus indicating that both the SAVI-system and Neff Self-Compassion Scale could be valid tools in interpreting expressions of compassion.

A number of important limitations need to be considered. This study is a by-product of a major pilot study trying to find follow-ups for the AHA-questionnaire with the main target to lessen harassments and sleeping problems, and the informants did not come from a randomised sample. The data used is filtered through the deficiencies of the researcher. The problem with the researcher's possible bias is countered by data being analysed by the whole research team and with continuous feedback to the informants. The study has some strength in the choice of triangulation as a method.

Being a by-product of a pilot study of course causes limitations to the validity of this study. Maybe more reliable and valid information might have been produced had the informants been asked directly to fill out Neff's Self-Compassion scale, being one of the most researched instrument in the compassion field. But on the other hand, as Neff wrote (2013) self-reports have serious limitations. The incorporation of multiple sources of evidence have likely increased the quality of the study substantially and strengthened our conclusions.

Implications

Our findings reveal some interesting implications for practice and policy makers. First and foremost, compassion is still a new concept in organisational research, but since it has shown promise in reducing stress and inducing well-being in a non-clinical population (Neff, 2003, 2013) the research team thought it might be of interest to see if and how it could be expressed and maybe strengthened in an academic setting. One of our main findings, consistent with Breines and Chen (2013)

was that compassion was context-dependent; in those groups and sections where there were stable and transparent structures and well-defined leadership the expression of compassion occurred and correlated with green verbal behaviour in SAVI (Agazarian, 1969), whereas in sections without these settings expressions of compassion were more scarce. Next, if there was a positive correlation between reduced stress levels and compassion, which measures should be taken to strengthen the expression of compassion? Our interview data revealed some interesting solutions directed towards structure, clarity and increased transparency.

Another way to strengthen the expression of compassion in the academic setting would therefore be to work with the leadership. Due to the action led research (Greenwood & Levin, 2007) with continuous feedback to the informants we found that people say and do things that might be interpreted not at all as intended. One way to strengthen the expression of compassion would thus be to induce more communication and feedback skills in the organisation. Added to that, many of the informants conveyed feelings of isolation; they were fine in their research group, but that the group operated quite isolated in cutthroat competitive climate without much support from the organization. One way to lessen this feeling would be to make the faculty less of a “research hotel” and more of a stable platform.

Our findings also raise some questions for further research and method development. This study has relied on an interpretation of the Neff Scale and on the SAVI-system with “green” and an interchange of “yellow and green” behaviours acting as a proxy for verbal expression of compassion. This onset could be further developed for more stringent conclusions of the true nature of verbal expression of compassion. In its current form however, the instrument provides a structured tool for analysis. To accomplish a more reliable instrument one would probably try to develop an instrument adding compassion-components to SAVI. It would also be of great importance to further the study by adding some compassion items in the next work environment questionnaire, as well as do some compassion enhancing interventions directed towards leaders in the academic setting and measure the psychosocial work environment for their teams before and after.

Despite the deficiencies this study points to some important characters in a functional academic environment, such as you can be nice and still do good research, maybe even better? Or to take the words of Albert Einstein: The world is a dangerous place to live, not because of the people who are evil, but because of the people who don't do anything about it.

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Author note

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