Training in Collaborative Communication in an Organizational Context: Assessment of Impact

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Abstract

Collaborative Communication (CC), also known as Nonviolent Communication, is an integrated system of concepts and skills that fosters high quality relationships, a positive environment and effective communication. This research evaluated whether training a group of executives in CC improved the quality of relationships and communications among team members and between teams, the efficiency and effectiveness of those receiving training, and the effectiveness of teams which include executives who received training. A comprehensive six-month training program in CC was offered to 23 executives. Quantitative data measuring the executives' perceptions of the work environment, the quality of interpersonal interactions and communication effectiveness were collected before training, midway through the training and after training. Semi-structured interviews were conducted with the executives seven months after the training was completed to gain qualitative information about the nature of the long-term benefits of the training that the executives observed. Results showed statistically significant changes on 31 of the 33 quantitative measures. Executives reported that conversations and meetings were notably more efficient and estimates of the impact of this greater efficiency indicated a probable payback period to the organization of 2-10 months for all expenses. Qualitative results showed executives valued the impact of CC training on their ability to communicate clearly, make requests that solve problems, understand where others are coming from, speak openly and directly, mediate conflicts among team members and facilitate effective meetings. Trust, engagement and other work-culture factors were reported as improved.

Keywords: nonviolent communication, collaborative communication, empathy, organization, training

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The lifeblood of an organization is people working together to accomplish tasks that, in aggregate, lead to the organization achieving its purpose. A substantial body of writing in recent years has emphasized that people work together most effectively when individuals are thriving and the quality of relationships and communication between people is high (e.g. Patnaik, 2009; Pink, 2011). This supports the right tasks getting done, efficiently and with high quality. Putting attention on improving these foundational aspects of organizational functioning has the potential for major payoffs.

Collaborative Communication (CC), also known as Nonviolent Communication[sm], is an integrated system of understandings, attitudes and skills that support people in thriving and connecting in ways that foster high quality relationships and effective communication in the service of achieving shared purposes. If CC achieves its aims, its use should contribute markedly to organizational effectiveness.

What is CC?

CC, also known as *Nonviolent Communication*, was developed by Marshall B. Rosenberg, Ph.D., beginning in the 1960s (Rosenberg, 2003, 2005). Today, the model is taught around the world, and has been applied in a wide variety of contexts, including business and nonprofit settings, and in mediation, education, parenting and health-care (Connor & Killian, 2012; Larsson, 2011; Lasater & Stiles, 2010; Sears, 2006). CC is potentially applicable to any setting where human beings interact with one another.

CC is an approach to communicating, but its scope extends beyond surface aspects of communication. CC is based in part on an understanding that much of what we have been taught about how to think about and interact with others is rooted, albeit subtly, in a *Control* paradigm.

In this paradigm, people are pressured to conform to agendas not wholly of their choosing, and those who appear to have different agendas are viewed as adversaries. Operating out of this paradigm can lead to guardedness and people acting at cross purposes, subtle alienation, and reduced individual and collective thriving. Yet, practices based on this *Control* paradigm are so pervasive, so much the norm, as to be nearly invisible. People aren't usually aware of how they contribute to undesirable outcomes.

CC is an integrated system for thinking about and relating to people that is rooted in a *Collaboration* paradigm. Its concepts and practices create a favorable climate for people experiencing one another as allies, and for working together effectively. These practices support synergy, openness, trust, bonding, full engagement, and thriving.

CC is based on general principles about how human beings work, which are drawn from contemporary thinking in psychology and the social sciences, as well as timeless wisdom from the around the world about relations among people. Because of its foundations and internal coherence, the embracing of CC by individuals and/or organizations has the potential for major impact on the well-being of the people involved, the relationships among the people and the functioning of the organization as reflected in the efficiency and effectiveness of its functioning.

How is CC implemented in practice?

The practice of CC can be understood as being organized around these practical intentions:

- **Create clarity** – Be aware that the message sent is often not the message received, the intention of our communication and our suggested next step may not be understood if we do not make these explicit, and objective observations can have advantages over potentially unreliable or divergent interpretations.

- **Prioritize connection** – Pay attention to how words, attitudes and actions affect the relationship. Beware of sacrificing relationship to short-term task goals. Pay attention to people's moment-by-moment capacity to take in what is said to them, and attend to barriers to communication before trying to communicate.
- **Focus on needs** – Look for the shared positive purposes and values that are implicit in each person's positions and actions, to understand what is important and find a basis for collaboration. Focus on underlying goals, rather than being attached to initial strategies, to be open to new possibilities. Trust that what people say and do is a reflection of the aspirations that are inherent in being human; focus on these aspirations to support seeing one another's goodness and humanity. Remember core human aspirations and values, as a source of vitality and engagement.
- **Value mutuality** – Treat everyone's needs as mattering, and look for solutions that work for everybody. Value people saying "no" to what doesn't work for them, and consciously choosing when to say "yes."
- **Be self-aware and empowered** – Cultivate awareness of what is going on inside ourselves, especially noticing our feelings and needs. Take responsibility for our role in what we feel, and for addressing our needs and asking for assistance. Remember our ability to make conscious choices.

Training in CC involves learning and working with a well-developed body of concepts, suggested attitudes, and specific practices that align with these practical intentions.

The ideas of CC are nuanced and are often not understood until their effects are experienced. Consequently, most people find it challenging to learn CC based on abstract descriptions or formal recipes. Effective training relies not only on the transmission of concepts,

but also on modeling, experiences, and extensive practice. All of these elements were contained in the training whose impact is assessed in this study.

What does prior research say about the effectiveness of CC?

There is limited prior empirical research on the effectiveness of CC. Whereas many models and processes addressing communication, interpersonal relationships and conflict resolution have been developed in a university context, Rosenberg is a clinical psychologist who developed CC while working in communities and offering trainings to the general public around the world, including many war-torn areas and developing countries. As a result, there have not been the resources that a university setting provides for grant funding, graduate student research and scholarly activity related to CC. Only a small number of theses or articles have been located which examine the effectiveness of CC and these have been typically been based upon brief interventions and/or limited to educational settings or psychiatric facilities. (Branscomb, 2011; Jones, 2009; Little, 2008; Steckal, 1994; Riemer, 2009; Riemer & Corwith, 2007; Tekoa, 2007).

Goals of the present study

This paper describes the impact of an intensive six-month training program in CC on the functioning of the individuals and teams from four departments of a Fortune 100 corporation in which selected executives from these departments received the CC training. The research described is unique in the published literature because of the breadth and depth of the CC intervention that was evaluated – up to 80 hours of training, coaching and support per participant. It is also unique because the focus of the measures employed included significant emphasis on the impact of the training on the organizational units, structures and relationships as well as on the individuals receiving the training. Lastly, to our knowledge, this is the only written description of systematic research evaluating the effect of a major CC training in a

business or corporate setting. Previous writings on the effectiveness of CC training on organizational and individual effectiveness has been largely descriptive and anecdotal in nature (e.g., Lasater & Stiles, 2010; Miyashiro, 2011).

In collaboration with the organization, the following goals for the training were identified.

- Focusing on strengths (what is wanted, what is working) rather than faults or weaknesses and finding win-win solutions
- Maintaining openness to diverse strategies for any given outcome
- Addressing challenges and making decisions based on a partnership model of authenticity and accountability
- Communicating openly and effectively to find common understanding and shared goals
- Creating a culture of team-work, mutuality, inter-dependence and support
- Seeing issues on a global level and valuing the perspective and opinions of everyone equitably, with inclusion and respect
- Building collaborative relationships among the departments and with an offshore partner organization.
- Developing self-awareness and interpersonal skills
- Developing shared leadership and giving effective feedback
- Increasing autonomy and empowerment for greater workplace satisfaction and productivity

It was the purpose of this research to determine the extent to which these goals were met as well as how the quality of relationships and communication, the well-being of the staff, and the effectiveness and efficiency of the organization were affected.

Method

Participants

Participants were 23 executives, five to seven from each of three units within the corporation that work closely with one another in the realm of Information Technology. A fourth group of five persons were also selected who works closely with the other three units but these persons are vendors to the corporation.

Eighty percent of the participants were male; twenty percent were female. The age breakdown was 31-40 years old: 35%; 41-50 years old 55%; 55+, 10%.

Training

The training program included the following elements:

1. Pre-training interviews. One of the two lead trainers called each participant in the training to talk about the training, what was proposed and what the participant hoped to gain from the training. The trainers also asked participants to identify concerns and issues in their work life that they would like to see addressed in or improved as a result of the training. The trainers kept the content of these interviews in mind as they designed and conducted the trainings.
2. Foundation/immersion training. Participants as a group received five consecutive days of training beginning on a Monday morning and ending on Friday afternoon.
3. Integration training. Beginning approximately one month after the Foundation training, participants attended training days of 6 hours which were intended to

develop and deepen participants understanding of CC and give them feedback on how they were actually using CC in their lives. There was one such training each month for six months.

4. Printed materials. Participants received a substantial amount of printed material containing information about the theory and practice of CC. This included both a widely used textbook on CC and a workbook.
5. Private coaching sessions by telephone. Participants were able to receive private coaching sessions by telephone with CC trainers. Sixty-minute coaching sessions were offered twice monthly for six months.
6. Empathy buddies. Each participant was assigned another participant as an "empathy buddy." The invitation was for the two participants to talk to each other either by phone or in person 30-60 minutes per week. They were encouraged to practice listening empathically to each other's concerns, as they learned to do in the trainings.

To support active learning, the training sessions included a minimal amount of lecture style presentation or demonstrations; content was largely conveyed through experiential activities and exercises as well as role-plays. After the participants had gained some facility with the skills and perspectives (i.e. after four days of training), the trainers also addressed some of the actual conflicts present among the people at the training. The leaders coached the disputants in a dialogue about the conflict with the aim of increasing mutual understanding and resolving the conflict in a way satisfactory to all. These were called "real-plays."

Semi-quantitative and Qualitative Procedures

The semi-quantitative and qualitative data was drawn from semi-structured interviews conducted both individually and in small groups by the two authors seven months after the

training was completed. Because of complex travel schedules, only 13 executives (of the 23 who received some training) participated in the individual interviews; nine of these participated in two small group interviews. Open-ended questions were used to encourage the participants to reflect on what their experience with the training was, what was useful and meaningful to them, and how this impacted their work lives. The semi-qualitative data drew specifically upon questions asking about changes in efficiency or effectiveness as a result of the training.

Quantitative Measures

Three quantitative instruments were created for this research: and were administered at three points in time: prior to the beginning of the training, *pre-test*, three months after the beginning of the training, *mid-test*, and a month after the training was completed, *post-test*. All of these instruments were administered through an online survey website; all data was confidential and the results were available only to the researchers. The instruments were:

1. **Needs Met Survey.** Participants were asked "When you think of your work with the divisional team, how often are the following needs met for you by actions engaged in by you or others on the team?" The specific needs that were included were drawn from those frequently mentioned by participants in the pre-training interviews as important to them and their colleagues at work and as key elements of the ethos at their company. These were: openness, courage, accountability, clarity, appreciation, inclusion, learning, meaning, choice, collaboration, support, and vision. Participants chose from a six-point scale ranging from 1 = never or almost never to 6 = always or almost always.
2. **Behavior Inventory.** Participants were asked to rate separately how frequently they themselves and the members of their team demonstrate 18 specific behaviors related

to the goals of the training, e.g. search for solutions that are satisfying for everyone involved. The same frequency rating scale was used as for the above Needs Met measure.

3. **Vignette Inventory.** The third instrument that was created was a series of vignettes or hypothetical scenarios that could occur at the workplace. These were constructed based upon the results of the pre-training interviews with the executives; the content of the vignettes was drawn from the executives' descriptions of common challenges that they faced with supervisors, peers, direct reports and clients. The potentially challenging interaction was described briefly and the participant was asked to type what they might be likely to say in response. For example, two vignettes were:
   - You manager says, "I know you want me to attend that meeting today but I am on a deadline." What would you say?
   - Your direct report says "We just spent 60 minutes on this and the only thing that's come out of this meeting is that we need another meeting." What would you say?

Results

Semi-Quantitative Results

Eleven of thirteen interviewees offered numerical estimates regarding one or more ways in which CC training had impacted their work. These estimates are summarized in Table 1.

All interviewees reported increases in efficiency as a result of their CC training, Those who quantified this most often talked about being able to more quickly and definitively resolve an issue that one or more teams were trying to address. They reported fewer meetings, shorter email chains, and fewer people needing to be involved in making decisions. Comments included:

- "A decision that might take two to three meetings, you might be able to get it done in

one meeting."

- "Instead of us just numbly just taking a note and leaving, we're pushing back and asking questions, challenging. You get everything out on the table at that session rather than continuing."

  "I find that a phone call replaces twenty emails."

- "You have created an environment where… a smaller set of people can make larger decisions. Previously you needed five people to make a decision, and now three are needed."

As seen in Table 1, estimates of reduction in the time to resolve issues were typically in the range 50 to 80 percent, omitting the lowest (23%) and highest (94%) values.

Given that executives spend a substantial portion of their time addressing issues, one can infer an overall increase in efficiency in the use of their time, as shown in Table 2. The actual percent of the time spent addressing issues was not quantified, except for one interviewee who estimated 60 percent of his time is spent in this way.

Table 2 assumes that the resolution of issues all issues is sped up by the same amount. One would expect that, in practice, the resolution of different issues would be sped up by different amounts, and that a certain percent of executives' time would be spent on addressing issues in a manner greatly sped up as a result of CC training, while another percent of the time would be spent addressing issues in ways less affected by the training, while other time is spent on activities not sped up at all. A limitation of the reports we received is that there was little basis for mapping a distribution of speedups and time spent.

Even so, one can roughly estimate the length of time it took the organization to recoup the direct costs of the training and the cost of staff time invested in CC training, based on

increases in overall efficiency. Assuming10–80 percent of trainee time is now spent addressing issues in 50 percent less time than was required previously, it is estimated that the training paid for itself on the basis of efficiency improvements alone in from 2 to 10 months (Connor, Wentworth, Killian & Lasley, 2012). If one accounted for benefits other than efficiency improvements, the payback period would likely be shorter.

Two interviewees reported that it was not just a matter of CC speeding up issue resolution, but that with CC issues get addressed that in the past never would have been resolved at all.

> "A change from never resolved to resolved. We had situations that I didn't think we were ever going to get resolved. Constantly getting escalated to VP's, upper-level management, conflict going on, arguments, people yelling at each other. To now, we work through our problems… It's not about things are going better. It's actually about things weren't going at all, and now they're going. And what you see is just continuous improvement."

The enabling of new conversations to address strategic issues was said to have had a large impact on software development involving an offshore vendor, some of whose executives participated in the training.

> "We used to feel like 'Okay, we have gotten the work done. Now let's be quiet about it. Let's just keep going on.' Next release, it was the same thing. But now, we see that level of connection and the need to do something about issues."

One interviewee offered, "We've now reduced the cost probably by four-fold (so if it was $4, now it's $1)." Another reported that software defects requiring code fixes were reduced from 75 to 7, a reduction of over 90 percent. Both the "communication loop" with the off-shore team and

the time from “concept to design to implementation to use” were said to have “easily” been reduced by 50 percent.

Qualitative Results

To organize our reporting, we grouped benefits reported in the interviews according to whether they seemed to relate more to task, relationship, or personal factors, although in practice these dimensions are highly interrelated.

Task-related benefits. Interviewees reported a number of benefits that related directly to getting the job done.

We were told that in the past it was common for decisions to be revisited again and again, but that CC changed these patterns by creating safety and openness, more trust, inclusion of stakeholders, and clarity about what was said and agreed, so that decisions were able to stick.

- “You get out of a passive-aggressive pattern.”
- “I think people are coming to the table, having that shared reality to be able to express truly how they feel, feel comfortable expressing that, and that we’re not having to re-address things multiple times.”

We heard stories about how CC helped interviewees surface key information that transformed their understanding of what was going on and created opportunities to move beyond impasse.

> “It was great I asked that question because then I said, ‘I have already done that. I have everything. I can give it to you.’ He said, ‘Oh, I didn’t know that you’d already done it.’ If the right question is not asked and the conversation takes a different route, it’s so difficult to bring it back.”

There was said to be more alignment in support of shared goals.

CC was also reported as helping to hear what the speaker meant to say without going off track, and making communication more efficient. Although a key was said to be to "slow everybody down and make sure that we're giving this conversation the respect it deserves," interviewees reported that using CC ultimately yields better results quicker, and that with practice conversations themselves get quicker.

Relationship benefits. Some benefits focused on improved relationships.

Interviewees reported that CC gave them the confidence and skills to defuse tension in meetings and make rapid progress, and also to address simmering conflicts and work things out.

- "There was a big contentious moment in one of the meetings… Tim very adeptly controlled the conversation… He took it all the way through the model and he did it very elegantly… It took the energy level out of the conversation immediately. And it brought clarity to the situation and it brought a resolution."
- "I've found myself much more willing to break open a difficult relationship, sort of lean into the conflict a little bit more than I usually would have—either skirting around it, trying to talk about the tactical piece, and not talk about the elephant in the room. But now, I'm much more willing to just crack it open and figure it out so you can actually get the real stuff done. And do it that much better."

CC was reported to help people feel heard, in a way that often changed the conversation. A primary tool supporting this was that of "empathic reflections," reflecting back to people the essential meaning of what one heard them say.

- "She said she was having an argument with her husband, and she used reflection, and he broke down and started crying and said, 'This is the first time in our relationship that I feel like you actually heard me.'"

- "I find most of the situations I get in where there's conflict, the other person doesn't feel like they've been heard... Most of the situations where I've got into conflict in a conversation, once I take the time to do reflection, the dynamics of the conversation change."

Several interviewees reported an increased focus on and effectiveness in achieving "mutual solutions."

- "It gives us a win-win. That's the way I look at it. I'm not about a zero-sum game here, you know. I want everybody to succeed."
- "If you really want to achieve an outcome, it's critically important that you get everybody's position on the table. We don't end up with any one person's optimum solution. But we end up with the best solution that meets everybody's needs."

The training was said to have led to more respect. "People are having respect for other people's opinions, and it's okay to express your opinion and feel comfortable along the way."

Trust was frequently mentioned as something that CC contributed to building, in a variety of ways, including offering "a way to start to look at situations without judgment," "doable requests," the means for developing "shared understanding," and the ability to have "open and transparent dialog." Trust was also supported by cultivation of a sense of genuine caring, and having skills to work with those affected by tough situations, "understand their needs" and "handle each person with care."

A number of interviewees reported that going through the training together with members of other teams they had to work with, and with individuals at higher levels in the hierarchy, significant enhanced trust. One manager said of the training, "It's probably the best team-building exercise I've ever taken anybody through."

At least three interviewees said they saw CC helping work with diversity and with people from different cultures.

Personal benefits. Some benefits related to improved individual empowerment, access to inner resources, and well-being.

Interviewees talked about how CC made it easier to express themselves.

- "For me, trusting that if I use Collaborative Communication, no matter how difficult the conversation is, I can get my needs out on the table and I'm going to be able to get some sort of an outcome that will be positive. And, I'm much more willing to have conversations that maybe I wouldn't have had in the past."

CC was reported to support flexibility.

- "I find a lot of times that the value of NVC for me isn't necessarily that it changes the person that I'm in conflict with, but it actually causes me to actually slow down a little bit and look at the situation a little bit more closely and then be open to alternate approaches."

The increased trust was said to help empower people to take risks.

"They feel that empowerment to move forward and that it doesn't have to be they have to run everything as a leader through me… I think it's bi-directional trust."

Offering appreciation and celebrating successes is encouraged by CC, and some interviewees were struck by the impact of these.

- "It's amazing; if people know that, that that's how you think about them, what that does for the workplace, the work environment. It makes it a great place to come. You jump out of bed; you can't wait to get there."
- "He received a really awesome note on a very senior level, and he passed it down to

the whole team, too, so they can really feel like, 'Wow! That's nice!' And they feel like they made a difference. I think it made them happy. It drives that continued dedication on an intense project."

One interviewee spoke of how CC led to more satisfying work-life balance:

"Every quarter, we used to at least work four weekends on an average. In the past one year, we have not worked a single weekend."

Several interviewees said that CC helped with engagement, and that having higher-ups also using CC increased this.

- "Maybe I'm just putting in more effort, because I feel more connected, more devoted to someone. Maybe someone is asking me for something, and I really understand why they need it, so I really *want* to do it for them. Whereas, prior I might not. [Other] people [are] that way too. People are more willing to go the extra mile for somebody."
- "When you think that people care about you, you care about others. As a team, we need to get some things done, and everyone is willing to get that done."

Several interviewees reported a shift in their experience of the work environment.

"It's just much easier to do things in a collaborative manner than it is to always be suspicious that people are doing things underhandedly, or that there are other agendas, or that they don't trust you. Having the conversations is difficult sometimes, but, you know, there's a light at the tunnel. The behaviors change, the atmosphere changes, it's just a different environment, it's a nicer place to be."

CC offers tools for letting go of seeing others as enemies, and for seeing their humanity. In addition to creating space for collaboration, one interviewee reported this helping them be

excited about work.

- "I think you're relieved about human nature. I think we talked about it in the training that rather than those people are evil, it's those people are humans trying to serve the same type of needs as you are as a human. You know people aren't evil. You feel better about the outcome and feel better about humanity, and it's a lot easier to get excited about your work when you realize you're all pulling in different ways for the common good."

One interviewee reported that the meaning of work has shifted.

"You think about work in a different way. Previously, it's just a job. Now it's not just a job; it's about enjoying what you're doing. It's like, why are you doing things? Is it just for money? No, it's not anymore. It's more of a satisfaction. And you start appreciating other people; other people start appreciating you."

What others notice. Several interviewees reported having others notice the effects of their use of CC.

- "You get feedback in meetings, too, like, 'Geez, I really like the way you handled that situation.'"
- "I've had people approach me and go, 'What was that?' which is really kind of fun because I can tell them about it. Nine times out of ten, they don't believe me; they think I'm full of it. You know, 'That's not how you did that!' 'It is. That's what I did.' It's magic!"

Experience of the training. There were a variety of comments noting the practicality of the training.

"This isn't just one of those training classes where you learn something and then you

> can just say you learned it then you never really practiced it. This is something you have the opportunity to practice all the time."

There were at least six comments about the value of the real-plays (role-plays involving actual conflicts between participants) that were part of the training.

> "A big win is this idea of real-plays—that while you're in the training, if you put the right people in the training together, you can actually work on conflicts and resolve problems as a part of the training."

Comments about the coaching element of the training were also highly positive.

> "For me personally, it was the coaching that sustained me, to take the small steps to leverage the foundational work. Because without it I don't think I would know how to navigate through."

Practice was also a major theme in the comments about what made the training successful. Several participants used the concept of building muscle memory in developing proficiency with CC tools.

What others should know. We asked interviewees what those considering training their organizations in CC might want to know about it.

- "These are skills that, in the corporate world, if you're not developing them in your people, you're not going to be successful. There are other ways of developing these skills—not as comprehensive though. When I worked [elsewhere], we did a lot of work with the Seven Habits, Covey—active listening, right? That was only one aspect of it. And so for me, I don't know how you could be effective as a corporation if you don't develop these kind of skills with people. You're basically selling your shareholders, and then your company, short if you're not developing these sorts of

skills in your executives, in your employees. We talk a lot about soft skills and how important they are. This is one of the only tools—I don't even know if I could call it a tool—that actually gives you a way to develop it. There's a path to develop these skills in a way that we can use them and feel effective."

- "If there's an organization looking to take a look at this, you're going to have to get over the weird factor, because it's very different to what people do around here. Give it a chance, be open-minded about it, and enjoy it."
- "Less conflict, more collaboration, less frustration, more productive, happier employees."

Quantitative Results

Needs met inventory. The mean response of the participants to the question asking how often needs are met for them by actions engaged in by themselves or others on their teams is shown in Figure 1. (All differences described here are significant at a level of $p < .05$ or less.) For every one of the needs there was a statistically significant increase from pre-test to mid-test and from pre-test to post-test in the rating of how often their needs were met. The order in which the needs are listed from left to right on the horizontal axis is from the need which showed the greatest change from *pre-test* to *post-test* to the need which showed the least change from pre-test to post-test.

The change from mid-test to post-test was significant for all of the needs except appreciation, meaning, choice and inclusion; for these needs there was no reliable change from mid-test to post-test.

It appears that the impact of the training on the ratings of needs met was particularly strong during the first three months, the period from pre-test to mid-test. However, during the

second three months of training the impact was maintained and continued to grow on most of the measures.

The frequency with which participants reported observing the 18 target behaviors in themselves or in other members of their team is shown in Figure 2 for the three time periods, pre-test, mid-test and post-test. The order in which the behaviors are listed from left to right along the horizontal axis is from the behavior which showed the greatest change from pre-test to post-test to the behavior which showed the least change. The changes from pre-test to mid-test and from pre-test to post-test were significant for all the behaviors with the exception of set objectives and understand reasons for upset where no difference in the average response was found between the different times the test was administered. The change from mid-test to post-test was significant only for the behaviors mutual support, express dissenting opinion, ask to clarify confusion, and address differences of opinion." Table 3 shows how the behavior labels used in Figure 2 relate to the detailed behaviors as described in the Behavior Inventory.

Vignette inventory. Two independent raters read each of the responses of the participants to the vignettes and rated them on three scales.

1. **Clarity** - How likely are the informational content and the perceived intention behind the response to create a sense that the hearer understands the listener?
2. **Constructiveness** - How likely is the perceived intention and wording to contribute to a constructive dialogue?
3. **Caring** - How well does the message convey a sense that the stimulus person is important, valued, or cared about?

Each of these scales ranged from –3, *very negative impact*, to 3, *very positive impact*. There was a satisfactory level of agreement between the raters as to what constituted

high, medium and low values on the three scales (correlations of .75 or higher for each scale) and the ratings of the two raters were averaged. The mean ratings received by the participants on the three dimensions are shown in Figure 3.

The changes from pre-test to mid-test and from pre-test to post-test were significant for all three measures, clarity, constructiveness and caring. The change from mid-test to post-test was only reliable for the clarity measure.

Summary of Findings and Discussion

Summary of Semi-Quantitative Results

The interviews of executives who participated in the training yielded semi-quantitative reports of substantial improvements in efficiency. Most of those who offered estimates indicated a perception that the time taken to resolve an issue was reduced by 50–80 percent. Fewer meetings, emails, and phone calls were required, and often fewer people needed to be involved. We infer the likelihood of an increase in overall efficiency sufficient to pay for the direct and indirect costs of the training in from 2–10 months. As a result of conversations enabled by the CC training, offshore software development costs were said to have been reduced by a factor of 4 and software defects were reduced by over 90 percent.

Summary of Qualitative Results

Benefits of the training reported in the interviews included: decisions “stick” rather than needing to be revisited, key information gets surfaced to move work forward, conversations stay on track, there is alignment around goals, and communication is ultimately more efficient. Interviewees reported having the confidence and skills to defuse tensions in meetings and to address simmering conflicts, to support people in feeling heard in a way that shifts the tone of conversations, achievement of more “win-win” solutions, more openness, increased respect and

trust, and ability to work with people from different backgrounds. As a result of the training, interviewees reported more ease in expressing themselves around topics that might previously have been hard to talk about, increased flexibility, increased empowerment to take risks, more satisfying work-life balance, more engagement and motivation, a sense of mutual care, more positive attitudes about co-workers, and more excitement and satisfaction about their work.

The training was experienced as practical and applicable to everyday situations in the workplace. The use of "real-plays" was appreciated for the way it allowed real issues to be addressed in the training context. Individual coaching was valued. Practice was cited as important for gaining proficiency in what was taught. CC was seen as a particularly comprehensive model for developing "soft" / people skills.

Summary of Quantitative Results

The quantitative data show significant increases in almost all variables (31 out of 33). The variables themselves comprised three different types of measures: the extent to which 12 needs are met in the workplace, the prevalence of 18 behaviors regarded as desirable, and the level of clarity, constructiveness, and caring rated as being present in responses to hypothetical workplace situations.

The needs met data assess the extent to which the participants experienced important universal needs as being met in their work as team members. Descriptively, these data are most closely related to a measure of well-being or satisfaction at work, an assessment of work climate. To the extent that one evaluates a broad range of needs as being met in one's team experience, one probably has a substantial satisfaction with the work experience. The results showed that significant increases were reported from pre-test to mid-test on *all* the needs variables, and satisfaction continued to grow from mid-test to post-test on 8 of the 12 needs, while being

maintained on the remaining 4 needs.

The above results suggest that long-term climate change occurred; the intervention was not just a “three-month wonder” whose impact vanished after the novelty wore off. It is known that when a major change in the work environment is implemented there may be an initial positive response just to the change in the environment (Westinghouse effect, Mayo, 1945), in part due to the attention that is being paid to the people affected by the change. But the positive impact may dissipate as novelty fades. When the positive impact persists, this indicates a genuine value to the changes that have been implemented.

Conclusions

Intensive training in CC in an organizational context has been shown to be capable of delivering a wide variety of benefits supporting organizational effectiveness and the well-being of individuals. When those trained spend a substantial portion of their time addressing and resolving issues, efficiency gains have the potential to result in the training paying for itself in a matter of months, even without taking into account less easily quantified benefits. The evidence suggests that organizations would do well to consider whether intensive CC training might improve their operations.

References

Connor, J. M., & Killian, D. (2012). *Connecting across differences: Finding common ground with anyone, anywhere, anytime* (2nd ed.). Encinitas, CA: Puddledancer Press.

Connor, J. M., Wentworth, R., Killian, D., & Lasley, M. (2012). *Collaborative Communication Training: Assessment of Impact.* Unpublished technical report.

Jones, S. (2009). *Traditional education or partnership education: Which educational approach might best prepare students for the future?* Unpublished Master's thesis, San Diego University, San Diego.

Larsson, L. (2011). *A helping hand: Mediation with nonviolent communication.* Sweden: Friare Liv Konsult.

Lasater, I., & Stiles, J. (2010). *Words that work in business: A practical guide to effective communication in the workplace.* Encinitas, CA: Puddledancer Press.

Little, M. (2008). *Total honesty/total heart: Fostering empathy development and conflict resolution skills. A violence prevention strategy*. Unpublished Master's thesis, Victoria, B.C. Canada. University of Victoria.

Mayo, E. (1945). *The social problems of an industrial civilization.* Boston: Graduate School of Business Administration, Harvard University.

Miyashiro, M. (2011). *The empathy factor: Your competitive factor for personal, team and business success.* Encinitas, CA: Puddledancer Press.

Patnaik, D. (2009). *Wired to care: How companies prosper when they create widespread empathy*. Upper Saddle River, N.J: FT Press.

Pink, D. (2011). *Drive: The surprising truth about what motivates us*. New York: Riverhead Books.

Riemer, D. (2009). Creating sanctuary: Reducing violence in a maximum security forensic psychiatric hospital unit. *On the edge: The official newsletter of the International Association of Forensic Nurses,* **15**(1). Retrieved from http://www.iafn.org/displaycommon.cfm?an=1&subarticlenbr=302

Riemer, D. & Corwith, D. (2007). Application of core strategies: Reducing seclusion and restraint use. *On the edge: The official newsletter of the International Association of Forensic Nurses,* **13**(3): 7-10. Retrieved from http://www.iafn.org/associations/8556/files/OTEFall2007.pdf

Rosenberg, M. (2003). *Nonviolent communication: A language of life* (2nd ed.). Encinitas, CA: Puddledancer Press.

Rosenberg, M. (2005). *Speak peace in a world of conflict: What you say next will change your world.* Encinitas, CA: Puddledancer Press.

Sears, M. (2006). *Humanizing health care with nonviolent communication: A guide to revitalizing the health care industry in America.* Encinitas, CA: Puddledancer Press.

Steckal, D. (1994). *Compassionate communication training and levels of participant empathy and self-compassion.* Unpublished doctoral dissertation, United States International University, San Diego, CA.

Table 1

Semi-quantitative Estimated Improvements

Metric	Estimated[1] Improvement	Qualifiers	Notes
Time to resolve issues	***~90-94% reduction***	Unknown if typical	8-12 hours reduced to 45 minutes. Number of people involved reduced.
Time to resolve issues	***67-75% reduction***		"if something were to take us 3 or 4 weeks to resolve, it would be resolved in a week."
Time to achieve mutual understanding	**67-75% reduction**		"3 or 4 times less interaction"
Time to resolve issues	**67% reduction**		
Time to resolve issues Overall efficiency (calculated)	**70% reduction** **50% reduction** ***60-140% increase***	With those trained in CC. With those untrained.	"60% of day" spent on such issues.
Time to resolve issues Time to resolve certain issues	**≥ 50% reduction** ***100% reduction***		 "It would remain unresolved, for the most part"
Time to resolve issues	**≥ 50% reduction**	"Even doing it with people that don't know what I'm doing"	
Time to resolve certain issues Off-shore costs	***100% reduction*** **75% reduction**		Prior to the training certain issues were never addressed and now these problems are being worked out
Meetings to address issue. Time people spend at meetings (calculated)	***50-67% reduction*** ***70-80% reduction***	 Based on 40% fewer people to address issue	"A decision that might take 2 to 3 meetings, you might be able to get it done in 1 meeting." "previously you needed 5 people to make a decision, and now 3 are needed"

Time to resolve issues	***23-29% reduction***	"Where people are open to it."	"Extreme" example: two week impasse resolved in a fifteen minute conversation
Overall personal efficiency	**15% increase**		"15% increase in efficiency just by being able to handle the conflict more efficiently. And just feeling a little bit better about myself."
Time: "concept to design to implementation to use"	**≥ 50% reduction**	Working with off-shore team	

Notes

1. Plain-text estimated improvements are literal numbers offered by interviewee. *Italicized numbers are inferences computed based on numbers offered by interviewee*.
2. Horizontal lines separate distinct interviewees.

Table 2

Increase in Overall Efficiency Based on Reduction in Issue Resolution Time

RESOLVING ISSUES	**Time Reduction (%)**			
	25	50	67	75
% Time	**% Increase in Overall Efficiency**			
5	1.7	5	10	15
10	3.3	10	20	30
20	7	20	40	60
40	13	40	80	120
60	20	60	120	180
80	27	80	160	240
100	33	100	200	300

Note. For example, if issues are resolved in 67% less time and after the training 20% of time is spent on issue resolution, this corresponds to a 40% increase in overall efficiency.

Table 3

Key to Behavior Labels Used in Charts

Chart Behavior Label	Behavior Description in Behavior Inventory
Ask for reflection	Ask someone to repeat what they heard you say if you're uncertain that they understood you.
Recognition for all	Create opportunities for everyone on the team to receive recognition and appreciation.
Mutual support	Seek strategies for everyone to get the help and support they need, including yourself.
Express dissenting opinion	Express dissenting opinions when it might benefit the project.
Ask to clarify confusion	Ask clarifying questions if someone makes a statement that seems confusing or off-point.
Appreciation of behavior	Offer appreciation that focuses on behavior you want to continue.
Address differences of opinion	Address differences of opinion and move a project forward in a way that's mutually satisfying for everyone.
Share bad news with grace	Shares unpleasant news in a way that makes it easy for others to receive it.
Restate ignored ideas	Restate or reframe suggestions or ideas when they don't seem to be taken into account.
Mutual solutions	Search for solutions that are satisfying for everyone involved.
Foster buy-in & accountability	Initiate and support steps that foster buy-in and accountability from team members.
Address tension	Address tension when relationships are strained.
Address unkept agreements	Address unkept agreements.
Ask for observations	Ask for observable facts when you hear someone generalize or state a judgment.
Interrupt when helpful	Interrupt others to support clarity and efficiency.
Give clean feedback	Give feedback that is free of criticism, judgment or blame.
Set objectives	Set objectives with time lines to support improved performance.
Understand reasons for upset	Find out what matters to someone who is upset before responding or advising.

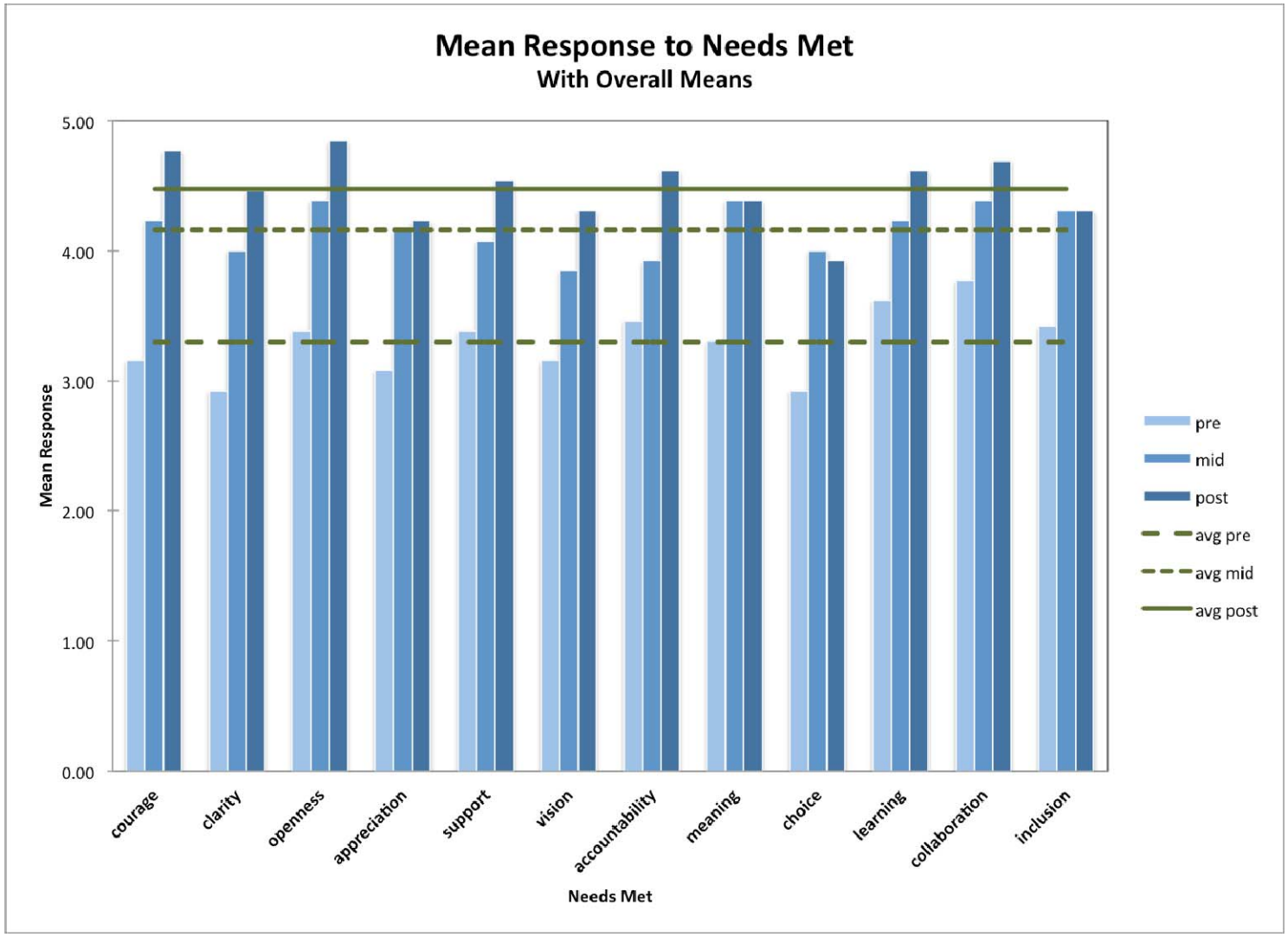

Figure 1. Mean response to needs met

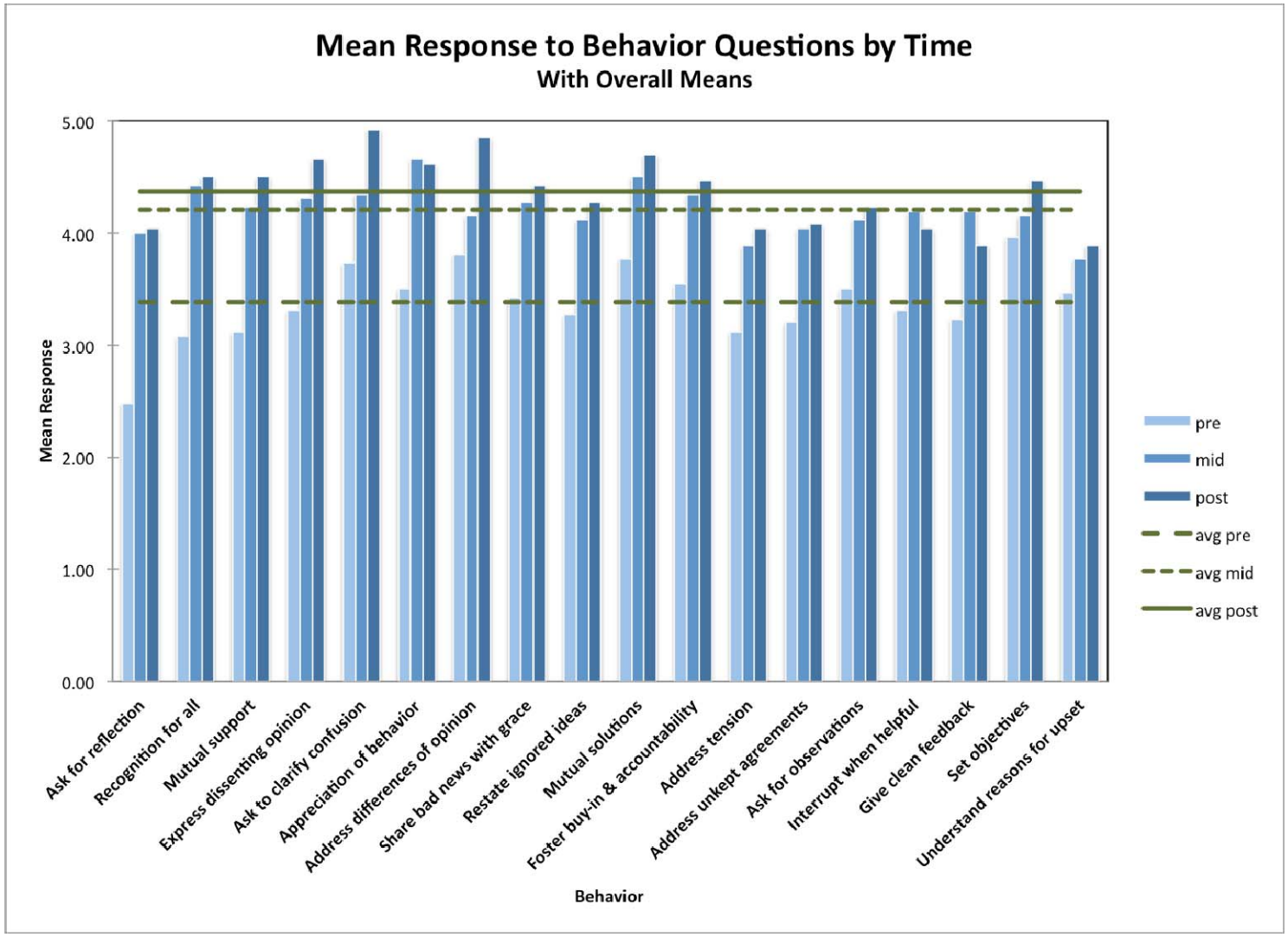

Figure 2. Mean response to behavior questions by time

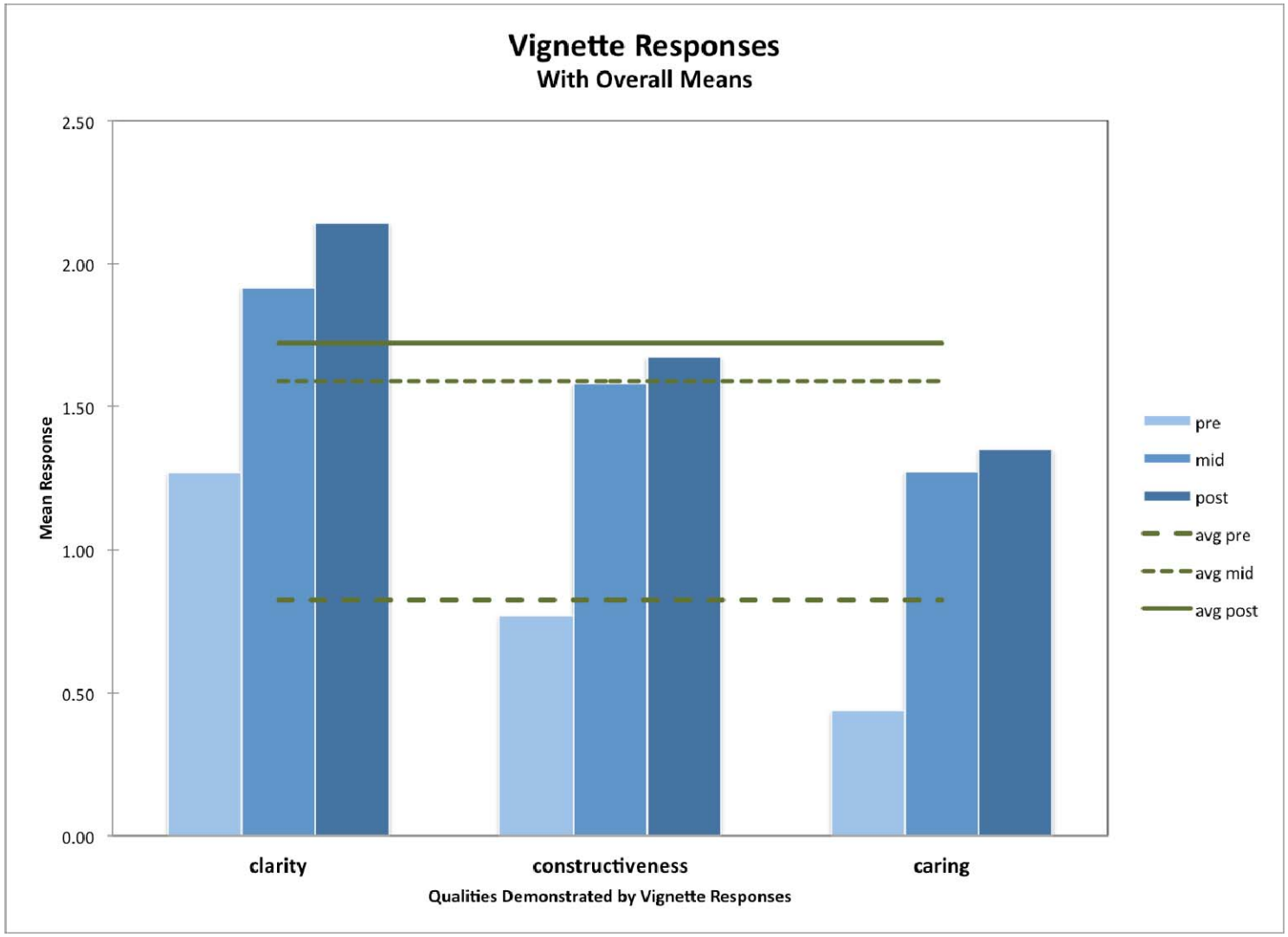

Figure 3. Vignette responses