Evidence Based Answers to Fifteen Questions about Leveraging 360-Degree Feedback

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ABSTRACT

Despite the popularity of 360-degree feedback, meta-analytic analyses suggest that these interventions can lead to significant behavior change but the effect sizes are quite modest. The research evidence addressing practical issues for successfully implementing 360-degree feedback interventions is updated since previous studies. This paper reviews fifteen specific questions that are common to most 360-degree feedback interventions (purpose & goals, assessment & competencies, and process & implementation) designed to facilitate enhanced awareness and successful behavior change in individuals and teams.

Keywords: 360-feedback, multi-rater feedback, feedback, coaching, behavioral change, talent development, leadership development

Increasingly, 360-degree feedback systems have proliferated and are being used for diverse purposes and interventions (e.g., executive coaching, performance evaluation, talent management, and succession planning). Despite the widespread use of 360-degree feedback, practitioners still seem to ignore some of the potential issues and evidence-based research highlighting the possible limitations, risks and issues of this type of intervention for coaching and talent development (Bracken & Rose, 2011). Under the right circumstances, feedback interventions can facilitate some of the conditions required for successful behavioral change (Mashihi & Nowack, 2011), yet there are many studies showing that such processes sometimes create no measurable change whatsoever (Siefert, Yukl, & McDonald, 2003), small effects, (Atwater, Waldman, Atwater & Cartier, 2000) or may have negative effects on both engagement and productivity (Kluger & DeNisi, 1996).

The current practice and use of 360-degree feedback by coaches and consultants is often based on expert opinion, vendor's recommendations, or suggested fads, rather than, on evidence-based empirical findings or applied evaluation studies. In fact, there is a paucity of well-designed longitudinal research and evaluation studies to guide practitioners in the effective design, administration, reporting, interpretation and use of 360-degree feedback systems for initiating and sustaining new behavioral change over time. The current literature is challenging to easily interpret due to the use of diverse and non-standardized competency models and definitions, different purposes and goals of the feedback process, use of 360-feedback across multiple job levels, cross-cultural factors in comparing self-other scores and diverse response scale and measurement issues inherent within the actual assessments being used (Caputo & Roch, 2009; English, Rose & McLellan, 2009; Roch, Sternburgh & Caputo, 2007).

In the mix of the limited number of well-designed prospective studies showing the benefits of 360-degree feedback, there are other studies that suggest potential harm, danger and potential limitations of its impact on both awareness and effectiveness. Despite the possible limitations of 360-degree feedback, practitioners can leverage this type of intervention to maximize both awareness and behavioral change by understanding and using comprehensive feedback and individual change models which build on the theoretical work of others (Gregory, Levy & Jeffers, 2008; Nowack, 2008; Joo, 2005; London & Smither, 2002).

Important Issues Potentially Effecting 360-Degree Feedback Intervention Success

Nowack (2009) summarized some of the issues surrounding using 360-degree feedback interventions for both the proximal goal of enhancing awareness and distal goal of facilitating successful individual and team behavioral change. Practitioners should consider the practical implications of the following twelve potential "360 feedback derailment issues" as they attempt to utilize feedback interventions for talent development, talent management/succession planning, coaching, performance review and selection/promotion. Each will be discussed in more detail in the subsequent discussion of leveraging the impact of 360-degree feedback:

1. Feedback that is perceived to be evaluative, judgmental and critical evokes emotional pain that mimics the same neural pathways that accompany physical pain (Eisneberger, Lieberman, & Williams, 2003).
2. Interpersonal stress (e.g., perceived negative feedback) causes increased cortisol levels being elevated fifty percent longer compared to impersonal stressors (Dickerson & Kemeny, 2004).

3. Clients who receive a large number of negative open-ended comments show a decline in engagement and performance following 360-degree feedback (Smither & Walker, 2004).
4. Significant behavioral change follows well-designed 360-degree feedback interventions but the effect sizes are relatively small, suggesting a potential upper limit around expectations of large performance improvements even in those most motivated to change (Smither, London & Reilly, 2005).
5. Agreement *within* rater groups in 360-degree feedback ranges from .30 to .50 (Conway & Hufcutt, 1997) suggesting the need for measures of rater agreement to help understand and accurately interpret feedback results.
6. Agreement *between* rater groups in 360-degree feedback is only moderate (Nowack, 1992; Harris & Schaubroeck, 1988) suggesting that different raters groups have meaningful interpretive differences to be considered and discussed with clients.
7. Self and other ratings are more positive in countries and cultures characterized as high in power distance and assertiveness (Atwater, Wang, Smither, & Fleenor 2009) suggesting that cultural norms, values and differences should be considered in the use of 360-degree feedback interpretation.
8. Managers who follow-up with talent who have taken 360-degree feedback assessments are more likely to set specific goals, solicit ideas for improvement and subsequently receive improved performance ratings (Smither, London, Flautt, Vargas, & Kucine, 2003) suggesting the importance of involving the manager in the coaching intervention to leverage long-term behavior change success.

9. People not only compare themselves to others, but to how they used to be in the past. In general, individuals evaluate their current and future selves as better than their past selves (Wilson & Ross, 2001) suggesting that coaches should focus their developmental planning efforts with clients in a future-oriented manner and help them compare one's "ideal self" to one's "real self" (Boyatzis & Akrivou, 2006).

10. People usually define their strengths based on traits they already possess and define their developmental opportunities more in terms of traits they lack at the moment (Dunning, Heath, & Suls, 2004). Kaiser & Overfield (2011) found that leaders were five times more likely to overdo behaviors related to their strengths, and they argue that most 360-degree feedback assessments do not "distinguish doing a lot of a behavior from doing too much of it, or distinguish underdoing from overdoing as two distinct classes of performance problems" (pp. 105-106).

11. Less than an adequate number of raters (8 to 9 in rater groups other than one's manager) will not achieve adequate reliability to make the rater feedback in 360-degree feedback either accurate or useful for coaching and developmental purposes (Greguras & Robie, 1995).

12. At least in the U.S., higher disagreement between self and observer ratings is related to lower performance (Ostroff, Atwater & Feinberg, 2004; Atwater & Brett), but appears less predictive in other countries suggesting caution in interpreting such gaps universally across all cultures and norms.

Beyond these potential limitations, practitioners need to make an evaluation before utilizing 360-feedback interventions in light of the possibility that some clients are unsuitable for coaching in the first place (Goldsmith, 2009). Attention to these various evidence-based issues and challenges can assist coaches to consider the best approach to utilizing feedback interventions to result in the desired individual, team and organizational outcomes.

Evidence Based Answers to 15 Questions on Leveraging 360-Degree Feedback

Trying to distill the 360-degree feedback literature into evidenced-based practice is challenging, but practitioners are encouraged to review some of the earlier recommendations by Morgeson, Mumford & Campion (2005) who organized 360-degree feedback research into twenty-seven questions that focus on practical applications, Craig & Hannum (2006) who attempted to summarize relevant research findings up to that point and Fleenor, Taylor & Craig (2008) who have written about “best practices” in using 360-feedback for behavior change.

The intent of this paper is to update prior "best practices" suggestions for practitioners on fifteen important questions that typically arise on the use of 360-degree feedback. In particular, this paper will update and expand on earlier questions addressed by Morgeson et. al (2005) and others and provide newer evidence-based research to help guide issues that arise in the development, implementation, interpretation and leveraging of 360-degree feedback interventions for individual, team and organizational effectiveness.

The first two questions addressed will focus on the *Purpose and Goals* of using 360-degree feedback and whether it is always the best intervention to use for coaching, training, compensation and talent management/succession planning programs. The second set of questions will focus on *Assessment and Competencies* being measured. The third section reviews the *Process and Implementation* of the 360-degree feedback process from selecting raters, confidentiality, and the impact of negative open ended questions often included in most assessments. The final section will review important questions related to *Interpreting and Leveraging* to ensure both insight and behavioral change. This last section will also address how to leverage the impact of 360-degree feedback as well as how to evaluate the program's effectiveness.

Insert Figure 1 Here

Purpose and Goals of 360 Degree Feedback

1. Does 360-degree feedback do more harm than good?

In general, poorly constructed and delivered 360-degree feedback systems can be time consuming and costly to develop and can increase disengagement and poor employee morale (Illgen & Davis, 2000; Kluger & De Nisi, 1998). In one commonly cited meta-analysis on performance feedback (607 effect sizes, 23,663 observations), Kluger & DeNisi (1996) found that although there was a significant effect across all studies for feedback interventions (d=.41), performance actually declined in one-third of all studies analyzed for various reasons such as depth of the feedback process, how feedback was delivered, personality of the recipient.

Several studies have also shown that individuals can experience strong discouragement and frustration when 360-degree feedback is not as positive as they expected (Atwater & Brett, 2005). Brett and Atwater (2001) found that managers who rated themselves higher than others (over-estimators) reported significantly more negative reactions to the 360-degree feedback process. They noted specifically that "negative feedback (i.e., ratings that were low or that were lower than expected) was not seen as accurate or useful, and it did not result in enlightenment or awareness but rather in negative reactions such as anger and discouragement."

Newer neuroscience research sheds some interesting light on "why" negative feedback is potentially emotionally harmful. Recent studies confirm that emotional hurt and rejection, whether part of social interactions (or poorly designed and delivered feedback interventions) can actually trigger the same neurophysiologic pathways associated with physical pain and suffering (Eisenberger, Lieberman, & Williams, 2003). Current findings suggest that people report higher levels of self-reported pain and have diminished performance on a cognitively demanding task after reliving a past socially meaningful event than a past physically painful event (Chen, Williams, Fitness, & Newton, 2008). In general, social evaluation stressors tend to elicit strong stress reactions with cortisol levels in our system being elevated fifty percent longer when the stressor is interpersonal versus impersonal (Dickerson & Kemeny, 2004).

Finally, research on individual flourishing and positive psychological well-being (Schwartz, Reyonolds, Thase, Frank, Fasiczka, & Haaga, 2002), success in marriage (Gottman, 1994) and team effectiveness (Losada & Heaphy, 2004) suggest that the ratio of positive to negative emotions and interactions is of critical importance. For example, Losada et al. (2004) unobtrusively observed actual work teams working on strategic planning and coded all interpersonal interactions as positive (e.g., demonstrations of support and encouragement) or negative (e.g., cynicism, disapproval of others). He identified 15 flourishing teams defined as showing uniformly high performance across three indicators: profitability, customer satisfaction, and evaluations by superiors, peers, and subordinates. Other teams were categorized as mixed (n=26) or low performance (n=19). He found that the optimally performing teams demonstrated an approximate 3:1 positive to negative ratio of interpersonal interactions with performance

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decrease at 11.9:1 (teams became more dysfunctional and less productive suggesting a possible upper limit of positive to negative interactions). Most commonly, a ratio of 3:1 positive to negative interactions appears to be significantly associated with enhanced individual and team engagement, performance and effectiveness (Fredrickson & Losada, 2005).

Implications: Neurobiological research hints that perceptions around status, certainty, autonomy, social relationships and fairness (Rock, 2008) can possibly hijack a 360-degree feedback process and create emotional stress and strong negative reactions in clients that potentially interfere with insight, acceptance and initial motivation to change behavior. The positivity to negativity ratio studies mentioned earlier is important to consider in light of how clients interpret and experience ratings and comments from others in 360-degree feedback. In particular, a preponderance of negative to positive feedback messages can interfere with both important proximal and distal goals in the coaching engagement.

2. Does 360-degree feedback work (for whom and under what conditions)?

Among researchers and practitioners, there is little disagreement that under the right conditions and applying "best practices" that 360-degree feedback can increase self-awareness and increase individual and team effectiveness (Fleenor, Taylor & Craig, 2008). At this point, more in depth prospective studies that allow for a more complete evaluation of the impact of 360-feedback interventions along with potential limits for the magnitude of behavioral change (either leveraging strengths or focusing on potential development opportunities) over time are needed to strengthen the research literature. For example, Smither, London, and Reilly (2005) in their meta-analysis of 26 longitudinal studies found that 360-degree feedback led to significant improvements on behavioral changes, objective performance measures, and subordinate attitudes. The largest effect sizes were found on the impact of the perceptions of direct reports and bosses. The corrected mean effect size was .15 for both direct reports and bosses, while the corrected mean effect sizes for peers and self-ratings were .05 and -.04, respectively (Smither, et al., 2005).

Their findings suggest that expected performance improvements will be practically modest for even those most motivated and capable of changing behavior over time (Smither, London, & Reilly, 2005). Taken together, there is supporting evidence that feedback is a necessary and important condition for successful behavior change and most useful for those with moderate to low levels of self-insight, express a strong motivation to improve, demonstrate poor performance on teachable skills and have a learning, versus performance, goal orientation (Leonardelli, Herman, Lynch, & Arkin, 2003).

Implications: Smither et al., (2005) presented eight important factors that play a role in determining the extent of behavioral change and performance improvement following 360-degree feedback help to guide the answer to “for whom and under what conditions” can feedback be most beneficial and impactful. The eight factors include: (1) the delivery and content of the feedback, (2) interpretations and emotional reactions to feedback, (3) the personality of the recipient, (4) feedback orientation of the participant, (5) readiness to change, (6) beliefs about change as well as self-esteem and self-efficacy, (7) goal intentions versus implementation intentions, and (8) taking/sustaining action while managing possible relapse. It would appear that these factors would be useful for practitioners to consider and for researchers to continue to focus on to improve the efficacy of feedback interventions for individuals and teams.

Assessment and Competencies

3. What type and how many raters should be included?

The type of raters that should provide feedback to clients will depend on a number of factors, including the purpose of the 360-degree feedback process, the job level of the client, the competencies being assessed, and the relevant stakeholders who have had an opportunity to provide constructive feedback. In general, individual-based 360-degree feedback processes typically include the client's manager, direct reports, team members at different job levels, peers at the same job level, internal and external customers, or volunteers outside the organization. Each rater type appears to provide unique and meaningful information and may become a focal point for developmental actions (Fleenor et al., 2008).

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How many raters are necessary to provide meaningful and accurate 360-degree feedback? The answer, of course, is only one rater, but we simply don't know who is "all-knowing" and perfectly accurate in his or her observations. Ideally, we should get an adequate sampling of data from those around the client who can provide a complete view of the client's strengths and potential development areas.

The following analogy demonstrates this; Sitting down with a child to solve a puzzle with them and asking the question, "How many puzzle pieces do you need to assemble to have confidence that what you are making resembles the picture on the cover?" as a way to answer how many raters do you need in 360-degree feedback. The more puzzle pieces we assemble correctly, the more confident we become that we are seeing the image that is also on the cover of the box. But we don't need to assemble all of the pieces to verify this. All we need is a "critical mass" of puzzle pieces to be assembled to trust we are seeing the true picture of the puzzle.

Like making puzzles, when we ask a large group of raters for feedback, we begin to see our behavior with more confidence and clarity. In fact, there is some research that suggests what this “critical mass” of feedback is in order to reach a level of confidence that others are accurately experiencing our behavior and can identify signature strengths and development opportunities. Greguras and Robie (1995) suggest that the optimum number of raters involved in most 360-degree feedback projects would require at least four supervisors, eight peers, and nine direct reports to achieve acceptable levels of reliability (.70 or higher). Of course, this statistical standard may not be practical in circumstances where leaders have only a few direct reports or one manager they have worked for many years.

Implications: Recent research suggests that as many as twenty six percent of companies report that when two or fewer respondents provide data for a given group and these small sample sizes may be inadequate for reliable measurement (3D Group, 2009). These findings do suggest that inviting more, rather than fewer, raters would be helpful in ensuring accuracy and a large enough rater pool to make the 360-degree feedback findings relevant and useful. Inviting and having too few raters in each rater category may limit the meaningfulness and accuracy of the feedback for professional and personal development. At least one study (Nieman-Gonder, Metlay, Kaplan, & Wolfe, 2006) has explored ratings provided by selected and non-selected raters by clients using multiple accuracy measures. Results indicated that selected raters were as accurate, or more accurate, than raters who were not selected by the ratee. Therefore, having a critical mass of feedback is likely more important than whether raters are nominated by the clients or selected by human resources or the client’s manager.

4. Do ratings *between* rater groups agree with each other?

Self-ratings are modestly to other rater perspectives, with a greater convergence between peer and supervisor ratings (Nowack, 1992). It seems intuitive to expect that some differences in perspectives will occur across rater groups. In general, direct reports tend to emphasize and filter interpersonal and relationship behaviors into subjective ratings, superiors tend to focus more on performance-oriented behaviors, and peers tend to be most accurate at predicting future leadership potential (Nowack, 2002; 2009).

For example, Inceoglu & Externbrink (2012) collected data for 151 international managers from a global Fortune 500 company (consumer goods sector) who participated in an internal leadership program. Results showed that assessment center (AC) ratings correlated positively with 360 ratings for the same competency but only if rated by peers. Overlap between 360-degree feedback and AC ratings in this managerial sample shows that peers may have a more accurate perspective of a manager's performance compared to subordinates or managers. Some research evidence suggests that peers are unique in their ability to predict leadership potential (Nowack, 2009) and are particularly sensitive to negatively evaluate the personality trait of narcissism (Goffin & Anderson, 2007). This is an important issue as Brett and Atwater (2001) reported that participants in their 360-degree feedback program had stronger reactions to negative feedback from bosses and peers than they did to negative feedback from subordinates.

These meaningful rater group differences might also be a point of possible confusion in the interpretation of 360-degree feedback for clients trying to use these results to determine specific behaviors to modify and which stakeholder to target. This potential ambiguity in understanding and interpreting 360-degree feedback is important in light of recent research suggesting that people who are even mildly neurotic report more distress by uncertainty within oral and written feedback than when given even direct negative feedback (Hirsh, & Inzlicht, 2008).

Implications: At a practical level, this means clients might be challenged to understand how to interpret differences observed by rater groups and asked to decide whether to focus efforts on managing upward, downward, or laterally in light of these potentially discrepant results. Coaches should be cognizant of the moderate correlations between different rater groups and help their clients to fully understand and interpret the meaning of such differences. For example, if the goal of the client is upward mobility within the organization, peer ratings are of high importance to understand and accept.

Because peers seem to focus on “followership” traits such as self-esteem, ability to accept feedback, and confidence, these relationships might need to be nurtured and strengthened for clients who have aspirations for increasing their span of control and leadership opportunities. It appears that almost all vendors who generate 360-degree feedback present various ways to illustrate self versus other rater responses. It is typically up to the clients and coaches they may be working with to discern the meaning of these differences and what actions, if any, should be considered as a result of the feedback they received.

5. Do ratings *within* rater groups agree with each other?

In earlier meta-analytic study by Conway & Huffcutt (1997), the average correlation between two supervisors was only .50. Between two peers, it was .37, and between two subordinates, it was only .30. Until a newer meta-analytic review is conducted, it would appear that agreement within rater groups appears to be an important issue to discern for clients in the interpretation of their 360-degree feedback reports. Vendors who do not provide a way for clients to evaluate within-rater agreement in feedback may increase the probability that average scores used in reports can be easily be misinterpreted—particularly if they are used by coaches to help clients focus on specific competencies and behaviors for developmental planning purposes.

In our own coaching practice, it is not unusual for clients to expend a great deal of energy trying to identify their "critics" and "supporters" in discussing the results of the 360-degree feedback assessment. Having a way to discern and discuss potential "outliers" in the data gathered can help clients be more focused on their developmental goals and make informed choices about how much energy to put into "managing" his/her direct reports, peers or boss.

Implications: From a practical perspective, vendors should provide one or more measures of rater agreement within each individual feedback report such as: 1) Including a range of scores on self-other rating summaries; 2) Showing a distribution of ratings on most and least frequent behavior summaries; and 3) Including statistical metrics of rater agreement (e.g., based on standard deviation or error). All of these within-rater agreement metrics would appear to help delineate outliers and clarify how to possibly interpret polarized scores on specific questions and competencies.

In our experience as coaches, it is easy for clients to review a table of ranking the most or least behaviors by rater groups using average scores and immediately interpret those at the top or bottom of the table to be the specific behaviors to focus development efforts on. Clients often do so without an analysis of whether the average scores might truly reflect rater "clans" of supports and critics that require additional follow up to clarify what the average scores may mean.

6. Which response scale is best for 360-degree feedback?

Many studies suggest that response scales have a large impact on the 360-degree feedback data and some response scales seem to be preferable to others. For example, Bracken and Rose (2011) suggest that commonly used frequency scales (e.g., never to always) are inferior to others but are quick to point out that the majority of research has focused on the anchors themselves and additional research is needed to identify optimal response choices and anchor format.

A recent meta-analysis by Heidemeier and Moser (2009) suggests that social comparison scales (scales with relative rather than absolute anchors) were able to reduce leniency in self-ratings and they suggest they should be employed much more often than in the past. Goffin & Olson (2011) also present evidence from at least three important and quite different domains that comparative evaluative judgments of the self or others (i.e., whether a given person is higher or lower on some characteristic than is another specific person) may be more advantageous than absolute evaluative judgments (i.e., asking the respondent to indicate the an individual's level of performance, attitude, traits, or other attributes using numerical scales with verbal anchors such as low to high, unfavorable to favorable, bad to good).

Holt and Seki (2012) suggest vendors and practitioners to explore assessment approaches and scaling that will be more culturally sensitive to measuring and evaluating leadership competence in light of the use of 360-degree feedback within multi-national companies. They encourage consideration of alternatives beyond frequency-based scales that might emphasize perceptions of overdoing or underdoing behaviors (Kaiser & Overfield, 2011) and bi-polar scales measuring strengths and the overuse of those strengths.

Gentry & Eckert (2012) suggest that using a dual scale of leadership expectations (ratings on the dimensions that contribute or hinder leadership in general) and perceptions (actual ratings of behavior) and exploring the alignment between these two might also improve and enhance cross-cultural measurement and development of clients receiving feedback. They argue that this method differs from traditional 360-degree measurement approaches in that perceptions per se are neutral and that meaning is dependent on the context of “local” expectations. Therefore, the “fit” between expectations and perceptions helps practitioners to interpret the results with their client. They also point out some limitations of this approach such as overload of data to interpret for the client and how expectations of raters may shift over time.

Implications: A review of the literature suggests that there are diverse approaches to the use of response scales in 360-degree feedback assessments (e.g., comparison versus absolute). In general, response or rating scales are important to consider when developing customized 360-degree feedback assessments and interpreting off-the-shelf tools available from vendors.

The selection and use of 360-degree feedback scales should be properly matched to the purposes of their use (e.g., coaching/development emphasizing what clients can translate into deliberate practice, selection/succession planning which typically depends on comparing clients ratings to others or performance evaluation which may require a mix of the two to facilitate both appraisal of performance and future development). Finally, researchers and practitioners should continue investigation and explore use of alternative 360-degree scales to maximize cross-culture relevance and meaningful interpretation of results.

7. How many rating points should be on a 360-degree feedback rating scale?

There is no definitive agreement from researchers and/or practitioners about the optimal number of response categories that should be used in order to get the most reliable data in 360-degree assessments. The most recent findings from a 2009 benchmark study (3D Group, 2009) suggest that the most popular in practice is a 5-point scale (76 percent) followed by a 7 point rating scale (16 percent).

However, there is a general range provided in the 360-degree feedback literature that suggests the number of response categories to use. For example, Bandalos and Enders (1996) found that the reliability was highest for scales having five to seven points. Preston and Colman (2000) examined response categories ranging from two to eleven, and reported that test-retest validity was lowest for two to four point scales and was highest for seven to 10 point scales (there was a noted decrease beyond 10 response categories).

Implications: Research by Lozano, Garcia-Cueto, and Muniz (2008) also investigated the reliability and validity of scales ranging from two to nine response options with four different sample sizes. Their analyses suggested that having between four and seven response options was optimal. It is important to note that the number of rating points may be largely dependent on the type of scale being used (e.g., frequency, effectiveness, comparison) and/or a selection of using a curvilinear approach such as the frequency scale discussed by Kaiser & Overfield (2011). As a result, the scale response range might exceed the recommended 5 to 7 point scale range but increase actionable behaviors by those receiving feedback with such scales.

8. Should an individual 360-degree feedback report contain a mix of graphs, charts, tables and open-ended questions to maximize understanding?

Little research exists to provide definitive answers as to the best way to present 360-degree feedback results to facilitate acceptance and enhance readiness to change behavior However, it is intuitive that clients have different learning styles, and some may prefer to favor the interpretation of either qualitative over quantitative presentations of results or vice-versa. One study that does give some insight about what presentation style might maximize the acceptability, understanding, and interpretation of 360-degree feedback results comes from Atwater and Brett (2003). These researchers compared several different report presentations to participants and concluded that:

a. Individuals appear to be significantly less positive and less motivated after receiving text feedback than after receiving numeric feedback.

b. Individuals appear to prefer numeric scores and normative feedback in 360-degree interventions and find these easier to interpret and use for development purposes.

Implications: Unfortunately, practice has truly outstripped research in guiding developers of 360-feedback assessments to optimize report content and to organize the presentation of data to enhance understanding and acceptance of results without it being confusing or overwhelming. Most 360-degree feedback reports tend to have common sections including: 1) Comparison of self-other rating similarities/differences using bar, line and spider graphs to illustrate these trends; 2) A “Letterman top 10 (and bottom 10) list of behaviors that summarize strengths and development opportunities; 3) Open-ended question summaries and competency based suggestions/recommendations; and 4) Developmental suggestions and a summary of strengths to leverage.

It appears that “what the crowd does” is what is now commonly accepted in how 360-degree feedback reports are organized and presented despite a paucity of evidence based practices to guide developers and practitioners. Until more research has accumulated, the findings of Atwater and Brett (2003) would appear to support the more popular and common approaches being used today.

360-Degree Process/Implementation

9. Can open-ended questions be emotionally damaging to clients?

It is common in most online based 360-degree feedback assessment to include one or more open-ended questions which are typically voluntarily and confidentially answered by raters (sometimes these comments are categorized by rater groups used in the assessment process or just listed in a random order). In general, there has been little research evaluating the cognitive and emotional reactions of such qualitative feedback on clients in the 360-degree literature based on online data collection. Narrative comments shared by raters can possibly be evaluative, overly critical, or negative having an adverse impact on acceptability and motivation if included in reports without editing or removal.

A study by Smither and Walker (2004) analyzed the impact of upward feedback ratings, as well as narrative comments, over a one-year period for 176 managers. They found that those who received a small number of unfavorable, behaviorally-based comments improved significantly more than other managers, but those who received a large number relative to positive comments significantly declined in performance more than other managers (Smither et al., 2004). Like quantitative results, open-ended comments can create strong emotional reactions that can interfere with the acceptance of feedback and lead to diminished engagement and productivity. Additional research on ways to improve gathering constructive and meaningful "feedforward" comments from raters and the impact of such ratings on clients's motivation, emotional reactions and readiness to change future behavior would appear to be warranted in light of such studies.

Implications: When the ratio of positive to negative open-ended comments begins to be of a magnitude that could create strong emotional reactions on the part of clients, practitioners face a set of ethical questions for which clear answers are difficult to determine when coaches rely on online assessments, rather than, interviews and written summaries of results. The APA Ethical Principles of Psychologists and Code of Conduct (American Psychological Association, 2010) in the Avoiding Harm Standard 3.04 states "Psychologists take reasonable steps to avoid harming their clients/patients, students, supervisees, research participants, organizational clients and others with whom they work, and to minimize harm where it is foreseeable and unavoidable" and the Assessment Standard 9.02a states "Psychologists administer, adapt, score, interpret or use assessment techniques, interviews, tests or instruments in a manner and for purposes that are appropriate in light of the research on or evidence of the usefulness and proper application of the techniques."

These ethical guidelines suggest that when open-ended comments are overwhelmingly negative with little prescriptive feedforward suggestions to improve, practitioners should consider reasonable options to organize and summarize the themes of the feedback and present them back to the client in a manner that will engender understanding, acceptance and the management of potential negative emotional reactions. The findings of Smither et al. (2004)

highlight the necessity to minimally follow-up with clients after they have received and reviewed their 360-degree feedback report to ensure that any negative emotions and reactions can be processed in a healthy manner.

Interpreting and Leveraging the Impact of 360-Degree Feedback

10. Does personality impact how people respond to 360-degree feedback?

Personality appears to directly influence how clients react to 360-degree feedback, how motivated they will be to act on the observations and suggestions of others, and how likely they will be to implement and sustain new behaviors to become more effective. For example, research by Smither, London, and Richmond (2005) explored the relationship between leaders' personalities and their reactions to and use of 360-degree feedback. Leaders high in the five factor personality facet of emotional stability were significantly more likely to be rated by a psychologist as motivated to use the feedback results for their ongoing professional development. Additionally, leaders high in extraversion were significantly more likely to have sought additional feedback six months later, while leaders high in conscientiousness were more likely to have actually engaged in developmental behaviors. These researchers also found that extraverted leaders who are also high on the personality factor of openness to experience were more likely to perceive and view negative feedback as valuable data and were most likely to seek further information about their feedback.

Several studies support the findings that individuals with high self-esteem report more favorable attitudes toward the 360-degree feedback results than those with low self-esteem (Bono & Colbert, 2005). Feedback recipients who rate themselves highly on receptivity and the desire to make a good first impression were also perceived by feedback providers as having more positive reactions to feedback (Atwater, Brett, and Charles, 2007).

Research by Bono and Colbert (2005) suggests that the motivation to change behavior following 360-degree feedback is related to a meta-personality concept called core self-evaluations (CSE). Specifically, they found that individuals with high levels of core self-evaluations (those with high self-esteem, generalized self-efficacy, internal locus of control and low neuroticism) will be most motivated to initiate change behavior when they receive discrepant feedback, while those with low levels of core self-evaluations will be most motivated when others' ratings are most similar to their own. As such, the personality of the client has a direct result in the level of readiness to change based on self-other agreement levels and valence.

The stable personality trait of goal orientation has been shown to influence whether an individual views feedback as a development opportunity or a challenge to his or her self-rating (Dweck, 1986). Individuals with a learning goal orientation tend to hold a view of ability as modifiable and believe they are capable of improving their level of abilities (Brett and Atwater, 2001). These researchers found that those with a learning goal orientation believed the feedback was more useful than those with a performance goal orientation.

Implications: Taken together, it seems clients are most motivated to use 360-degree feedback for development when they are conscientious, achievement oriented, extraverted, possess high self-efficacy, have an internal locus of control, and express low anxiety. Identifying and understanding the personality of clients will help practitioners to structure coaching and feedback interventions in a manner that facilitates both readiness to change and the enhancement of self-efficacy (Rhodes, Plotnikoff & Courneya, 2009). Practitioners might consider including newer generation five-factor personality inventories or structured interviews to assess personality factors that might contribute or hinder their acceptance of 360-degree feedback and overall commitment to initiate and sustain successful behavior change over time. For example, clients who report being higher on conscientiousness tend to be able to control, regulate and direct their impulses and, as such, are more likely to be committed to change and personal/professional development (Klockner & Hicks, 2008).

11. How do you manage the feedback of under-estimators and over-estimators?

It has been estimated that 65 to 75 percent of the employees in any given organization report that the worst aspect of their job is their immediate boss. In fact, estimates of the base rate for managerial incompetence in corporate life range from 30 to 75 percent, with the average level of poor leadership hovering at about 50 percent (Hogan, R. & Kaiser, R., 2005). Many of these leaders tend to have inflated views of their skills and abilities, and this appears fairly common in 360-degree feedback research (Atwater & Brett, 2005). These self-enhancers or over-estimators are often blind to identifying their own strengths, less receptive to feedback from others and have negative reactions (Brett and Atwater, 2001). As a result, practitioners might need to work hard to find the "what's in it for me" with such clients to explore how they can better understand the perceptions of others and commit to modifying their behavior to some extent to better meet the expectations and needs of those working with them.

In a recent Harvard Business Review article, Kaplan and Kaiser (2009) argue that it is just as detrimental to overuse our strengths as it is to under use them. In their research, those expressing the right amount of strength showed a significant association with a measure of leadership success. As the authors point out, leveraging and emphasizing strength might lead to actually interfering with being flexible and adopting new behaviors.

Goffin & Anderson (2007) found in their study of 204 managers that self-rating inflation was significantly correlated with high achievement, self-esteem and social desirability personality factors. This personality profile pattern suggests that self-enhancers might possess an exaggerated perception of their strengths resulting in potential defensiveness and resistance during 360-degreee feedback discussions with their manager, coach or others who are debriefing their report.

It should also be noted that the pattern of high social desirability and low anxiety (repressive coping) has long been shown in the health psychology literature to be significantly associated with increased cardiovascular reactivity to stress, higher blood pressure, and worse health outcomes (Rutledge, 2006; Mund & Mitte, 2011). This pattern found in an earlier Goffin & Anderson (2002) manuscript suggests that over-estimators might not only be at risk to derail in their careers but also vulnerable to meaningful and negative health outcomes. To date, no research has directly tested this hypothesis or considered that the most vulnerable over-estimator might indeed be a personality profile characterized as high in social desirability, low in negative affect (anxiety) and simultaneously high in positive affect.

Another form of "cognitive distortion" that is common in 360-degree feedback processes are characterized by clients rating themselves significantly lower than the ratings of others. These "under-estimators" are actually viewed as possessing strengths but not recognizing or acknowledging them relative to others giving them feedback (Nowack, 2009). Furthermore, research by Goffin & Anderson (2007) suggests that under-estimators score significantly higher on negative affect than over-estimators suggesting they are likely to be more emotionally reactive, anxious and nervous in the interpretation of their feedback results.

In our own coaching practice, we have found that under-estimators"(about 25 to 30 percent of those taking 360-degree assessments) are typically characterized as highly perfectionist, expect high performance for themselves and others, focus on their weaknesses and look for fault, criticism, and potential deficits in their feedback from others and ignore and gloss over any feedback suggesting strengths as being too complimentary.

In short, these clients tend to minimize the strengths seen by others and dwell on anything that isn't perfect in their summary feedback report. In practice, no matter what we try to do as a coach, these clients are resistant to leverage their strengths as seen by others. They tend to be hyper-vigilant on the negative in feedback reports they receive and focus on what they see as their developmental opportunities or weaknesses. It is important for practitioners to do their best to help under-estimating clients see their feedback in balance and prepare for the likelihood that they will accentuate and focus on the negative, despite feedback from others that they are actually performing strongly or possess high competence in particular skills and abilities being rated. Further research will be required to replicate and validate these initial observations and findings.

Implications: The discrepancy between self-ratings and other ratings can affect both emotional reactions and readiness to change behavior. Current research suggests mixed findings for the association between affect and behavioral change. For example, Atwater and Brett (2005) suggest that leaders who received low ratings and over-rated themselves were more motivated than leaders who received low ratings and gave themselves low ratings. However, these over-rater also had more negative reactions (e.g., were more disappointed and angry) than those who did not overrate. In contrast, other research suggests that over-estimators are significantly less likely to engage in developmental plans following negative feedback (Woo, Sims, Rupp, & Gibbons, 2008).

Jordan & Audia (2012) point out three common self-enhancing assessments of low performance that has implications for incongruence between self and other ratings, particularly when the feedback from others is more critical. Observed low performance by others can influence how clients assess their own job performance. These three self-enhancement strategies include: 1) Revisiting the importance of the performance goals to perceive low performance in a more positive light; 2) Redefining the level of abstraction of a performance goal to make it more flexible or broad; and 3) Focusing on how things could have been worse if they had acted differently (i.e., focusing on counterfactual outcomes as comparisons). Taken together, these self-enhancing processes might help explain why some clients take little initiative to change behavior in light of feedback that is more critical compared to their own self-assessment.

12. What kind of training or certification by coaches is required to help clients understand and interpret 360-degree feedback reports?

Coaches and consultants may have very diverse backgrounds and academic degrees, but familiarity with assessments in general would be useful to professionally utilize 360-degree feedback systems (Nowack, 2003). In their article in Harvard Business Review, Sherman and Freas (2004) stated that executive coaching is “Like the Wild West of yesteryear, the frontier [executive coaching] is chaotic, largely unexplored, and fraught with risk, yet immensely promising” (pp. 82-83). Current research on coaching differences by education and training has found that psychologists are more likely to meet face-to-face, contract for fewer sessions, and are more likely to use 360-degree assessments in their practice than non-psychologists (Bono, et al., 2009).

Furthermore, recent research suggests that attempts to change people' stated goal intentions alone may not always result in successful maintenance of behavior over time (Lawton, Cooner & McEachan, 2009). After 360-degree feedback, many clients express a strong desire and intent to become more effective and may actually try new behaviors. These individuals might not be unable to sustain them for very long due to relapse suggesting that coaches should emphasize relapse prevention techniques, facilitate self-efficacy and become a "professional nag" to their clients to help reinforce new behavior change efforts (Rhodes, Plotnikoff & Courneya, 2009).

Implications: In the Bono et al. (2009) study based on results of surveys completed by 428 coaches (256 nonpsychologists, 172 psychologists), differences were generally small (average d = .26), and there were as many differences between psychologists in their training and orientation to coaching (e.g., clinical, social/personality or industrial/organizational as between coaches and nonpsychologists (d = .29). Additionally, these researchers reported that psychologist coaches were "more likely to use effective tools to diagnose the problem (e.g., multisource behavioral ratings d =.54, interview with supervisor d = .33, interview with peers d = .35, ability/aptitude tests d = .30, and review of prior performance data d =.41)" (p. 390).

What remains clear is that adequate training designed to provide knowledge (e.g., ethics, use of assessments), skills (e.g., developing rapport, handling resistance) and abilities (building client self-efficacy) to help clients gain self-insight and facilitate long-term behavioral change success is in need of additional research. Of course, certification and training don't imply competence, but coaches using 360-degree assessments are encouraged to conduct their own knowledge/skills gap and make an effort to continue their education and training to become more proficient in the professional use of such assessments to leverage success. For example, if an

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executive coach is clinically trained they might need to enhance their knowledge about business/industry or if trained in a research oriented industrial-organizational psychology program they might need to enhance their core counseling skills.

13. Are there cultural differences to be considered in the use of 360-degree feedback?

There is increasing use of 360-degree feedback in different cultures and countries, as multi-national companies utilize it throughout their entire organization. Differences in 360-degree feedback rating and interpretation should be expected to some degree in other cultures. Some dimensions that appear to be important include individualism versus collectivism, power distance, and gender egalitarianism. Atwater and her colleagues (2009) explored self and subordinate ratings of leadership in 964 managers from 21 countries, based on assertiveness, power distance, and individualism or collectivism. Self and other ratings were more positive in countries characterized as high in assertiveness and power distance. In the U.S., lack of self-awareness predicts performance, but this metric was less useful in five European countries (U.K., Germany, Denmark, Italy, and France). In European countries, only others' ratings of leadership predicted managerial effectiveness.

Cultural relevance was compared across five countries (US, Ireland, Israel, The Philippines, and Malaysia), and this supported the overall effectiveness of the 360-degree feedback process but also revealed important differences (Shipper, Hoffman, & Rotondo, 2007). This study suggested that the 360-degree feedback process is relevant in all cultures but most effective in those low on power distance with individualistic values (e.g., United States versus Philippines). Recently, Eckert, Ekelund, Gentry, and Dawson (2010) investigated self-observer rating discrepancies on three leadership skills on data from 31 countries. They reported that rater discrepancy on a manager's decisiveness and composure was higher in high power distance cultures (e.g. Asian) than low power distance cultures (e.g. Americas).

Self–observer rating discrepancy has also been shown to be higher (i.e., bigger or wider) for U.S. American managers than for Europeans on 360-degree ratings of managerial derailment behaviors (Gentry, Hannum, Ekelund & de Jong, 2007). Finally, earlier research on 360-degree feedback across 17 countries by Robie, Kaster, Nilsen, and Hazucha (2000) suggested that there were more similarities than differences across countries. For example, the ability to solve complex problems and learn quickly appears to be universally predictive of effectiveness for leaders.

Implications: Taken together, these studies suggest that cultural-level factors such as values, norms, and beliefs, have an impact on self–other rating discrepancies and their meaning. The relevance of self-other ratings may be unique to U.S. base companies but less important in Europe and other countries. Peer ratings appear to have robust utility for predicting future leadership potential across cultures. Finally, alternative competency models of cross-cultural leaders and 360-degree feedback scales might be strongly considered for future feedback interventions, particularly with multi-national companies (Hot et al., 2012). Practitioners should also strive to identify and understand all the cultural factors that might impact the effectiveness of their coaching work with clients including the use of relevant assessments of skills, personality and values/interests.

14. Does a 360-degree feedback report require debriefing?

"Best practices" in 360-degree feedback processes suggest that greater transfer of learning and goal setting occurs when a manager or coach helps clients understand and debrief their reports (Nowack, 2009). For example, Arthur, Bennett, Stanush, and McNelly (1998) conducted a meta-analysis of knowledge and skill decay studies and reported that one day after training, trainees exhibit little to no skill decay, but one year after training, they lost over 90% of what they learned. All too often, vendors and some practitioners espouse the "diagnose and adios" approach to 360-degree feedback, hoping that self-directed insight alone will result in motivated behavioral change efforts.

In one of the few prospective empirical studies conducted on the impact of executive coaching, Smither, et al., (2003) reported that after receiving 360-degree feedback, managers who worked with a coach were significantly more likely to set measureable and specific goals and solicit ideas for improvement. They subsequently received improved performance ratings. Thatch (2002) found that in six weeks of executive coaching following 360-degree feedback, performance increased by 60 percent, and in a much cited study in the public sector, Olivero, Bane, and Kopelman (1997) found that employee feedback and coaching for two-months increased productivity above the effects of a managerial training program (22.4 versus 80.0 percent) for 31 clients. These coaching studies support the importance of supportive follow-up after feedback is received to facilitate developmental action planning and the practice of targeted behaviors.

Some limited support for other approaches to structured follow-up comes from a recent doctoral dissertation study evaluating the effectiveness of 360-degree feedback interventions in 257 leaders in diverse organizations (Rehbine, 2007). In this study, over 65 percent of those surveyed expressed a strong interest in utilizing some type of an online follow-up tool to measure progress and facilitate their own individual behavioral change efforts. However, newer research also suggests that the type of follow-up coaching might be as important as the modality (self-directed using an online development system or coach directed).

A recent study by Robert Hooijberg and colleagues, looked at what makes coaching effective, surveyed 232 managers from diverse organizations (Hooijberg, & Lane, 2009). One of the key questions asked was: "What did your coach do that you found most effective?" From the view of the client or clients, three major categories determined feedback success: 1) interpreting results (34.8 percent), 2) inspiring action (27.5 percent), and 3) professionalism (23.3 percent). The majority of clients thought the best coaches were those who analyzed strengths and weaknesses, helped assimilate feedback, and made concrete developmental recommendations. This study seems to contradict much of the coaching literature and suggests that clients using 360-degree feedback expect and want their coach to take a more active role in interpreting their results and making developmental recommendations to leverage actual behavior change.

Implications: Taken together, "best practices" would strongly suggest that 360-degree feedback reports be discussed with clients (or be made available with the use of highly structured online goal setting systems that are sometimes integrated with such feedback assessments). Greater use of "prescriptive" and "feedforward" suggestions on the part of the coach, manager or consultant debriefing the report would appear to maximize readiness to change and the targeting of specific behaviors to use more, less or differently to enhance overall performance.

Practitioners should utilize some of the prescriptive suggestions from models of transfer of training that suggest that factors before, during and after feedback can positively influence the extent of transfer back to the job (Grossman & Salas, 2011). Finally, based on research suggesting the importance of personality factors in feedback processes, practitioners should carefully consider the meditating effects of self-efficacy, mastery goal orientation and motivation to transfer (Chiaburu, Van Dam, and Hutchins, 2010) during their debriefings.

15. How can you leverage the impact of 360-degree feedback to ensure successful behavioral change?

Smither, London, Flautt, Vargas & Kucine (2003) found that leaders who received unfavorable feedback initially had negative reactions, but six months later they had created significantly more improvement goals than other leaders. They suggested “negative feedback may take a while to sink in or recipients may need some time to reflect and absorb the feedback” (p. 203) after the initial emotions have subsided. Brett and Atwater (2001) found that individuals who received negative feedback from bosses and peers were discouraged and angry ($r = –38$, $–.25$ respectively, $p < .01$). These same individuals also perceived the feedback as less accurate or useful. However, the impact of initial reactions seemed to lessen after several weeks, and feedback sign was not related to perceived feedback usefulness despite the emotionality surrounding the process.

Taken together, these findings suggest two things. The first is that it is important to manage the initial emotional reactions that clients have and to identify key personality traits that might exacerbate or temper these responses (e.g., narcissism, self-esteem, emotional stability). Secondly, translating awareness into goal implementations would appear to be most critical to ensure that clients translate the 360-degree feedback experience into deliberate practice of new behaviors to accentuate what they do well, acquire new habits or modify existing ones to become more effective.

New evidence suggests that perceived importance of the desired behavioral change end-point is the best predictor differentiating non-intenders from those who are successful adopters of new behavior. However, self-efficacy, perceived control and being clear about the “cons” behind behavioral change are more important in discriminating successful maintainers from unsuccessful maintainers who might relapse and fall back to their older habits and routines (Rhodes, Plotnikoff & Courneya, 2009). Finally, recent research suggested that a shift in attention from the starting point to the end point occurred halfway through the task so this might be one of the most important times for coaches to follow up with their clients (Bonezzi, Brendl, & De Angelis, 2011).

Typically, the development of expertise in a complex activity requires at least 10 years and/or 10,000 hours of deliberate practice (Ericcson, 2006). Acquiring new habits also requires repeated practice so that the new behavior is automatic (unconscious competence). To investigate the process of habit formation in everyday life, 96 volunteers chose an eating, drinking or activity behavior to carry out daily in the same context (for example 'after breakfast') for 12 weeks. They completed the self-report tracking form each day and recorded whether they carried out the behavior (Lally, Van Haarsveld, Potts & Wardle, 2010). The number of days it took for a new behavior to become "automatic" depends on its complexity (e.g., new eating habits 65 days and exercise 91 days). Participants in the study who missed the habit just once didn't seem to cause a relapse though more than once did. Of the 82 clients who saw the study through to the end, the most common pattern of habit formation was for early repetitions of the chosen behavior to produce the largest increases in its automaticity. Over time, further increases in automaticity dwindled until a plateau was reached beyond which extra repetitions made no difference to the automaticity achieved.

Organizations that implement a systemic approach to talent development with support from a manager and follow up development activities tied to performance improvement will have the most effective outcomes in leadership development (Nowack, 2009). A better understanding of the role of the manager as an important internal coach and how organizational culture influences promoting and sustaining new behavior is in need of greater exploration. The manager can reinforce and support the implementation of the development plan of the client. This is important in light of recent findings suggesting that effect sizes for transfer of management training interventions are generally low (particularly when seen by direct reports and peers) but can be improved significantly with opportunities for structured and deliberate practice over time (Taylor, Taylor, & Russ-Eft, 2009). Practitioners should focus more on implementation intentions with their clients using "if-then" goal statements to maximize behavior change commitments and planning (Gollwitzer & Sheeran, 2009).

Implications: Use of newer online goal setting and development planning/reminder systems may be promising and recent studies seem to suggest that clients are interested in using these for translating awareness from 360-degree feedback into behavior change (Rehbine, 2007). In a recent unpublished one-year longitudinal study using an online goal setting and tracking system with a major university medical center, significant behavioral change was observed by managers, direct reports, and peers on a post-program assessment (Nowack, 2011). Additionally, Martin (2010) found a positive effect on learning transfer for peer support in a corporate field environment, with peer support and encouragement mitigating a negative work climate. Martin (2010) evaluated learning transfer on 237 managers of a manufacturing company in the Midwest U.S. who participated in a leadership development program and found that leaders in a division with a more favorable climate and those reporting greater peer support showed the greatest transfer of learning but that support for peers bolstered transfer in the face of more negative work climates.

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These findings suggests that performance can be practically enhanced by using a 360-degree feedback process involving both peers as development partners and managers as performance coaches to hold clients accountable for creating and implementing a development plan based on 360-degree feedback results. Future research is required to replicate these findings about the facilitating roles of peers and managers might play in reinforcing new behaviors following 360-degree feedback programs.

Conclusions

In general, there has been a lack of attention in both research and practice in exploring ways to successfully help clients initiate and sustain new behavior with the use of 360-degre feedback (Bracken et al., 2011; Joo 2005; London & Smither, 2002). Behavior change efforts are often not linear but tend to be progressive, regressive or even static. Current findings suggest that multiple simultaneous efforts (e.g., behaviors planned to improve multiple competencies at the same time) tend to be equal or even more effective than focusing on single goals because they reinforce quick benefits (Hyman, Pavlik, Taylor, Goodrick, & Moye, 2007).

Building on intentional change theory (Boyatzis, 2008) and feedback process models of Smither et al., (2002), Gregory et al., (2008), the Enlighten, Encourage and Enable behavior change model (Nowack, 2009) was introduced to help facilitate successful goal initiation and implementation. This model (Nowack, 2009) is based on the applied theories of individual behavioral change including the theory of planned behavior (Ajzen, 1991), self-efficacy and social cognitive theory (Bandura, 1977), the health belief model (Becker, 1974), and the Transtheoretical/readiness to change model of change (Prochaska & Velcier, 1997). Each of these theories and individual change models should be useful to practitioners who are attempting to extend the utility of 360-degree feedback beyond awareness to enhanced individual, team and organizational effectiveness or impact.

Sustaining behavioral change for anyone is challenging in the most ideal situations. The evidence-based limitations of feedback interventions along with an earlier meta-analysis by Kluger & DeNisi (1996) all support the idea that enhancing awareness and effectiveness of feedback depends on a complex interplay of intrapsychic, interpersonal and organizational factors. Individual differences (e.g., personality) can impact the motivational level following feedback as well as the goal setting process. Coaches and consultants who deliver feedback or utilize 360-degree feedback interventions should become familiar with the questions and answers summarized in this paper to minimize potential harm or decrease engagement and performance following feedback and to leverage the impact of this intervention on lasting behavior change.

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Purpose and Goals	Assessment and Competencies	Process and Implementation
1. Does 360-degree feedback do more harm than good? 2. Under what conditions and for whom does 360-degree feedback become beneficial?	3. What type and how many raters should be included? 4. Do ratings between rater groups agree with each other? 5. Do ratings within rater groups agree with each other? 6. Which response scale is best for 360-degree feedback? 7. How many rating points should be on a 360-degree feedback rating scale? 8. Should a 360-degree feedback report contain a mix of graphs, charts and open-ended questions to maximize understanding?	9. Can open-ended questions be emotionally damaging to clients? 10. Does personality impact how people respond to 360-degree feedback? 11. How do you manage the feedback of under-estimators and over-estimators? 12. What kind of training or certification is required by coaches to help clients understand and interpret 360-degree feedback reports? 13. Are there cultural differences to be considered in the use of 360-degree feedback? 14. Does 360-degree feedback require debriefing? 15. How can you leverage the impact of 360-degree feedback to ensure successful behavior change?

Figure 1. 15 Key Questions about Leveraging 360-Degree Feedback.