White Paper
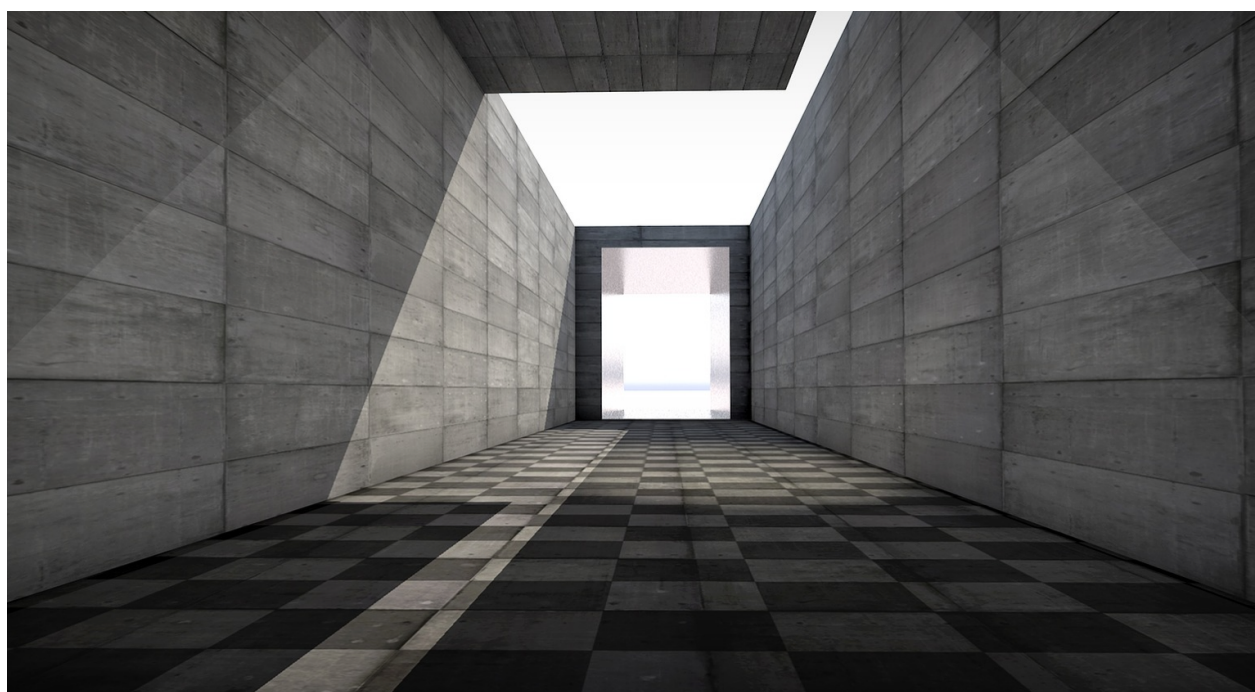
Teamstowork™
Software that makes team underperformance a thing of the past©

TeamsToWork: The background

Teamstowork™, April 2020

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Version 4

Introduction

The original idea behind the Teamstowork™ team analysis and software© was conceived in 2009. A Danish state-owned entity, taking over a large number of failing banks, also took on a significant human resource challenge: to help employees in a large-scale restructuring of their careers. This also entailed assessing many project, work and executive teams, in order to understand their competencies, motivation and behaviour. Many frameworks were tested and an idea for a framework of questions that focused on team aspects was initially applied on 24 teams. This framework of questions has since undergone several iterations in cooperation with several innovation foundations and more than 200 teams across Europe, Africa and the United States; ranging from university start-up teams to corporate project, work and executive teams, primarily within banking, consulting, education and pharma.

The framework of questions has existed since 2015, as a prototype since 2017 and in 2019 available as a SaaS solution. Results are meant to help groups achieve success by predicting outcome along with a description of its strengths, exposures and critical development requirements. The different use scenarios include

- selecting the best teams for a process or project or
- assessing and developing existing teams that face new challenges or
- matching a candidate for a job with a specific team

When applying the solution, objectives include:

- enabling more work, project and leadership teams to succeed
- predicting outcome and offering unique insight into likelihood of success
- creating more *dream teams*
- offer practical and appropriate recommendations to the 60-70% of all project, leadership and work teams which experience serious challenges.

The solution has also undergone a series of studies to examine correlations with Big 5[1] and MBTI/JTI[2] preferences along with Gordon's (GPPI, SIV, SPV)[3][4] and McClelland's[5] work on values and Belbin's role[6] characteristics along with face validity for more than 300 individual results. Team results have undergone similar examinations involving empirical Team Climate Inventory (TCI)[7] results and face validity for more than 75 groups. Strong, positive, *correlations* with traditional framework output was found – for both team and individual along with significant *face validity* results – for both team and individual.[8]

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[1] https://journals.sagepub.com/doi/abs/10.1177/0146167202289013
[2] http://www.professor.earonkavanagh.ca/article_kavanagh-reflection.pdf
[3] https://ptc.bps.org.uk/test-review/gordons-survey-personal-values
[4] https://ptc.bps.org.uk/test-review/gordons-survey-interpersonal-values
[5] https://en.wikipedia.org/wiki/David_McClelland
[6] https://onlinelibrary.wiley.com/doi/abs/10.1111/j.2044-8325.1993.tb00535.x
[7] https://onlinelibrary.wiley.com/doi/abs/10.1002/(SICI)1099-1379(199805)19:3%3C235::AID-JOB837%3E3.0.CO;2-C
[8] Statistical analysis carried out in 2010 (Finansiel Stabilitet).

The Teamstowork™ team analysis and software© are solutions appropriate for companies, organizations and consultants that want to focus on:

- Getting the right people together to run important projects
- Giving every opportunity to improve – as a work, project or leadership team
- Knowing what it takes for everyone to shine – improving individual contributions and job satisfaction

This white paper goes through the background, use and science behind the Teamstowork™ team analysis and software©. New features to the software solution were added in August 2019. These features involve registering team improvement plans directly in the Teamstowork™ software cockpit along with the possibilities of continuous and automatic follow-up and evaluation of a team's improvement. These new features are introduced in this whitepaper. A detailed description of the background, use and science of these new features will be added to the next edition of the whitepaper.

Our aim is to help the world meet its greatest challenges. Well-functioning teams will be an essential part of the solution. We hope you will find our solution relevant, accessible, affordable – and fun!

For further information on practical use, background, inspiration and terminology in both text and video, please go to www.teamstowork.com

Teamstowork™,
Copenhagen, February 25th 2020

The Promise and Peril of Teams[9]

By Anna Tavis, Ph.D.[10]

If you have ever been on a high performing team, you would know what such a team looks like. An engaged and uplifting culture makes showing up at work every day exciting. You bring your whole self to work, and your skills complement your teammates. They have your back as you have theirs. Why is it then that this kind of team is rare? Why do so many teams struggle to work well together as personalities clash? **Peter Neville**, the founder and partner of Copenhagen consultancy TEAMSTOWORK™, makes an astute observation. Given how much attention is being paid to the emergence of artificial intelligence in the workplace, aren't we neglecting the much more critical potential of learning how to work on teams? It is much more likely that teams, not AI, would solve most of our human problems. Does it make sense to refocus on teams?

The Next Generation of Teamwork[11]

By Peter Neville, MSc. Psychology

Does the emerging concept of "team" mean a fundamental shift, a paradigm change – or is it simply a rehash of something we haven't discussed for a while and therefore, just dusting off, repackaging, and commercializing the old?

Maybe teamwork, much like artificial intelligence, has reached a level of importance and inevitability that requires us to sit up and pay serious attention to the implications, values, and necessary actions required to make full use of its inherent potential?

Almost 9 out of 10 companies surveyed for a 2013 Ernst & Young report agreed that the problems confronting them were so complex that teams were becoming essential to provide effective solutions[12]. A recurring CB Insights post-mortem study shows that close to one in four of all start-up failures are due to "not having the right team" – making it number three on the list (behind running out of funds and being unable to identify a market need)[13]. However, when adding items such as "burn-out", "failure to pivot", "lacking passion" and "disharmony on team" you quickly get to a great deal more than one in four. Adding

[9] People + Strategy, spring 2018

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[11] People + Strategy, spring 2018

[12] "The power of many: How Companies use teams to drive superior corporate performance." *EY* online. 2013. http://www.ey.com/Publication/vwLUAssets/EY-The-power-of-many/$FILE/EY-The-power-of-many.pdf.

[13] "The Top 20 Reasons Startups Fail." *CB Insights*. February 2, 2018. Https://www.cbinsights.com/research/startup-failure-reasons-top/.

insights from Lancaster University[14] and Inc.[15] you quickly arrive at a heightened state of awareness: There is something rotten in the state of teams. Fragmentation, isolation, insufficient understanding of each other as team members, lack of accountability – all point to a whopping team vitamin deficiency that results in a massive loss of opportunities. The inability to capitalize on differences, create the driving force that is commitment or deliver on innovation by sharing and giving feedback leads to stress and sometimes even depression. Some say that a massive 60% of teams show symptoms of these dysfunctions.

These are things to worry about. There are, however, a range of facts that will prove helpful in finding solutions. If we truly understand that many of the complex challenges we face today must be addressed by teams rather than individuals – and that teams will help the world meet its greatest challenges – then we might also understand that innovative acts (that even robots really can't handle either) require *shared* and *collective* imagination, history, touch, timing, phrasing, understanding, connectivity and remarkable creativity. If we understand this, then we will all understand that the right team is paramount.

Science seems to get it. The 2017 Nobel Prizes fit nicely into a narrative of *next generation teams* – as it was a minimum of three *teams* that won – not the lonely genius of a single man (as it was exactly 100 years ago). No (wo) man is an island any longer. We do, however, find it challenging to trust one another (one of Google's main points as to what defines and distinguishes an effective team[16]) and also find it difficult to engage in unfiltered conflict around ideas, commit and hold one another accountable to those commitments, and to continuously focus on goals and ways of working that will increase the probability of delivering a truly great solution. Not only do we find this difficult to do once – to do this on a continuous basis is truly challenging.

Real teams are, however, excellent performers and collaborators that continue to evolve and develop over a long period of time. Needless to say, there are outside forces way beyond the scope and influence of a team that greatly affect its success (leadership, culture and market forces to name but a few). PwC recently published a survey clearly indicating that what was considered natural progressions – almost developmental certainties – only five years ago (concerning international trade agreements and the EU) have suddenly ceased to indicate any direction[17]. The world has truly become divergent. Without completely capable, effectively interacting teams, an organization cannot adapt readily in a shifting environment. Despite the common myth of anti-social behaviour in science, the arts and business, no one produces in total silence and isolation. The exchange of ideas and impressions is crucial to any complex process, and this, in the most fecund circumstances, is what a team at its best provides.

Insights into individual personality constructs have come a long way. The concepts of "me" and "you" seem strong and give us an understanding of differences and similarities that in many ways also contribute to the understanding and complexities of working in a team. We often, however, hand over our decision-making when selecting and developing teams to concepts that are based outside the realm of the collective. The team is so much more than the sum of individual constructs. The understanding of teams and teamwork will advance in ways we cannot predict – hopefully being able to keep up with an increased use of teams. A deeper understanding of what makes *you* and *me* "click" will enhance our ability to not only meet the world's greatest challenges but also to build a better world, together.

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[14] Cooper, Cary, ed. *Research Companion to the Dysfunctional Workplace* (Lancaster, UK: Lancaster University Management School, 2007.

[15] Tabrizi, Behnam. *"75% of Cross-Functional Teams Are Dysfunctional."* Harvard Business Review (June 23, 2015)

[16] Duhigg, Charles. "What Google Learned From Its Quest to Build the Perfect Team." *The New York Times Magazine*. February 28, 2016.

[17] "20th CEO Survey." PwC. 2017. Https://www.pwc.com/gx/en/ceo-survey/2017/pwc-ceo-20th-survey-report-2017.pdf.

Futurists may discuss the increased use of robots and artificial intelligence. But for the moment, we remain the most remarkable of creations – and teams, when functioning at their best, represent an augmented version of our individual selves.

The Logic Behind the Teamstowork™ team analysis and software©

By Peter Neville, MSc. Psychology & Morten Falck Larsen, M.D.

The Teamstowork™ team analysis and software© are both part of a software solution, available at

https://www.teamstowork.com. The software solution gives access to:

- The Teamstowork™ Cockpit (administrator module). This gives the administrator the ability to give access to other users, to team members and to put together teams. The cockpit contains data on individual, team and organisational levels.

- The Teamstowork™ team analysis©, an online framework of questions (also referred to as Teamq©). The framework contains 81 questions and usually takes between 15-20 minutes to complete.

- Teamstowork™ Improvement plans. This enables teams to establish improvement actions, follow up and evaluate the progress of these actions.

- The Teamstowork™ Knowledge Center. This contains descriptions of the software solution (use and background), terminology (team and individual output in the form of reports and articles). Terminology can also be accessed via hyperlinks from both team and individual reports.

The Teamstowork™ team analysis examines a team's potential by applying three overall perspectives: Creating thrust, exhibiting a specific set of effective team-related behaviours and the ability to manage conflicts in a good way. In other words, The Teamstowork™ team analysis takes aspects of team behaviour, including complementarity, conflict potential and competencies into account, when analysing the team's likelihood of success. The team is presented with an overview of its strengths, exposures and suggestions on how to increase its performance. Intended primarily as a team development tool capable of facilitating interventions in project, work, and executive teams, the use of Teamstowork™ team analysis and software© includes:

- Team assessment and development interventions
- Selection of new team members and their induction into a team
- Offering a prognosis of team success, in teams that haven't previously worked together
- Organisational diagnosis as part of organisational development interventions at team level
- Individual development as part of a team

The Teamstowork™ team analysis is self-report questionnaire. A meta-analysis[18] comparing self- and informant ratings of a person's Big Five personality traits showed that self-report means did not differ from informant-report means (average $\delta = -.038$). Teamstowork™ still emphasizes the importance of realism and an honest mindset. In other words, we encourage respondents to avoid enhancement by overstatement or exaggeration. In a team context this is both counter-productive and detectable. Questions should be answered with realism and self-awareness – even though some argue that making yourself look good is a social skill (Winsborough, 2019) (sic). The easiest way to ensure a realistic and true picture is *not* to think too long – quick answers are usually the right – and honest – ones.

The Teamstowork™ Knowledge center contains videos, tutorials and terminology linked to the Teamstowork™ team analysis and software©, including the Individual report, Team report and administration cockpit – and can be reached at https://virtual.teamstowork.com/hc/en-us.

Defining "Team"

The word team denotes a group of people working toward a common goal. However, it does not necessarily indicate *how* the individuals are working together. For example, the word *team* can be used to describe

- A large number of people spread out over many locations (e.g. the "sales team")
- A category of people doing the same type of work in one location (e.g. the "controller team" or the "customer service team")
- People working in a loosely coordinated way across different locations (e.g. a "virtual team")
- A specific work unit or people with the same manager (e.g. the "executive management team")
- People assigned to a committee, task force or project team and asked to accomplish something (e.g. the "new product team" or the "quality improvement team").

Teamstowork™ team analysis and software© is relevant to situations in which you are working with others around a common task, objective or goal, such as in a project team, everyday work group or executive team. Such situations most likely involve smaller teams of typically 4-9 people. These individuals may not be working in a team-like manner and may in fact function in ways that corrode a feeling of "team". Your use of Teamstowork™ team analysis results and software in these instances can be to understand how to function best in a collection of individuals, so that a sense of "team" might be achieved along with greater satisfaction, better decision-making and likelihood of success.

An extensive literature search and review was carried out between January 2010 and June 2011. This focused upon three main areas of research literature: organizational climate, teamworking and conflict management. Studies carried out in the UK, Continental Europe, and North America were included in this review which covered all of the main scientific journals in applied psychology, organizational psychology and management. Additionally, published textbooks, reports, manuscripts, and working papers were obtained to ensure comprehensive coverage of the research on teams at work, from Katzenbach & Smith in 1993 to the Korn/Ferry Institute in 2007 – identifying the aspects that define the "high-performing team". Most definitions of these teams included the following description:

- *3+ people*
- *working together*
- *depending on each other to reach a common goal*

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[18] k = 152 samples https://lnkd.in/gx-4Wpf

- *are excellent performers and collaborators*
- *that continue to grow over a long period of time,*
- *trust one another,*
- *engage in unfiltered conflict around ideas, and*
- *are able to commit to decisions and plans of actions, and hold one another accountable for delivering against these, and*
- *focus on the achievement of collective results,*
- *showing a high degree of goal articulation, result orientation and innovation.*

These empirically-based conclusions mean we are looking for linked, collaborative, inter-related, dynamics and integrated aspects of the team and its members – not simply for aspects of personality or differences therein. Some of the work done over the last 30 years on teams, and much of commercially successful applications, have not been integrated into psychological testing. Teams and individuals have in many instances remained separate entities and team-related knowledge and data has often been generated by tools developed to describe individuals. When applying a team-based perspective (Rubin, Plovnick & Fry in the late 1970s, Katzenbach & Smith in the early 1990s, Lafasto & Larson, West & Anderson and Hackman in the early 2000s, along with Lencioni in 2005 and the Korn/Ferry Institute in 2007), three overall factors are central when identifying effective teams:

1. Are they able to *work effectively*, displaying behaviour involving cooperation, goal articulation, result-orientation and innovation?
2. Are they able to *manage their conflicts* constructively?
3. Are they able to "move on" by creating *momentum* (thrust and animation), enabling their project or critical task to move forward, competently, to a – completed – delivery stage?

To have a predictive and generic value, we have removed aspects which reside outside the team – e.g. leadership, culture, market forces etc. The main challenge is, of course, that this is where some real team challenges and problems lie. However, without a completely capable, effectively interacting team, no company can adapt readily in a shifting environment (Donald C. Hambrick, California Management Review, Survey 1995). In other words, The Teamstowork™ team analysis and software© focuses on aspects within the realm of the team and on aspects that are more or less constant. This enables us to say something about the team, its members and completion capability potential in different contexts and even in instances where teams haven't previously worked together. This doesn't mean that the external world is irrelevant. The world *will* throw things at all teams – the better ones are simply able to duck, dive or intercept more effectively. Yes, adversity and opportunity will be part of all business endeavours and projects – great teams are, however, more often able to manage, overcome, pivot, innovate and prosper. Even though context is important to consider – to understand relevant team dynamics and outcomes – teams performing in different contexts are in many instances more similar than not (APA, 2018).

The Three Factor Theory of Completion Capability Potential

As the major literature review progressed, it became clear that there were a number of factors which were consistently found in the studies into work group functioning to be predictive of effective team performance. These factors were:

- Effective behaviour (cooperation, goal articulation, result orientation, innovation)
- Inter-relational synergy (conflict management, complementarity)
- Thrust

The term "Effective behaviour" is used to indicate whether the team has effective and efficient team behaviour when working together. The Teamstowork™ team analysis uses markers that include: *Cooperation* (respect and sense of togetherness), *Goal articulation* (common understanding and commitment to goals), *Result orientation* (no-holes-barred discussions on ideas and basic premises) and *innovation* (continuous focus on strategically important creativity and new ways of working).

The term "Inter-relational synergy" is used to describe the team's collective starting point for managing conflicts and bridging differences in value sets and inter-relational orientation (i.e. the different needs people have when working in a team). Inter-relational Synergy involves addressing and managing basic trust, conflict, degree of commitment, accountability and team result focus.

The terms "thrust" and "project stage contribution" apply to a generic four-stage project model. In other words, any given task or project is considered possible to break down into four stages, or phases, that indicate a progressive movement from start to finish. The first stage (design), is a stage that is characterized by exploring possibilities and evaluating options, followed by a stage that emphasizes setting a direction (decide), a stage that involves maintaining cohesion (drive) and, finally, a phase that involves staying focused, resisting pressure and producing high-quality output (deliver). These phases strive to describe work processes of both a project, task and agile nature and contain an indication of where the team can create most forward momentum and where it possibly loses thrust, energy or direction. The term "thrust", is, in other words, a team's combined baseline for working through four critical stages in any given task or project.

Naturally, it is a slight exaggeration to imply that all tasks and projects – whatever size or complexity they may have – can be divided into four equally important stages or that we with great accuracy are able to extract conclusions with unwavering certainty. However, feedback, correlations to climate inventories and face validity do suggest that an indication of the team's collective capacity in this area does give a recognizable and useful starting point for a discussion on the team's ability to

- ♦ Design: collect data and create a vision for potential solutions,
- ♦ Decide: set direction,
- ♦ Drive and resource the tasks and
- ♦ Deliver: keeping everything together – delivering on time and meeting goals and objectives.

In other words, teams share common tasks or projects and need to work collectively towards the same goals. To achieve their goals, teams work through these four critical stages.

Effective behaviour, Inter-relational synergy and Thrust are the three dimensions that form the framework of the Teamstowork™ team analysis and are brought together in the Completion Capability Index (CCI).

The CCI is a number between 1-100. The number is calculated by adding scores from three dimensions. The index is subsequently adjusted by comparing the scores of all three dimensions to ensure that a high score on one or two dimensions is not enough to compensate for a low score on the remaining dimension(s). Thus, a team with similar (high) scores on all three dimensions will be awarded a higher index:

$$100 - \sqrt{(100-x)^2 + (100-y)^2 + (100-z)^2} \ / \ 3$$

The CCI is calculated by looking at answers that fall into the three overall dimensions, marked x, y, and z. In the Teamstowork™ team analysis team report we have assigned these dimensions to one of two axes (x and y). The x axis contains answers or combinations of answers that relate to aspects of effective team behaviour, competencies, specific project stage contributions and the team's complementarity. The y axis contains answers or combinations of answers that relate to inter-relational aspects of teamwork.

A specific CCI is then calculated by using 100 as the ideal score and comparing answers that apply to the different categories. As mentioned earlier, teams that obtain similar scores on the measured categories are awarded slightly higher scores compared to teams that score high on some categories and significantly lower on others. A good average score is in other words not something you can come up with by combining a low with a high score.

The number itself might not have a particular importance – the description that the Teamstowork™ team analysis reports give, however, should. In other words, if one recognizes the description, one will probably understand the number (sic). The specific number should, on the other hand, give a clear indication of just how challenging working in a specific team could become. A high CCI usually means that the potential or likelihood of successful teamwork and project completion is higher than a team with a low CCI.

A lower CCI doesn't, however, mean that true grit and self-discipline won't help a team in its strive to obtain success – it does, however, indicate a likelihood that specific behaviour and competencies or a lack thereof will potentially offer up challenges and unproductive behaviour that will benefit from a discussion of just *how* the team, proactively, can compensate, train and seek assistance, if necessary.

A high CCI, on the other hand, doesn't imply that a deck chair on a cruise ship or a hammock on a sunny beach is the next natural step – high scorers will, of course, still need to work, manage challenges, confront issues etc. It just seems that little bit easier.

The results, interpretations and suggestions presented in the Teamstowork™ team analysis report and Knowledge center are offered as starting points, a set of hypotheses about team effectiveness and individual contributions. While this software application is a powerful and predictive assessment and development tool supported by years of research and theoretical development, it cannot explain all aspects of complex human behaviour or factor in external circumstances. Only the team can verify the statements and determine how well they describe the team, its members and qualify the suggestions for improved performance. Last, but not least, it is the team that will select, follow up and evaluate any development activities and improvements to its performance.

Those of us who argue for the existence of certain team and personality traits, will grant that it is risky to use a dozen or so questionnaire items to form a conclusion about the degree of a particular behaviour or tendency in a group or person. However, we can minimize that risk by careful selection, choosing only questions that all people can identify with in some way. In addition, by presenting several statements and asking which is more like the person most of the time, we can ask the respondent to subjectively rewind the tape of his or her recent life and form a judgement as to which statement is a better fit. By using carefully selected items and question formats, we can obtain valid and reliable estimates concerning how people will tend to respond – across situations that invite behaviours related to a particular personality, motivation, attitudes, beliefs, values and interests. "If personality was primarily inconsistent, the human behaviour would be primarily inconsistent." (Epstein, S., 1997, p. 14). Research suggests that although we are able to adapt (compensate) our behaviour to particular team circumstances, there is nevertheless **considerable**

consistency in our behaviour, across situations and over time (Howard, P.J., 2006). Teamstowork™ recognises that behaviour and team characteristics are always to some extent determined by current environment and circumstances. The emphasis, however, is upon those relatively stable and enduring traits and characteristics which determine differences between team members in their typical manner of relating to each other, to stakeholders, how they approach tasks and respond to challenging situations, generally. Some of the factors that affect how we behave in a team are not outwardly observable in the same way as personality is but we can sometimes gain insight into them by understanding preferences and tendencies.

Correlation, reliability and validity – the psychometric properties of the Teamstowork™ team analysis

The Teamstowork™ aims to help us predict potential performance for a team and subsequently identify the core contributions of individual team members. Our initial work concentrated on how closely sets of data were between Teamstowork™ report results and comparable applications designed to predict individual behaviour and gauge specific team behaviour and climate in existing teams. On an individual level sets of data were compared with Big 5 theory, terminology and instruments developed at the Center for Applied Cognitive Studies (*The WorkPlace Big Five ProFile*, for working adults) and found results attesting strong correlations. Data also correlated to L. V. Gordon's Survey of Personal Values (SPV) and Survey of Interpersonal Values (SIV). Prior to this work, the Teamstowork™ individual report was submitted to aspects of test reliability and validity. Reliability – the extent to which a framework of questions measures with consistency – was carried out with a sample of 117 people in 2010 and again in 2011. Work concerning the extent to which the framework measures in practice what it purports to measure in theory was carried out between 2010-2014. The case for The Teamstowork™ team analysis individual report (individual output) is also strong, as statistical analysis of 215 respondents between 2012-2014 showed strong face validity. 85% of respondents had previously been exposed to MBTI/JTI testing along with either OPQ32 or NEO PI-revised. An old issue in personality theory is whether personality comes in distinct subvarieties – personality *types* – or is best conceptualized as varying continuously along dimensions (personality *traits*) (Loehlin, 1992, p.119). The concept of the personality trait is widely accepted today – but even if many researchers reject the simplistic dichotomization expressed in the Myers-Briggs Type Indicator (MBTI) *both* perspectives offer an adequate description of the diversity of our species. In numerous face validity studies respondents were in effect able to cast fundamentalism aside and were not only able to compare results with previous descriptions (and recognize descriptions and core contributions), but also to (subjectively) assess the extent to which the output covered the concept it purported to measure.

However, in the case of the Teamstowork™ Team Report, the analyses undertaken and the statistics reported and interpreted are somewhat more complex. It must be borne in mind that the Teamstowork™ team analysis measures:

♦ group level phenomena – its completion capability potential as perceived by team members and measured by aggregate data;

♦ a construct which is measured by comparing and combining several aspects of team specific importance, such as differences/similarities in fundamental inter-relational orientation and values, complementary personality and competency "fit" along with preferred behaviour in connection with teamwork and the management of conflicts.

Nevertheless, the twin criteria of psychometric test evaluation still remain paramount – test reliability and test validity. The preceding analyses confirm the psychometric properties of the Teamstowork™ team analysis to be acceptable in terms of both its factor structure and the internal homogeneity and reliability of

its component sub-scales. But, are team members able to provide an accurate and valid depiction of facet specific completion capability potential via this self-report scale that captures individual contributions?

This question of the construct validity of the Teamstowork™ team analysis was examined in some detail by correlating subjects' self-reported contributions to a team with the results of

- the content analyses of tape-recorded team meetings of 15 teams and video-recorded team meetings of 15 teams along with
- Team Climate (TCI) and 5 Behaviour data from 52 teams.

This analysis firstly examined the correspondence between characteristics and behaviour as described by the Teamstowork™ team analysis and both verbal and non-verbal interactions coded by raters on dimensions derived from the three factor model. Secondly, data from the 52 teams was compared on two separate scales, involving aspects of team climate (West & Anderson, 1994) and dysfunctional behaviour (Lencioni, P.). Thirdly, these results were presented to the teams in question to determine face validity. On the whole, strong correlation was found between behavioural categories in all three application results and between behavioural categories in the Teamstowork™ team analysis reports and composite scales of self-reported climate and degrees of dysfunctional behaviour.

Labeling

It may be very appropriate – to paraphrase French poet and philosopher Paul Valéry – to look beyond the label to actually see what one sees. However, we simply do not have the time or energy to look freshly at everything; we must be selective, and therefore labels are a necessary shortcut. The fact that our world is full of differences requires us to develop a language to talk about them. Labels are a kind of shorthand. We should never reify a label and give it a status equivalent to that of the behaviour it refers to. But without a label, we would have no time to do many things.

Improvement plans, follow-up and evaluation as part of the Teamstowork™ software

By Peter Neville, MSc. Psychology & Michael Cleverly, CTO, Teamstowork™

Responding to a dynamic and ever-changing environment, organizations both public and private must place increasing importance on learning and skill development. Billions of dollars are already being spent annually by organizations on training and management development. In the US alone, this figure has been estimated to be from $55.8 billion to as much as $200 billion and is likely to increase[19]. Every indication is that the need for development will continue given the increasing demands on organizations to boost productivity, keep pace with technological advances, meet competitive pressures, use team-based decision-making and problem-solving, streamline processes, and retain talent. The capacity of organizations to learn,

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[19] Arthur et al., 2003; Bunch, 2007; O'Leonard, 2008; Salas and Cannon-Bowers, 2001

adapt, and change is a critical component of competitiveness. If training is to have the desired effect and sustainable impact, it must be designed to meet the needs of the learner and the organization[20].

Desired effect and sustainable impact require you ask questions that include:

- Are the objectives of the improvement understood and clearly communicated?
- Are the skills to be acquired similar or different to skills currently in use?
- Is the improvement perceived as relevant?
- Do participants believe they will have an opportunity to practice?
- Will participants receive feedback on their performance or application and have the opportunity to make appropriate adjustments?
- Are the training situations conducive to effective learning?
- Is the timing of the improvement appropriate?
- How can participants support each other during the improvement process?

Proper conduct of the improvement builds on taking the above questions into consideration. It is essential to maintain the learner's interest and motivation in the improvement – to put forth the energy required to acquire new skills, behaviors etc. In particular, learning transfer for complex decision-making tasks is enhanced by the active involvement of the learner during practice. A major reason properly designed training processes have greater success is that they improve the learner's cognitive understanding and retention of the content and build the learner's self-confidence and motivation to apply the training[21]. These cognitive and motivational components help to facilitate the transfer and maintenance of learned behaviors[22]. Studies suggest that many training and development activities are implemented on blind faith with only the hope that they will yield results[23].

Improvement plans & Follow-up

Effect and impact of an improvement process depends to a great extent on the nature and level of constraints and obstacles during the post-analysis training process – that interfere with and limit the implementation of new skills, behaviors etc. In spite of this, organizations rarely incorporate follow-up activities into their training programs[24]. Many organizations are unsure how to accomplish this. Several follow-up activities are found to be particularly useful in supporting implementation.

- Improvement plans (including actions)
- Performance assessment (including peer meetings, supervisory consultations and technical support).

Improvement plans are written documents completed immediately following an analysis that specifies how participants expect to implement skills, behaviour etc. on-the-job. These plans may be quite detailed and specific or brief and general. They frequently encompass both cognitive and behavioral components of the learning. They promote cognitive learning because they involve the learner more deeply in concepts and relationships and, thereby, promote greater insight and collateral learning. Behavioral components are

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[20] Montesino, 2002; Olsen, 1998; Rossett, 1997
[21] Colquitt et al., 2000
[22] Wexley & Baldwin, 1986
[23] Arthur et al., 2003; Broad & Newstrom, 1992; Robinson & Robinson, 1989
[24] Saks & Belcourt (2006)

involved since participants must describe the actions to be taken, consider their impact on individuals and processes, and specify how improvement will be assessed[25].

Performance assessment (including peer meetings, supervisory consultations and technical support)

Performance assessment encompasses activities undertaken to measure or observe the behavior of participants in work settings following analysis or instruction. Numerous studies have identified follow-up assessment and evaluation as important aids to promoting transfer of learning[26]. Some advocate a strong emphasis on outcome measurement to guide the design and conduct of training programs. Not only does this approach improve the program and the ability of managers to see meaningful results, learner motivation is often increased through greater understanding of expectations for change and feedback on performance. While an expressed objective of training assessment is to help managers justify the cost of programs, an important outcome of assessment activities is often greater motivation to apply skills and increased transfer.

Peer meetings are periodic meetings of participants and are sometimes facilitated by a professional staff employee or external consultant. At these meetings employees share examples of how they are implementing improvement plans, explaining impact of their application on operations and performance, and exploring barriers to application and how they can be eliminated. These meetings promote implementation by improving the participants' understanding of the material learned and by motivating action through direct encouragement and the examples given by other participants[27].
Supervisory consultations are designed to put e.g. the team leader into the role of coach or facilitator to encourage skill application. One of the most important supports for training originates from leaders and peers[28]. Leaders and peers play key roles in the post-analysis on-the-job environment by giving feedback, encouragement, reinforcement, and by providing opportunities to practice newly learned behaviors[29]. Technical support involves a variety of mechanisms established by an organization to provide information and assistance to participants.

Substantial research confirms the importance of these activities to ensure desired effect and sustainable impact. However, many organizations are uncertain how to accomplish this and practices vary widely[30]

Although these findings do not represent a rigorous test of the effectiveness of various follow-up techniques, they provide qualitative information that aids in understanding previous work on implementing change. In addition, they support previous recommendations that managers consider implementation issues in any development effort. Uncertainty reduction, self-efficacy, risk management, and motivation can be addressed through proper follow-up activities. The cost of follow-up does not have to be large to produce important gains. Action plans, peer meetings, and supervisory consultations can be implemented with minimal cost and represent good value especially given their potential to increase return on training dollars invested. This experience also suggests that time demands on managers can be minimized. Technical support and consultants can aid in performance assessment and technical support and can provide valuable feedback and implementation support while minimizing time demands on participants.

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[25] Broad & Newstrom, 1992; Tannenbaum & Yukl, 1992
[26] Salinger & Deming, 1982; Tyson & Ward, 2004; Yorks et al., 2007
[27] Baldwin & Ford, 1988; Tannenbaum & Yukl, 1992
[28] Cromwell & Kolb, 2004
[29] Baldwin & Ford, 1988; Ford et al., 1992; Kraiger et al., 2004; Tannenbaum & Yukl, 1992
[30] Hutchins, 2009

Given the potential improvements to operations, morale and job satisfaction, every improvement process should have a strategy for promoting implementation. The techniques considered here work to improve cognitive understanding and willingness to make behavioral changes on-the-job. Follow-up activities easily pay for themselves not only in direct operational improvement but also in terms of enhanced morale, job satisfaction and communication.

Evaluation

One of the most vague and unsatisfactory aspects of improvement processes is the evaluation of their effectiveness. The attempt to obtain feedback on the effects of an improvement process (development or training program), and to assess the value in the light of that feedback: Were expected results achieved, what was the impact, (both intended and unintended), is there continued relevance and are there alternatives or more cost-effective ways of achieving expected results? In other words, evaluation can be described as a control function that enables you to conclude whether or not the result was worth the effort and what improvements are required to make it even more effective. Establishing a framework for this feedback involves:

- Selecting measures
- Gathering information based on those measures
- Comparing what participants learn to some standard, goal, or expectation

Seldom are training programs rigorously evaluated to determine their effect on the behavior or job performance of participants. One of the more optimistic estimates suggests that no more than 15 percent of learning actually transfers to the job[31]. Other studies of transfer rates find they typically average only in the 10-40 percent range[32]. Therefore, it is important to explore methods that encourage transfer of learning in order to achieve greater training impact. Why should we bother to evaluate our training? Well, we would effectively be blindfolding ourselves by not doing so! Gathering feedback and data on what participants thought of the training, how they performed in the assessments that were part of the process, and how they were able to transfer that training into everyday work-life, will enable you to identify ways in which improvements can be made. We all have a drive to continuously improve the way we do business. Improving the training that we deliver is one thing, but are we sure that we've focused on the right things? Evaluating the results and effects of an improvement process enables us to check if we are effectively equipped with the right knowledge, skills and behavior. Continuing to train people on knowledge, skills and behavior that are obsolete is simply a waste of time. Letting people leave improvement processes with gaps in their knowledge, skills and behavior can, at best, limit productivity, creativity and innovation. At worst, it can be dangerous.

In order to ensure that improvement processes remain aligned with business objectives, you'll need to measure its output in some way. You might intuitively know that you are getting your development right, but can you prove it? Do you have management data that is valuable and useful – providing a strong body of evidence? If so, this will potentially not only reduce training budgets but also improve the way you do business.

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February, 2020

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[31] Cromwell & Kolb, 2004
[32] Baldwin & Ford, 1988; Burke & Hutchins, 2007; Fitzpatrick, 2001; Ford & Kozlowski, 1997

References

Arthur, W., Bennett, W., Edens, P.S. and Bell, S.T. (2003), "Effectiveness of training in organizations: a meta-analysis of design and evaluation features", Journal of Applied Psychology, Vol. 88 No. 2, pp. 234-45.

Baldwin, T.T. and Ford, J.K. (1988), "Transfer of training: a review and directions for future research", Personnel Psychology, Vol. 41 No. 1, pp. 63-105.

Broad, M.L. and Newstrom, J. (1992), Transfer of Training: Action-packed Strategies to Ensure Payoff from Training Investments, Addison-Wesley, Reading, MA.

Bunch, K.J. (2007), "Training failure as a consequence of organizational culture", Human Resource Development Review, Vol. 6 No. 2, pp. 142-63.

Burke, L.A. & Hutchins, H.M. (2007), "Training transfer: an integrative literature review", Human Resource Development Review, Vol. 6 No. 3, pp. 263-96.

Broad, M.L. & Newstrom, J. (1992), Transfer of Training: Action-packed Strategies to Ensure Payoff from Training Investments, Addison-Wesley, Reading, MA.

Colquitt, J.A., LePine, J.A. & Noe, R.A. (2000), "Toward an integrative theory of training motivation: a meta-analytic path analysis of 20 years of research", Journal of Applied Psychology, Vol. 85 No. 5, pp. 678-707.

Cromwell, S.E. & Kolb, J.A. (2004), "An examination of work-environment support factors affecting transfer of supervisory skills training to the workplace", Human Resource Development Quarterly, Vol. 15 No. 4, pp. 449-71.

Epstein, S. (1997, March),"This I Have Learned from Over Forty Years of Personality Research." Journal of Personality and Social Psychology, 65(1), 3-32,

Fitzpatrick, R. (2001), "The strange case of the transfer of training estimate", The Industrial-Organizational Psychologist, Vol. 39 No. 2, pp. 18-19.

Ford, J.K. & Kozlowski, S.W.J. (Eds) (1997), Improving Training Effectiveness in Work Organizations, Lawrence Erlbaum, Mahwah, NJ.

Ford, J.K., Quinones, M., Sego, D. & Sorra, J. (1992), "Factors affecting the opportunity to perform trained tasks on the job", Personnel Psychology, Vol. 45 No. 2, pp. 511-27.

Howard, P.J. (2005), "The Professional Manual for the WorkPlace Big Five ProFile 3.0", Charlotte, NC: Center for Applied and Cognitive Studies.

Hutchins, H.M. (2009), "In the trainer's voice: a study of training transfer practices", Performance Improvement Quarterly, Vol. 22 No. 1, pp. 69-93.

Kraiger, K., McLinden, D. & Casper, W.J. (2004), "Collaborative planning for training impact", Human Resource Management, Vol. 43 No. 4, pp. 337-51.

Loehlin, J.C. (1992), "Genes and environment in Personality Development." Thousand Oaks, C.: Sage.

Montesino, M.U. (2002), "Strategic alignment of training, transfer-enhancing behaviors, and training usage: a post-training study", Human Resource Development Quarterly, Vol. 13 No. 1, pp. 89-108.

O'Leonard, K. (2008), The 2008 Corporate Learning Factbook: Benchmarks, Facts, and Analysis in US Corporate Learning and Development, Bersin and Associates, Oakland, CA.

Robinson, D.G. & Robinson, J.C. (1989), Training for Impact: How to Link Training to Business Needs and Measure the Results, Jossey-Bass, San Francisco, CA.

Saks, A.M. & Belcourt, M. (2006), "An investigation of training activities and transfer of training in organizations", Human Resource Management, Vol. 45 No. 4, pp. 629-48.

Salas, E. & Cannon-Bowers, J.A. (2001), "The science of training: a decade of progress", Annual Review of Psychology, Vol. 52, pp. 471-99.

Salinger, R.D. & Deming, B.S. (1982), "Practical strategies for evaluating training", Training and Development Journal, Vol. 36, August, pp. 20-26, 28/29.

Tannenbaum, S.I. and Yukl, G. (1992), "Training and development in work organizations", Annual Review of Psychology, Vol. 43, pp. 399-441.

Tyson, S. & Ward, P. (2004), "The use of 360-degree feedback technique in the evaluation of management development", Management Learning, Vol. 35 No. 2, pp. 205-23.

Wexley, K.N. & Baldwin, T.T. (1986), "Post-training strategies for facilitating positive transfer: an empirical exploration", Academy of Management Journal, Vol. 29 No. 3, pp. 503-20.

Yorks, L., Beechler, S. & Ciporen, R. (2007), "Enhancing the impact of an open-enrollment executive program through assessment", Academy of Management Learning and Education, Vol. 6 No. 3, pp. 310-20.