The differential effects of solution-focused and problem-focused coaching questions: a pilot study with implications for practice

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Abstract

Purpose – The purpose of this paper is to explore the differential effects of problem-focused and solution-focused coaching questions by means of a literature overview and results of an exploratory pilot study.

Design/methodology/approach – In a problem-focused coaching session 39 participants complete a range of measures assessing self-efficacy, their understanding of a problem, positive and negative affect, and goal approach. They then respond to a number of problem-focused coaching questions, and then complete a second set of measures. The 35 participants in a solution-focused session complete a mirror image of the problem-focused condition, responding to solution-focused coaching questions, including the “Miracle Question.”

Findings – Both the problem-focused and the solution-focused conditions are effective at enhancing goal approach. However, the solution-focused group experience significantly greater increases in goal approach compared with the problem-focused group. Problem-focused questions reduce negative affect and increase self-efficacy but do not increase understanding of the nature of the problem or enhance positive affect. The solution-focused approach increases positive affect, decreases negative affect, increases self-efficacy as well as increasing participants’ insight and understanding of the nature of the problem.

Practical implications – Solution-focused coaching questions appear to be more effective than problem-focused questions. Although real-life coaching conversations are not solely solution-focused or solely problem-focused, coaches should aim for a solution-focused theme in their coaching work, if they wish to conduct effective goal-focused coaching sessions that develop a depth of understanding, build self-efficacy, reduce negative affect, increase positive affect and support the process of goal attainment.

Originality/value – This is the first study to explore this issue.

Keywords Solutions, Coaching, Problem solving

Paper type Research paper

Introduction

Coaching is increasingly being used as a means of enhancing performance, development and well-being, and effective questioning lies at the very heart of the coaching conversation. But what constitutes “effective” questioning in coaching? Should such questions should primarily be focused on analysing problems and exploring unhelpful thinking patterns (Neenan, 2008), or should they be focused on constructing solutions (Berg and Szabo, 2005)? To date there has been no research on this issue. In this paper, in order to better inform coaching practitioners and trainers, we present a brief overview of the literature and the results of a pilot study which examined the relative impact of problem-focused and solution-focused coaching questions on individuals’ levels of understanding, self-efficacy, affect and goal approach.

Coaching is generally understood as being a collaborative, action-oriented conversation that facilitates the enhancement of life experience, goal attainment, self-directed learning
and performance in the coachee’s professional and/or personal life (Spence and Grant, 2007). Given the above conceptualisation of coaching, coaching questions that are truly effective should have the effect of enhancing motivation, developing understanding, increasing positive affect and self-efficacy for change, as well as helping the coachee to move closer towards their goals or objectives. But what is the best way to create such effects?

**Solution-focused approaches: asking “how to?”**

Many coaches will be familiar with the “ask–tell matrix” first popularised by Whitmore (1992). The matrix consists of two orthogonal dimensions – an “ask–tell” dimension and a “how-why” dimension (see Figure 1) – and this provides a useful framework for discussing the differences between solution-focused and problem-focused coaching questions.

Solution-focused approaches to coaching emphasise the importance of keeping the coaching conversation focused on the “asking how to” quadrant (see Figure 1). The solution-focused approach posits that coaches should spend most of the time asking questions that elicit thoughts from the coachee about how to best attain their goals, rather than asking “why” questions that explore causality. The underpinning theory here is that one does not need to know the aetiology of a problem in order to be able to construct solutions and move towards goal attainment. Indeed, some solution-focused proponents would argue that problem exploration can have a detrimental effect on the coachee (Jackson and McKergow, 2002).

Although the research into solution-focused approaches is still young (Corcoran and Pillai, 2009), there is emerging support for its effectiveness. Recent meta-analyses of counselling applications of solution-focused brief therapy (SFBT) found that SFBT demonstrated positive effects (Kim, 2008; Stams et al., 2006). There is also a growing interest in using solution-focused approaches in non-therapy areas. Bell et al. (2009) reported on a successful solution-focused intervention designed to reduce golfers’ putting yips (e.g. jerk in the putting stroke). Visser and Butter (2008) found solution-focused approaches in organisational coaching and consultancy to be strongly associated with success. In addition there are an increasing number of books that outline solution-focused approaches to organisational and personal coaching (Grant, 2006; Jackson and McKergow, 2002; Szabo and Meier, 2009).

**Asking “why?”: understanding the essence of the problem**

In the problem-focused approach the underpinning assumption is that the coachee needs knowledge of the problem aetiology in order to gain the understanding necessary for goal progression. In this approach the coaching conversation is more focused on the “asking
why” quadrant (see Figure 1). There are a range of theoretical frameworks that can be used in problem-focused interventions, including root cause analysis (e.g. Wilson et al., 1993) and psychodynamic approaches (e.g. Kilburg, 2004).

With regard to coaching and related helping modalities, cognitive-behavioural theory (CBT) is perhaps one of the more common theoretical frameworks associated with a problem-focused approach. Cognitive-behavioural theory rests on the notion that problematic emotions and behaviours stem primarily (although not exclusively) from cognitive processes, and that such problems can be solved by understanding how such thoughts arise, and then systemically changing one’s thinking patterns, behaviours, and by also changing the environment where possible (Froggatt, 2006). The kinds of questions that stem from a CBT approach would ask about the origin and chronology of the problem, would seek to uncover details of the thoughts associated with the problem, and would explore the impact of those thoughts on the individual. There is a considerable amount of research both clinical, counselling and organisational settings showing that the CBT approach can be highly effective with a wide range of problems (Ost, 2008; Proudfoot et al., 2009).

The aims of the current study

Our aims were to examine the impact of problem-focused and solution-focused coaching questions and to determine which is more effective. To this end we conducted a pilot study that was designed to emulate a problem-focused and a solution-focused interaction within a coaching session. That is, we did not conduct a whole coaching session; rather, we asked a series of problem-focused and solution-focused coaching questions.

Method

Participants

Participants were 39 mature-age students in postgraduate courses in the Faculties of Science and Economics and Business at an Australian University who participated as part of course requirements.

Measures

Positive and negative affect were measured using a 12-item version of the Positive and Negative Affect Scale (PANAS; Watson et al., 1988). Positive affect descriptors were “happy”, “inspired”, “cheerful”, “pleased”, “enthusiastic” and “determined”. Negative affect descriptors were “angry”, “downhearted”, “anxious”, “frustrated”, “irritable” and “dissatisfied with self”. Participants indicated the degree “that best reflects the way you feel right now”.

Self-efficacy was assessed with the single item “Right now I feel very confident that I know how to solve this problem”.

Understanding of the problem was assessed with the single item; “I understand the nature of this problem”.

All the above questions used a six-point response scale (1 = very slightly or not at all; 6 = extremely).
Goal approach was assessed by asking the participants to “please rate how close you feel you are to actually solving this problem right now”. Participants responded on a 0-100 per cent point scale where 0 per cent represented “not solved at all” and 100 per cent represented “completely solved”.

Procedure

Both problem-focused and solution-focused sessions were conducted in a group setting using a self-coaching format. Both sessions were 30 minutes long.

**Problem focused coaching session.** Participants described a real-life problem, completed the measures, responded to a series of coaching questions designed to elicit problem-focused and self-reflective thinking, and then completed a second set of measures identical to the first set.

Participants responded to the following request:

Please take five minutes to write about a problem that you have that you would like to solve. It should be one that is frustrating for you and one that you have not, as yet, been able to solve. This problem should be real and personal, but something you feel comfortable sharing about. It might be a dilemma, that is a situation in which you feel caught between two or more possible courses of action, or a situation that you don’t feel like you have a good deal of insight into.

Participants then completed the pre-session measures. Following this, the participants were then asked to respond to the following questions:

1. How long has this been a problem? How did it start?
2. What are your thoughts about this problem?
3. How do you react when you have those thoughts?
4. What impact is thinking about this issue having on you?

These questions were selected because they focus the respondent's attention on the problem, and it has been argued that doing so leads to insight and the “ahh” experience (Jung-Beeman et al., 2008). Participants then completed the post-session measures. Participants did not have access to their previous responses.

**Solution-focused coaching session.** One week after the problem-focused session was held, a solution-focused session was conducted. The solution-focused session was designed to be a mirror image of the problem-focused session. Participants described a different real-life problem and then completed the measures. They then responded to a series of coaching questions designed to elicit solution-focused thinking and then finally completed a second set of measures identical to the first. Participants where then asked to respond to the following solution-focused questions:

Think about a possible solution to the problem you have just described. Now, imagine the solution had somehow “magically” come about. Describe the solution.

Describe some ways you could start to move towards creating this solution.

What are your thoughts about this solution?

How do you react when you have these thoughts?

What impact is thinking about this solution having on you?

These questions were selected because they focus the respondent's attention on possible solutions and encourage the formation of positive intentions rather than fostering a problem-focused self-reflective process (e.g. de Shazer, 1994). Participants then completed the post-session measures. Participants did not have access to their previous responses.

Results

Paired t-tests were used to examine the impact of the coaching sessions with in each group. An independent sample t-test was used to examine the difference in goal approach. Alpha was set at 0.05. All p-values are two-tailed. There were no significant differences between groups on any pre-coaching measures.
Problem-focused coaching session

Thirty-nine participants completed the questionnaires. Means, standard deviations and difference in pre-post scores are presented in Table I.

There was no significant differences in pre-post scores for positive affect ($t(1, 38) = 1.83; NS$). However, there was a significant decrease in negative effect ($t(1, 38) = 2.31; p = 0.02$). There was also a significant increase in self-efficacy ($t(1, 38) = 3.07; p = 0.004$). Unexpectedly, there was no change for the item “I understand the nature of this problem” ($t(1, 38) = 1.92; NS$). However, there was a significant increase in goal approach ($t(1, 38) = 3.22; p = 0.003$). The mean goal progression increased from 45 per cent to 50.94 per cent following the problem-focused coaching questions.

Solution-focused coaching session

Thirty-five participants completed the questionnaires (four participants were absent). Means, standard deviations and difference in pre-post scores are presented in Table I.

There was a significant increase in pre-post scores for positive affect ($t(1, 34) = 3.58; p = 0.001$) and a significant decrease in negative effect ($t(1, 34) = 2.56; p = 0.015$). There was also a significant increase in self-efficacy ($t(1, 34) = 3.66; p = 0.001$). There was an increase for the item “I understand the nature of this problem” ($t(1, 34) = 2.61; p = 0.01$). There was a significant increase in goal approach ($t(1, 34) = 6.08; p < 0.001$). The mean goal progression increased from 41.12 per cent to 56.29 per cent following the solution-focused coaching questions.

Comparing increases in goal approach scores

Although both problem and solution-focused sessions increased participants’ goal approach scores, a comparison of the pre-post difference scores for the two groups indicated that the increases in the solution-focused group were greater than the increases for the problem-focused group ($t(1, 65) = 3.35; p = 0.001$). The solution-focused group’s goal approach scores increased on average 16.00 per cent compared to the problem-focused group’s mean increase of 5.94 per cent (see Table II and Figure 2).

Discussion

Both the problem-focused and the solution-focused sessions were effective at enhancing goal approach. However, a comparison of the pre-post difference scores for the two groups...
indicated that the increases in the solution-focused group were significantly greater than the increases for the problem-focused group. The solution-focused group’s goal approach scores increased on average 16.00 per cent compared to the problem-focused group’s mean increase of 5.94 per cent (see Table III and Figure 3). Thus in terms of goal approach, it would appear that the solution-focused approach was superior to the problem-focused condition.

The problem-focused questions: asking “why?” reduces negative affect

The problem-focused coaching questions were effective at reducing negative affect and enhancing self-efficacy. However, positive affect did not change and this finding is in accord

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![Figure 2](image)

![Figure 3](image)
with past research which has found that expressing one’s problems can be cathartic and reduce negative affect (Pennebaker et al., 1990).

The differential effect on positive and negative affect seen in the present study illustrates the important of using a full range of assessments in coaching interventions; assessments that span both the “negative” and the “positive” range. As in this case, coaching may reduce negative feelings but not actually enhance positive feelings or wellbeing, and without a broad approach to measurement the true impact will not be observed (for a useful discussion on this point, see Keyes, 2005).

The problem-focused approach was also effective in increasing goal approach: in merely thinking about the problem and thinking about their associated thought processes, participants felt as if they had moved closer to their goal. This is especially noteworthy given that participants did not write about any goal approach behaviours or formulate any action steps.

It is surprising that the self-reflection inherent in the problem-focused questioning did not lead to increased understanding of the nature of the problem itself. One would expect that reflecting on the problem would lead to an increase in understanding of that problem; but this was not the case. Furthermore, there was no significant relationship between understanding of the nature of the problem and goal progression ($r = 0.044; \text{NS}$), suggesting that an understanding of the nature of the problem is not necessary for goal progression.

The solution-focused questions: asking “how to?” feels more positive

The solution-focused coaching questions impacted on a greater number of variables than the problem-focused questions, and the solution-focused approach increased participants’ insight and understanding of the nature of the problem. In addition, there was a significant increase in positive affect, which was not evident in the problem-focused condition. Thus, in relation to emotional impact, and arguably in general, the solution-focused approach appeared to be superior to the problem-focused approach.

Past research supports this pilot study’s findings. In the only prior study to have compared specific solution-focused techniques to problem-focused approaches, Wehr (2009) asked participants to focus on a specific personal problem that they would like to solve. Subsequently one group generated exceptions to the problem and the other group generated examples of problems. Following this, participants in the solution-focused group felt significantly better than those in the problem-focused group. Furthermore, when a similar study was conducted over a period of one week, memory recall task participants in the solution-focused group recalled more successful situations than problem situations, and the solution-focused group recalled significantly more successful situations than the problem-focused group. In addition, the solution-focused group had higher levels of confidence in their ability to deal with the problem (Wehr, 2009).

In both Wehr (2009) and the present study, solution-focused approaches were associated with greater levels of positive affect. Isen (1987) notes that individuals in a positive mood react more cooperatively and show greater insight and more adaptive responses in social situations. It may be that the positive affect associated with the solution-focused approach facilitates the development of understanding, and this is an important point for practitioners to bear in mind.
Implications for practice

This paper has some useful implications for practitioners. We suggest that coaches aim for a solution-focused theme in their work with clients. This is not to say that we should ignore the existence of problems: solution-focused does not mean problem-phobic! In reality, problem-focused and solution-focused approaches overlap, coaching conversations are not solely solution-focused or solely problem-focused. Coaches move between these approaches to best meet the needs of the coachee. Many clients want to talk about their problems. Having the time and space to talk about problems can be cathartic, and stopping them from doing so can alienate them. Indeed, just thinking about problems seems to help coachees move towards their goal. However, and this is an important point for coaches, consultants and trainers to bear in mind, although a problem-focused approach may reduce negative feelings, it may not increase positive feelings: we of course assume that it is important that clients feel energised by their coaching sessions.

Limitations of the present study and future research

In a pilot study such as this there are inevitable limitations and these should be taken into account in interpreting the findings. Firstly, the sample size is somewhat small. While sample sizes of thirty-nine and thirty-five are sufficient to detect medium to large effect sizes in within-subject designs they may be on the small size in terms of producing reliable correlational statistics (Cohen, 1992). We recommend that further research use larger sample sizes. Secondly, the participants in the study took part as part of their course requirements. It would be useful to replicate this study using actual coachees, rather than mature age students. Thirdly, the measures are purely self-report. Future research could use objective behavioural indicators of goal progression in addition to the self-report measures used in the present study. Fourthly, because the participants completed the exercises one week apart, the results of the solution-focused session may be partly due to a practice effect as the participants had done a similar exercise one week before. Despite these limitations, this paper has given some insights into how to ask more effective questions in coaching and will hopefully provoke further work along these lines.

Summary

Although both problem-focused and the solution-focused conditions are effective at enhancing goal approach, the solution-focused group had significantly greater increases in goal approach compared to the problem-focused group. Problem-focused questions reduced negative affect and increased self-efficacy. However, the solution-focused questions were overall more effective, providing the same benefits as the problem-focused condition while also increasing positive affect and participants’ understanding of the nature of the problem. Overall it seems that while both problem-focused and solution-focused questions are effective, generally, solution-focused coaching questions are more effective than problem-focused questions. Thus, we suggest that coaches aim for a solution-focused theme in their coaching work if they wish to conduct effective goal-focused coaching sessions that build self-efficacy, reduce negative affect, increase positive affect and support the process of goal attainment.

Coaching is becoming increasingly established as a positive change methodology. However, there is still much to learn about what constitutes effective coaching practice and how coaching works. This paper represents a small step in developing such knowledge, and
we look forward to further research that uncovers the psychological mechanics of successful coaching practices.

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