THE EFFECT OF SOLUTION-FOCUSED VERSUS PROBLEM-FOCUSED QUESTIONS: A REPLICATION

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In therapeutic conversations, questions can be considered as interventions in their own right. This study is a cross-cultural replication of Grant (Journal of Systemic Therapies, 2012, 31, 2, 21) study on the effects of different types of questions on various clinically relevant variables. A total of 204 students of a Spanish university described a real-life problem that they wanted to solve and were then randomly assigned to either a solution-focused or a problem-focused questions condition. Before and after answering the questions, they completed a set of measures that assessed positive and negative affect, self-efficacy, and goal attainment. Solution-focused questions produced a significantly greater increase in self-efficacy, goal approach, and action steps than problem-focused questions, and a significantly greater decrease in negative affect, providing further empirical support to solution-focused practices.

Questions have a long tradition in the field of family therapy. Initially, they were only used as a way to gather information on which to build in-session interventions and homework tasks in order to change the interactions in the family (Haley, 1976; Minuchin, 1974). The interactional focus of questions in family therapy was different than in individual therapy, but their intent was still basically to seek information to assist therapists in making correct assessments. The Milan Associates (Selvini-Palazzoli, Boscolo, Cecchin, & Prata, 1980) were the first family therapists to explicitly describe questions as interventions in their own right, as an effective way to introduce news of difference into the family system. This line of thought was further developed by Tomm (1987) who proposed a special type of questions, reflexive questions, specifically designed to unleash recursive changes in the embedded meanings constructed by families in therapy.

The therapeutic role of questions in family therapy became even more relevant with the constructionist wave that immersed psychotherapy by the end of the eighties (Gergen, 1985). Seen from this perspective, questions were considered to be the most appropriate means to cooperate with families in the co-construction of new meanings, more respectful and coherent with the new epistemology than using directives, paradoxical injunctions or simply straightforward homework task to bring about change. Within this new paradigm, solution-focused brief therapy (SFBT; de Shazer, 1991, 1994; de Shazer et al., 2007) not only considers therapeutic questions the most important therapeutic tool, as an effective means to bring about changes in the therapy room but also provides a number of well-described sets of solution-focused questions that can be used to that end: the Miracle Question, Pretreatment Change Questions, Scaling Questions or Coping Questions (DeJong & Berg, 1998; de Shazer, 1991, 1994). Problem-focused questions tend to focus on
the origin and determinants of problems and aim to help clients gain insight about their causes. In contrast, solution-focused questions promote conversations on resources, goals, and small steps to reaching them; their aim is to move clients in the direction of building their own solutions. It has been suggested that questions have an interactive impact on conversations in therapy because of their implicit presuppositions (McGee, 1999; McGee, Del Vento, & Bavelas, 2005). For instance, to ask “What is better since our last session?” presupposes that the client has improved. To ask, “Have there been any improvements since our last session?” presupposes that the client may or may not have improved (Herrero de Vega & Beyebach, 2004).

Solution-focused therapy is showing promising results in controlled effectiveness studies with a variety of populations and in a great variety of settings (Gingerich & Peterson, 2012; Kim, 2008; Stams, Dekovic, Buist, & de Vries, 2006), including family therapy (Eakes, Walsh, Markowski, Cain, & Swanson, 1997; Zimmerman, Jacobsen, MacIntyre, & Watson, 1996). In fact, solution-focused therapy is one of the three approaches (together with Bowen family systems theory and cognitive-behavioral therapy) most often cited by North American family therapists as a perspective “valuable to their work” (Bradley, Bergen, Ginter, Williams, & Scalise, 2010). However, there is only limited evidence comparing the effects of solution-focused questions versus problem-focused questions on intermediate and/or final therapeutic outcomes (Beyebach, 2014; Richmond, Smock, Bischof, & Sauer, 2014). One exception is the study undertaken in Australia by Grant (2012), directly comparing the effect of solution-focused versus problem-focused questions on a range of variables relevant to therapeutic change: positive and negative affect, self-efficacy, self-rated goal approach (perceived closeness to the goal), and action planning toward the desired goal. In the Grant study, solution-focused questions produced an increase of positive affect and of self-efficacy of clients, and a decrease of negative effect. Problem-focused questions did not have an impact on these variables. Furthermore, participants in the solution-focused questions condition increased their self-rated goal approach more than those in the problem-focused condition, and generated more action steps to reach their goals. However, as is unfortunately the case with most of the research on solution-focused therapy (Franklin, Trepper, Gingerich, & McCollum, 2012), these results have not been replicated.

The goal of this article was to provide a cross-cultural replication of Grant (2012) findings on the differential impact of problem- versus solution-focused questions, using a European, Spanish-speaking nonclinical sample. Given that therapeutic questions are language- and culture-bound (Falender, Shafransky, & Falicov, 2014), it is important to test whether Grant’s results hold in a different culture and in a different language.

We believe that Grant’s research design, a randomized analogue study, is especially appropriate to examine the therapeutic effect of language. Naturalistic therapy process-outcome studies use treatment groups that differ in many uncontrolled variables, and are plagued by the problem of responsiveness—the logical tendency of therapists to adjust their reactions to the responses of each of their clients (Stiles, Honos-Webb, & Surko, 1998). Analogue studies do not have these problems, but the generalizability of findings to real therapy settings is problematic. For this reason, we see analogue and direct therapy studies as synergic strategies that address how language works in therapy. In replicating Grant’s study, we expected to add to the evidence base for the use of solution-focused questions in family therapy. This line of research is complementary to that of microanalysis (De Jong, Bavelas, & Korman, 2013; Korman, Bavelas, & De Jong, 2013; McGee et al., 2005), which describes the impact of questions, considered as events in a social discourse, by carrying out functional analyses of the impact they have in real therapy sessions.

METHOD

Participants

Participants were 204 students of a Spanish university, 107 nursing students, and 97 psychology students. Mean age was 20.5 years ($SD = 5.02$ years), with 57 males and 168 females. 92.2% were single, 7.4% were married or living with a couple partner, and 0.5% were divorced.

Instruments

To replicate Grant’s (2012) study, the same variables and measures were used.
Affect was measured with the Spanish version (Sandín et al., 1999) of the Positive Affect and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988), a well-established instrument with excellent psychometric properties in both U.S. and Spanish samples (Sandín et al., 1999; Watson et al., 1988), that has shown robust correlations with measures of depression and anxiety (Robles & Páez, 2003; Sandín, 2003). The instrument has 20 items using a 5-point response scale (1 = slightly or not at all; 5 = very much), 10 items belong to the subscale of Positive Affect (e.g., “happy”, “positive”, “optimistic”) and the other 10 to the subscale of Negative Affect (e.g., “angry”, “frustrated”, “annoyed”). Participants were asked to choose the number that better reflected, “how you feel right now.” In our study, internal consistency was adequate, with Cronbach’s alpha .87 for Positive Affect and .82 for Negative Affect.

Self-efficacy was defined as a person’s belief in his or her ability to complete a task or solve a problem. It was measured with a composite score derived from three items designed by Grant: “Right now I feel very confident that I know how to solve this problem,” “Right now I feel very confident I can deal with this problem,” “I am confident that I can find a solution to this problem right now.” Each of them was responded on a 6-point scale (1 = totally disagree; 6 = totally agree). The three items were translated and adapted to Spanish by a bilingual professional. They were back-translated into English to confirm the accuracy of the translation. In our study, Cronbach’s alpha for the Spanish self-efficacy measure was .94.

Goal Approach was measured as participants’ rating of their closeness to their goals. The question asked was “rate how close you feel right now to your goal of actually solving this problem.” Participants responded on a 0- to 10-point scale where 0 represented “not solved at all” and 10 represented “completely solved.” This question was also translated and adapted to Spanish by a bilingual professional and back-translated into English to confirm the accuracy of the translation.

Action Steps were the specific behavioral steps that participants could take to move toward their goal. At the end of the experiment, participants were asked to list up to 20 action steps that they could take to help to reach their goal of solving the problem. If they could not think of any steps, they were to answer 0.

Procedure
Participants were randomly assigned to either the problem-focused (n = 102) or the solution-focused (n = 102) conditions. Both groups were equivalent in age: t(202) = −0.879 p = .381, gender: $\chi^2(1) = 0.464 p = .496$, and marital status: $\chi^2(2) = 2.752 p = .253$.

In both conditions, participants were invited to describe a real personal problem they were facing, as follows:

Please take between 5 and 10 min to think and write about a problem that you have that you would like to solve. It should be one that you are worried about and you have not been able to solve. This problem should be real and personal, but something you feel comfortable sharing. 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 like.

Participants then completed the first set of online measures, which assessed their levels of positive and negative affect, self-efficacy, and goal approach (Time 1). Then, they responded in detail to a series of online questions, designed by Grant (2012) to represent either the problem-focused or the solution-focused conditions.

The questions in the problem-focused condition were selected by Grant to focus the respondent’s attention on the problem and to elicit insights associated with problem solving (Jung-Beeman, Collier, & Lounios, 2008). The problem-focused questions were the following:

- “How long has this been a problem?”
- “When did it start?”
- “Why do you think this is being a problem?”
- “What are your thoughts on this problem?”
- “How do you feel when you have these thoughts?”
- “What impact can it have been thinking about this problem have in your life?”

Solution-focused questions were selected on the basis of a review of solution-focused literature (de Shazer, 1988, 1991, 1994; DeJong & Berg, 1998; Furman & Aholà, 1992). They were designed...
by Grant to focus participants’ attention on possible solutions and to encourage the formation of positive intentions rather than fostering a problem-focused self-reflective process. In our study, we substituted Grant’s first question (“Think about a possible solution to the problem you have just described. Now, imagine the solution had somehow ‘magically’ come about. Describe the solution”) for a more fully developed Miracle Question (de Shazer, 1991):

Imagine that this night you go to sleep and while you are sleeping a sort of ‘miracle’ happens and the problem you have just describe is solved. Describe in as much detail as possible how you would notice the next morning that this ‘miracle’ has happened. What would you be doing differently?

The other four questions were as follows:
- “Describe some steps you could start to take to start solving the problem”
- “What are your thoughts about this solution?”
- “How do you feel when you have these thoughts?”
- “What impact can to have been thinking about these solutions have in your life?”

After responding these questions, participants in both conditions completed a second set of measures of positive and negative affect, self-efficacy, and goal approach (Time 2). They then listed any action steps they could think of that they could take to reach their goal to solve the problem.

Analyses

To evaluate the impact of problem-focused versus solution-focused questions, data were analyzed using a 2 × 2 repeated-measures analysis of variance (ANOVA), with one between-subjects factor (problem-focused vs. solution-focused condition) and one within-subjects factor (Time 1 vs. Time 2). The dependent variables were positive affect, negative affect, self-efficacy, and goal approach (Time 2). They then listed any action steps they could think of that they could take to reach their goal to solve the problem.

RESULTS

At Time 1, there were no significant differences between conditions on any measures except for positive affect, $t(202) = -3.659, p = .000$, and negative affect, $t(202) = -3.015, p = .003$, which were both higher for the solution-focused condition (Table 1).

The results supported our predictions. For negative affect, 2 × 2 ANOVA showed a significant time by condition interaction, $F(1, 202) = 11.735, p = .001 (\eta^2 = .055)$, indicating that the average scores on negative changed more for the solution-focused condition than for the problem-focused condition (Figure 1). Average negative affect decreased significantly in the solution-focused condition and showed no significant change in the problem-focused one. On average, from Time 1 to Time 2 the negative affect scores decreased −2.42 in the solution-focused condition and only −0.002 in the problem-focused condition.

For positive affect, the 2 × 2 repeated-measures ANOVA also showed a significant time by condition interaction, $F(1, 202) = 6.548, p = .011 (\eta^2 = .031)$. As shown in Figure 2, in the solution-focused condition, positive affect scores increased (albeit nonsignificantly) from Time 1 to Time 2, whereas the opposite trend was observed under problem-focused condition. On average, from Time 1 to Time 2 the positive affect scores increased 1.35 in the solution-focused condition, and in contrast decreased −0.038 in the problem-focused condition.

For self-efficacy, the interaction of time with condition, $F(1, 202) = 14.610, p = .000 (\eta^2 = .067)$, and the main effect for time, $F(1, 202) = 38.858, p = .000 (\eta^2 = .161)$, were both significant. The average self-efficacy scores increased in both conditions from Time 1 to Time 2, but increased more in the solution-focused condition than in the problem-focused condition (Figure 3). On average, from Time 1 to Time 2 the self-efficacy scores increased 1.93 in the solution-focused condition and only 0.40 in the problem-focused condition.
For goal approach, ANOVA revealed a significant main effect for condition, $F(1, 202) = 31.201$, $p = .000$ ($\eta^2 = .134$), and a significant time by condition interaction effect, $F(1, 202) = 5.233$, $p = .023$ ($\eta^2 = .025$), indicating that the average goal approach scores increased significantly in both conditions and that the average score at Time 2 was higher for the solution-
focused than for the problem-focused condition (Figure 4). The average increase of the goal approach scores from Time 1 to Time 2 was 0.72 for the solution-focused condition and 0.3 for the problem-focused condition.

Figure 2. The effects of solution-focused versus problem-focused on pre- and postmeasures of positive affect.

Figure 3. The effects of solution-focused versus problem-focused on pre- and postmeasures of self-efficacy.

focused than for the problem-focused condition (Figure 4). The average increase of the goal approach scores from Time 1 to Time 2 was 0.72 for the solution-focused condition and 0.3 for the problem-focused condition.
Finally, analysis of covariance of scores on the variables at Time 2, controlling for Time 1 scores, indicates that for all of them, except for positive affect (it had nonsignificant main effect for time), there are significant differences that can be attributed to the questions responded by the participants (Table 2).

For action steps, a significant between-conditions difference was found, with significantly more action steps listed for the solution-focused (mean = 6.17) than for the problem-focused (mean = 4.77) condition, $t(202) = -3.015, p = .003$ (Table 1).

**DISCUSSION**

Our results indicate that in our sample, the focus of the questions that participants received and answered made a difference for the majority of the variables we studied. The solution-focused questions had a significant effect on negative affect, self-efficacy, goal approach, and action plans, which the problem-focused questions did not have. This cross-cultural confirmation of Grant (2012) findings is consistent with what solution-focused practitioners describe as the effects of solution-focused questions. The results also extend the research on how minor variations in language can have effects on participants both in experimental (Healing & Bavelas, 2011) and in naturalistic (Heritage, Robinson, Elliott, Beckett, & Wilkes, 2007) settings.
Comparing the Impact of Questions on Positive and Negative Affect

There was a differential impact on affect for solution-focused versus problem-focused questions. Whereas problem-focused questions did not have any impact on either positive or negative affect, solution-focused questions did reduce negative effect significantly and increased—albeit not significantly—positive effect. Some solution-focused therapists assume (Connie, 2013) and a recent naturalistic study in a marriage and family clinic suggests (Richmond et al., 2014) that problem-focused questions increase negative and decrease positive affect. However, our findings showed that problem-focused questions did not significantly change either negative or positive affect. This finding replicates Grant (2012) findings, which also showed that participants did not feel worse after answering the problem-focused questions. In our view, the replication of this finding supports the notion that solution-focused practitioners do not need to avoid problem talk at all costs, given that it will not necessarily have a negative impact on clients’ affect.

As far as solution-focused questions are concerned, it seems logical that they decreased negative affect, but it is puzzling that they did not produce a statistically significant effect on positive affect, as they did in Grant’s (2012) study. Recall that the first question in our set of solution-focused questions was a close transposition of the Miracle Question, which is often described by solution-focused therapists as a question that induces a positive emotional experience (Connie, 2013). One possible methodological explanation for this difference could be the slight variation in the instrument used in the two studies, given that Grant used the short 12-item version of the PANAS, and we used a Spanish version of the full 20-item PANAS. From the clinical point of view, another possible explanation could be that, to achieve its full positive emotional impact, the Miracle Question requires more follow-up questions in order to elicit more specific and interactional detail, as some therapeutic process research suggests (Beyebach, 2014).

Comparing the Impact of Questions on Self-Efficacy

Although both the participants in the solution-focused and in the problem-focused conditions increased their self-efficacy scores from pre- to post-test, the increase in the solution-focused condition was significantly larger than in the problem-focused condition. This finding is relevant in light of the evidence suggesting that self-efficacy is a robust predictor of therapeutic outcome in a wide range of intervention areas (Bandura, 1977, 1997), including SFBT (Rodríguez Morejón, 1994). In fact, the strengthening of self-efficacy has been described as a “common factor” that may be promoted in a very specific way by solution-focused interviewing procedures (Beyebach, Rodríguez Morejón, Palenzuela, & Rodríguez-Arias, 1996). Our data seem to confirm that solution-focused questions are a useful tool to increase self-efficacy.

Comparing Action Planning and Increases in Goal Approach

If clients’ increased self-efficacy is to translate into behavioral change after a therapeutic conversation, this increase needs to be translated into specific action steps. In our study, the solution-focused questions also outperformed problem-focused questions in self-rated goal approach and the number of action plans. Seen in light of the Stages of Readiness for Change model proposed by Prochaska and DiClemente (1982), our results suggest that solution-focused questions may help subjects advance in their stage of readiness for change more than problem-focused questions do.

Limitations

We would like to acknowledge some limitations of our study. First, the participants were undergraduate psychology and nursing students who answered online questions, not actual clients interacting with a therapist. Second, although subjects were randomly assigned to the problem-focused and the solution-focused conditions, the two conditions were not equivalent at Time 1 in negative or in positive affect, which makes the interpretation of the affect findings less straightforward. Third, the generalizability of our findings is of course limited by the specific sets of problem-focused and solution-focused questions we used. Last but not least, we wish to acknowledge that the effect of questions as we tested it, online and without the option of elaborating on the responses, is probably very different from the effect they have in real interactions, as they unfold in ongoing therapeutic conversations. Therefore, any generalizations from our analogue research set-
ting to real therapeutic processes, with all their relational and contextual implications, need to be made with great caution.

Implications for Practice and Future Research

In spite of these limitations, in our view the results provide further empirical support for solution-focused practices, showing that the solution-focused questions we tested were more effective than the problem-focused ones on a number of change-relevant variables. This differential impact, first shown in an Australian English-speaking sample, has now been substantiated in a European Spanish-speaking sample. This cross-cultural element is especially important, given that so much of the therapeutic impact of SFBT is usually attributed to very subtle linguistic nuances (de Shazer, 1994; de Shazer et al., 2007), which could arguably get lost in other languages. Furthermore, our results not only provide indirect empirical support for solution-focused practice in general, but strengthen the evidence base for the new field of online solution-focused interventions (Cepukiene & Pakosnis, 2014).

In our view, the difference in the number of action steps described in response to solution-focused versus problem-focused questions is especially relevant, as it parallels the solution-focused practice of using scaling questions to invite clients to describe in detail what “one point more” would look like. In this respect, our data may encourage solution-focused practitioners to focus more explicitly on this part of the conversation. In conjoint sessions, the input of various family members may make this step even more fruitful.

Finally, our data may also encourage solution-focused practitioners to become more flexible in their approach to therapy by integrating solution-focused and problem-focused questions, as different authors have suggested (Beyebach, 2009; Geyerhofer & Komori, 2004;Selekman, 1993; Selekman & Beyebach, 2013). Our results replicate those of Grant (2012), suggesting that problem-focused questions do not necessarily increase negative affect or reduce positive affect. However, future research would need to demonstrate whether combining both types of questions does indeed strengthen the positive effects of solution-focused interventions, or whether it weakens or dilutes them.

Future research should also replicate this study with real clients and in real face-to-face conversations, including a follow-up component to evaluate whether the action plans developed during the conversation actually translate into real-life changes and goal attainment outside the therapeutic setting. It would also be interesting to find out what role individual differences play; for instance, whether subjects with different expectations on solution building and problem solving (for instance, as measured with the Solution-Focused Inventory, Grant et al., 2012; or with the Solution Building Inventory, Smock, 2014; Smock, McCollum, & Stevenson, 2010) react differentially to problem-focused and solution-focused questions. In conjoint family therapy sessions, it would be very interesting to examine how these individual differences have an impact on the solution-building process.

A closer look at the differential effect of various types of solution-focused questions would also add to our understanding of the impact of solution-focused therapy and would contribute to bridge analogue studies like ours and the micro-analysis of real therapy and coaching interviews (De Jong et al., 2013; Korman et al., 2013). In this respect, we plan to carry out more analogue online studies on the effects that specific combinations of solution-focused questions (for instance, “Miracle Question + Scaling Question” vs. “Exception Questions + Scaling Questions) have on the different subscales of the SFI (for instance, on “Goal Orientation” vs. “Resource Activation”), and how these intermediate therapeutic outcomes translate into real-life changes. It would be very interesting to analyze these differential effects in the context of conjoint family therapy sessions, where not only answering therapist’s questions, but also the mere fact of listening to the answers of other family members may have an impact on affect, goal approach or self-efficacy.

REFERENCES


