Surveying views of metaphor vs. literal language in psychotherapy:

A factor analysis

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Five key therapeutic functions of metaphors are often discussed by psychotherapists. They i) help clients express emotions and experiences, ii) help therapists and clients explain difficult concepts, iii) introduce new frames of reference, iv) help work through client resistance, and v) build a collaborative relationship between therapists and clients. Research on how these functions are enacted in psychotherapy talk tends to assume that they are indeed perceived as such by clients, and that metaphorical language is preferred to comparable literal language in performing them. This paper reports a survey study (N=84) to critically interrogate these assumptions. Participants read two constructed therapy dialogues, controlled and counterbalanced for presentation sequence, where therapist and client discuss an issue using metaphorical and literal language respectively. Each dialogue is followed by a 15-item questionnaire to rate how well the presumed functions were performed (e.g. the therapist and client can work effectively together, the therapist is able to explain difficult concepts). A combined Confirmatory (CFA) and Exploratory Factor Analysis (EFA) suggests that, instead of the five distinct functions proposed in the literature, participants discerned three functions which reflect a more holistic view of what metaphors can do. A second EFA conducted on literal responses yielded only two factors. This contrast in factor structure further suggests that i) literal language is less functionally nuanced, and ii) metaphors are not simply perceived as an 'add-on'

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to literal language, but are evaluated across an extended narrative in fundamentally different ways. Within-subjects metaphor vs. literal ratings of the items under the emergent three-factor structure were then compared. Metaphor ratings were significantly higher in all factors (p<0.01), suggesting that metaphorical language is indeed perceived as more effective than literal language when discussing clients' issues. Implications, limitations, and future directions are discussed.

**Keywords:** confirmatory factor analysis, exploratory factor analysis, metaphor functions, experimental survey

### 1.Introduction

A point that often escapes critical reflection in applicative metaphor studies is whether receivers of supposedly effective metaphors (e.g. students, consumers) perceive and/or evaluate them in the same ways as theorists and practitioners (e.g. teachers, advertisers). Psychotherapy, defined as the application of clinical methods and interpersonal stances to modify behaviors, cognitions, emotions, and other personal characteristics (Norcross, 1990), is no exception. A key difference between psychotherapy and other forms of medical practice is that it is a 'talking cure'. Since language comprises both the medium and essence of treatment delivery, clients tend to have relatively keen, yet underexplored intuitions about various aspects of treatment. Much has been written by theorists and practitioners on the potential therapeutic functions of metaphors (Cirillo & Crider, 1995; Lyddon, Clay, & Sparks, 2001; Stott, Mansell, Salkovskis, Lavender, & Cartwright-Hatton, 2010; Törneke, 2017). Explaining to clients that anorexia is like trying to drive without gas (Stott et al., 2010) or exploring a client's description of her husband as a locomotive (Kopp, 1995) helps, among other things, to symbolize emotions and reframe topical issues. However, even though it is common practice to study client expectations of therapeutic

techniques (Greenberg, Constantino, & Bruce, 2006) especially from the favored perspective of 'client-centeredness' (Mead & Bower, 2000), there is scant research on major questions like how layperson clients understand metaphors, evaluate their purposes, and whether these deviate from so-called expert understanding. The psychotherapy literature comes close with how metaphors influence client perceptions of therapists (Suit, Paradise, & Orleans, 1985), ratings of the helpfulness of sessions (Hill & Regan, 1991), and anecdotal case examples of how metaphors are experienced in-session (Dwairy, 2009; Stine, 2005), but has yet to address the above questions in direct and systematic ways. Discourse analytic studies which generally do not focus on therapeutic effectiveness have likewise been silent on these questions (Goldberg & Stephenson, 2016; Tay, 2013, 2014). They tend to uphold the 'expert' view that metaphorical language is preferred to literal counterparts in performing therapeutic functions, often taking it for granted as a premise rather than a conclusion.

It is clear that we need to critically interrogate these assumptions about metaphor use. From a general metaphor researcher's perspective, not doing so carries the risk of idealizing how producers and receivers view metaphor for the sake of analytic convenience (Gibbs, 2010), undermining validity as a result. The same caution applies for mental health practitioners. By understanding how real and prospective clients evaluate metaphor as a strategy in the psychotherapy context, therapists gain a valuable source of feedback – in the technical sense of "a response to an action that shapes or adjusts that action in subsequent performance" (Claiborn & Goodyear, 2005:209). This paper reports a survey study which aims to examine if frequently discussed expert viewpoints on the therapeutic functions of metaphor align with layperson viewpoints, and if laypersons actually prefer metaphorical over literal language to perform them. A review of the psychotherapy literature suggests that metaphors are often believed to be suitable

for performing five major functions (Lyddon et al., 2001). Firstly, metaphors help clients express emotions and experiences that are otherwise difficult to describe in literal terms (McMullen, 1996). These range from symbolic representations of self and others (Angus & Rennie, 1989) to complex feelings about their condition; e.g. 'a large dark cloud hanging over me that will rain AIDS down upon me' (Kopp & Craw, 1998). Secondly, metaphors help therapists and clients explain difficult concepts. These include technical details of conditions such as anorexia as seen earlier (Stott et al., 2010), and analogical models to clarify the nature of psychotherapy (Aronov & Brodsky, 2009). Thirdly, metaphors introduce new frames of reference. In theoretical terms this means suggesting new source domains and entailments for a certain target topic. For example, a therapist can explicitly point out a client's repeated use of war metaphors to describe relationships and suggest more adaptive source domains (Cirillo & Crider, 1995). Fourthly, metaphors can help clients work through their resistance, or self-protective fear of change (Lyddon et al., 2001). Caruth and Ekstein (1966:38) call them the "client's alibi". They allow clients to communicate without fearing commitment to propositional truths, "simultaneously keeping and revealing a secret". Lastly, metaphors help build a collaborative relationship between therapists and clients. A willingness to work with idiosyncratic, seemingly irrelevant, or culturally specific metaphors helps demonstrates the therapist's empathy and respect for clients (Dwairy, 2009; Lyddon et al., 2001), which could in turn reassure them to share more deeply. As highlighted earlier, how clients feel about and evaluate these functions remains largely unclear.

#### 2.Method

#### **2.1** Survey construction

Two vignettes depicting a discussion between a therapist (T) and student (S) on the topic of schoolwork were constructed in consultation with practicing counselors in a Chinese university (See Appendix). The vignettes exemplify the five therapeutic functions at hand, and differ in that the metaphorical version uses metaphorical language to perform them and vice versa. These functions are performed only after the point at which the vignettes diverge; i.e. "tell me why this climb/this semester has been particularly difficult".

Comparability was maximized by i) ensuring that as much of the co-text is identical as possible, and ii) ratings from 26 native Mandarin Chinese speakers (15 women, *M*=27.5 years, *SD*=4.45) on the variables of 'understandability', 'naturalness', 'metaphoricity', and 'meaning similarity' (cf. Cardillo, Schmidt, Kranjec, & Chatterjee, 2010). The extracts differed significantly in terms of metaphoricity, non-significantly in terms of the rest, with a mean score of 5.6/7 for similarity.

Three evaluative survey items were then devised, in consultation with the counselors, for each of the five functions. The (translated) items and their corresponding functions are shown in Table 1. As detailed below, survey participants will be using them to evaluate both the metaphorical and literal vignettes, in terms of how well the functions were performed.

Function	Item
Build	1. The therapist and client can work effectively together
collaborative	2. The therapist is able to see things from the client's point of view
relationship	3. The client feels understood by the therapist

Express	4. The client effectively expresses how he/she feels about his studies to the therapist
emotions and	5. The client effectively describes his/her experiences to the therapist
experiences	6. The therapist and client are able to express abstract things in concrete ways
Explain difficult	7. The therapist is able to summarize and explain the client's situation
concepts	8. The therapist is able to explain difficult concepts to the client
	9. The client can understand the therapist's advice
Introduce new	10. The therapist is able to help the client change his/her perspective
frames of	11. The therapist is able to suggest new ways of looking at the problem
reference	12. The therapist has offered the client a possible solution to his/her problems
Work through	13. The client's problems can be comfortably discussed with the therapist
client resistance	14. The client is willing to open up and share his/her thoughts with the therapist
	15. The therapist makes the suggestions easy for the client to accept

**Table 1.** Functions and survey items

## 2.2 Survey procedure

84 native Mandarin Chinese-speaking university students (46 women, *M*=23.5 years, *SD*=3.15) participated in the survey. Each participant was given as much time as required to read the two vignettes presented in randomized sequence. They then evaluated each vignette in terms of how well it reflected the 15 survey items, also presented in randomized sequence and without the theorized functions, on a 5-point Likert scale. After the survey, semi-structured interviews were conducted to probe more deeply into participants' understanding of the differences between the

vignettes, and reasons for their ratings. The qualitative findings from these interviews are however unable to be fully presented in this paper.

#### **2.3** Analytical procedures

We wanted to know if participants perceive the items as smaller interrelated groups (or factors) through their ratings, as well as how the metaphorical and literal vignette ratings compare. This was done in three steps: i) a confirmatory factor analysis (CFA) on the metaphorical vignette ratings to see if the interrelationships fit the hypothesized five functions in the literature, ii) an exploratory factor analysis (EFA) on both vignette ratings to understand the respective factor structures on their own terms, and iii) a series of comparative analyses of metaphorical versus literal ratings. CFA and EFA are related statistical techniques used to uncover interrelationships between a large number of observed variables, which could then be theorized as more general factors underlying the data. Both techniques are often combined in different ways within a single study (e.g. Revicki et al., 2014). The main difference between them is that CFA explicitly compares the data with a set of factors hypothesized beforehand, while EFA discerns potential factors from the data in pure bottom-up fashion. For the present purpose, the emergent factor structure would reveal which items go together as factors when evaluating metaphor use. Additionally, since the factors are computed as maximally distinct from one another, each can be interpreted as collecting a cluster of items that points towards a distinct therapeutic function of metaphor.

#### 3. Results and discussion

### **3.1** Factor analyses

Using CFA with maximum likelihood estimation, Table 2 shows the metaphorical vignette factor loadings and relevant statistics for the 15 items (m1-15) under the five hypothesized factors/functions (Factor 1-5). Each function is represented by three items as outlined in Table 1. Four indices were used to evaluate model fit (Kline, 2016) - the model  $\chi^2$ , comparative fit index (CFI), standardized root mean square residual (SRMR), and root mean square error of approximation (RMSEA).

Factor	Indicator	Estimate	SE	Z	р	Standardized estimate
Factor 1	m1	0.524	0.0739	7.08	<.001	0.701
	m2	0.791	0.0969	8.16	<.001	0.778
	m3	0.800	0.0981	8.16	<.001	0.781
Factor 2	m4	0.637	0.0721	8.84	<.001	0.880
	m5	0.527	0.0912	5.78	<.001	0.615
	m6	0.508	0.0950	5.34	<.001	0.585
Factor 3	m7	0.523	0.0841	6.22	<.001	0.632
	m8	0.616	0.0898	6.86	<.001	0.685
	m9	0.671	0.0856	7.84	<.001	0.744
Factor 4	m10	0.733	0.0841	8.71	<.001	0.807
	m11	0.528	0.0744	7.10	<.001	0.697
	m12	0.706	0.0854	8.26	<.001	0.784

Factor	Indicator	Estimate	SE	Z	p	Standardized estimate
Factor 5	m13	0.552	0.0920	6.01	<.001	0.615
	m14	0.534	0.0830	6.43	<.001	0.648
	m15	0.632	0.0877	7.20	<.001	0.698

**Table 2**. CFA factor loadings for metaphorical vignette ratings

All 15 items loaded onto their respective factors with p<0.001. This seems to suggest that participants do perceive and evaluate metaphor use along the five hypothesized therapeutic functions since m1-m3, m4-m6, and so on had internally correlated ratings. However, a closer evaluation of the model fit measures using recommended criteria (Hooper, Coughlan, & Mullen, 2008) suggests that the five-factor model is less than satisfactory (model  $\chi^2$  p<0.001, CFI=0.894, SRMR=0.066, RMSEA=0.104). This motivates a follow-up exploratory factor analysis where no preconceived factor structure is imposed on the data, and the relationships between the 15 items are described on their own terms. The objective is to find an alternative model, with a different number of factors and/or different items loading onto them, which provide a superior fit for the ratings and thus a better account of participants' perception of metaphor functions.

Prior to EFA, an initial Principal Component Analysis (PCA) was conducted to identify the number of factors to retain based on the criterion that each factor has an eigenvalue greater than 1. Table 3 shows the EFA factor loadings (sorted by size, values below 0.4 not shown) and

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uniqueness statistics for the metaphorical vignette ratings. Principal axis factoring with varimax rotation was chosen as the factor extraction method because of the absence of multivariate normality in the survey data (Costello & Osborne, 2005). Bartlett's test of sphericity (p<0.001) and KMO measures of sampling adequacy (overall 0.892) suggest that EFA is suitable and useful for the data. The factor each item best loads onto is shown in bold.

		Factor		
	1	2	3	Uniqueness
m15	0.744			0.363
m11	0.719			0.384
m7	0.694			0.416
m2	0.671			0.404
m10	0.669	0.469		0.331
m12	0.642	0.500		0.337
m3	0.536	0.507		0.421
m8	0.451	0.449		0.483
m6				0.697
m13		0.774		0.299
m9	0.503	0.609		0.366
m1	0.458	0.487		0.518
m14	0.407	0.439		0.489

		Factor		
	1	2	3	Uniqueness
m5			0.825	0.296
m4		0.537	0.601	0.318

**Table 3**. EFA factor loadings for metaphorical vignette ratings

Model fit measures (model  $\chi^2$  p=0.043, TLI=0.944, RMSEA=0.0748) suggest that this emergent three-factor model provides a better description of the ratings than the previous five-factor model. Additionally, there are no significant inter-factor correlations, and all factors are internally consistent (Factor 1 Cronbach's  $\alpha$ =0.907, Factor 2=0.811, Factor 3=0.704). Before further discussion of the three factors, a separate EFA was also conducted on the ratings for the literal vignette. This was done to investigate potential differences in factor structure across both conditions. For example, if the same number of factors with similar items under each factor emerges in both conditions, it would suggest that metaphorical and literal language are perceived as 'parallel' strategies in performing therapeutic functions. This would also resonate with the traditional view of metaphors as ornamental 'add-ons' to their literal equivalents. On the other hand, a different factor structure would suggest them to be fundamentally different communication strategies in psychotherapy. Table 4 shows the factor loadings.

	Fac	ctor	
	1	2	Uniqueness
110	0.826		0.312
12	0.790		0.348
115	0.762		0.383
11	0.703	0.415	0.333
112	0.685		0.525
18	0.681		0.468
17	0.649		0.544
111	0.619		0.595
19	0.613		0.555
13	0.584	0.469	0.439
16	0.462	0.413	0.616
114	0.438	0.431	0.623
15		0.890	0.205
14		0.649	0.572
113	0.505	0.506	0.488

**Table 4**. EFA factor loadings for literal vignette ratings

We see that the literal vignette ratings are adequately described by two factors instead of three (model  $\chi^2$  p=0.03, TLI=0.937, RMSEA=0.0749). Bartlett's test of sphericity (p<0.001) and KMO

measures of sampling adequacy (overall 0.891) likewise suggest that EFA is suitable and useful for the literal ratings. Since perceptions of metaphor are of primary interest in this paper, we will not elaborate on which items load onto which factors for the literal vignette. However, as mentioned earlier, two points could be inferred from the contrasting factor structures. The first is that metaphorical language and literal language are not evaluated on parallel terms. The greater number of factors for metaphorical vignette ratings suggests that metaphorical language is evaluated in a more functionally nuanced manner, with ratings converging around three distinct clusters of items. This lends support to the larger theoretical idea that metaphorical language is not simply an ornamental or pragmatically deviant form of some literal counterpart.

We now return to the three-factor model for the metaphorical vignette ratings (Table 5). The items under each factor are arranged in descending loading size order, and an attempt is made to describe their common characteristics which can then be interpreted as a perceived therapeutic function of metaphor use. Note that item 6 is not loaded onto any of the factors.

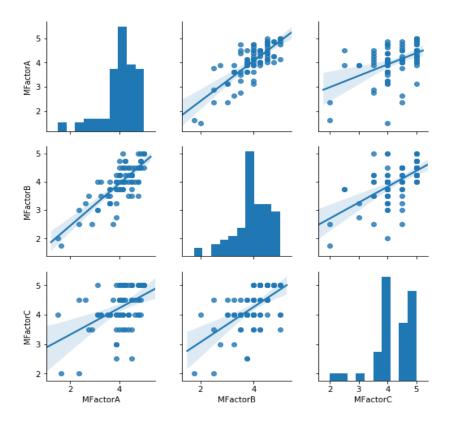
Factor characteristics	Item
General features of	15. The therapist makes the suggestions easy for the client to accept
successful communication	11. The therapist is able to suggest new ways of looking at the problem
	7. The therapist is able to summarize and explain the client's situation
	2. The therapist is able to see things from the client's point of view
	10. The therapist is able to help the client change his/her perspective
	12. The therapist has offered the client a possible solution to his/her
	problems

3. The client feels understood by the therapist
8. The therapist is able to explain difficult concepts to the client
13. The client's problems can be comfortably discussed with the
therapist
9. The client can understand the therapist's advice
1. The therapist and client can work effectively together
14. The client is willing to open up and share his/her thoughts with the
therapist
5. The client effectively describes his/her experiences to the therapist
4. The client effectively expresses how he/she feels about his studies to
the therapist
<u> </u>
e able to express abstract things in concrete ways

Table 5. The three-factor model and corresponding items

The first factor accounts for the greatest amount of variance in the ratings and is thus interpretable as the most saliently perceived function. We observe that it fully retains items 10 to 12, which originally represent the function of 'introducing new frames of reference'. However, it also features a mix of items from most other functions – 'working through client resistance' (item 15), 'explaining difficult concepts' (item 7 and 8), and 'building collaborative

relationships' (item 2 and 3). These diverse aspects collectively represent general features of successful communication such as suggesting, summarizing, empathizing etc., mostly by the therapist. We can contrast this with the third factor which retains two out of three items from the original function of 'expressing emotions and experiences'. The two retained items (4 and 5) focus on clients being able to express themselves. Lastly, the second factor combines aspects of 'building collaborative relationships' (item 1), 'explaining difficult concepts' (item 9), and 'working through client resistance' (item 13 and 14), which contrasts with the above two factors in highlighting the collaborative dimension; i.e. working through resistance is a mutual effort requiring therapists to make their advice understandable. We thus observe that evaluation of metaphor use seems to cluster around three holistic aspects – how therapists use them, how clients use them, and how they are used collaboratively, rather than specific functional distinctions highlighted in the literature. It is important to re-iterate that, in accordance with the principles of factor analysis, these aspects are not significantly correlated among themselves (See Figure 1). Each factor makes a sufficiently distinct contribution to explain the observed survey scores and can thus be put forward as a distinct underlying dimension. The histograms in Figure 1 show how the average item scores are distributed under each factor (not of primary interest) and the scatterplots illustrate the absence of correlations between the factors. Factors 1-3 are renamed Factors A-C to avoid confusion with items.



**Figure 1.** Histograms and scatterplots related to the three metaphor factors (MFactorA-C)

Interestingly, item 6 (therapist and client expressing abstract things in concrete ways), which resembles the standard definition of metaphor in contemporary theory (Lakoff, 1993), turns out to not be loaded onto any factor. This implies that participants have highly diverse ratings and views about what this item means. In the semi-structured interviews following the survey, we indeed observe different understandings of abstractness and concreteness from standard metaphor theory. For example, while the vignette attempted to depict academic difficulties in terms of the more experientially concrete activity of a hike, some participants view the hike as more 'abstract' than academic difficulties precisely because the latter is the actual topic at hand. The semi-structured interviews were useful in uncovering laypersons' views regarding what

metaphor is, how it compares to literal language, and its potential uses in psychotherapy, but they cannot be given full treatment in this paper.

### **3.2** Comparative analysis

The above factor analyses showed that metaphorical and literal language are not evaluated in parallel ways, and that peoples' perceptions of metaphor functions differ in interesting ways from the literature. However, the analyses do not address the question of whether metaphorical language is deemed to be more effective than literal language in performing these functions. A series of analyses were therefore conducted to compare metaphor vs. literal ratings across i) all items, and ii) the items representing the three emergent factors.

	Metaphor	Literal	Metaphor	Literal	Metaphor	Literal	Metaphor	Literal
	overall	overall	Factor A	Factor A	Factor B	Factor B	Factor C	Factor
								С
N	84	84	84	84	84	84	84	84
Mean	4.06	3.44	4.03	3.34	3.96	3.48	4.24	3.86
SD	0.62	0.70	0.71	0.80	0.68	0.75	0.70	0.88
	Metaphor >	Literal	Metaphor >	Literal	Metaphor >	Literal	Metaphor >	Literal
	(p<0.001)		(p<0.001)		(p<0.001)		(p<0.001)	
	$Log(BF_{10})=19.16$		Log(BF <sub>10</sub> )=	= 19.33	Log(BF <sub>10</sub> )=	9.11	Log(BF <sub>10</sub> )=	4.54

**Table 6.** Metaphor vs. literal vignette ratings

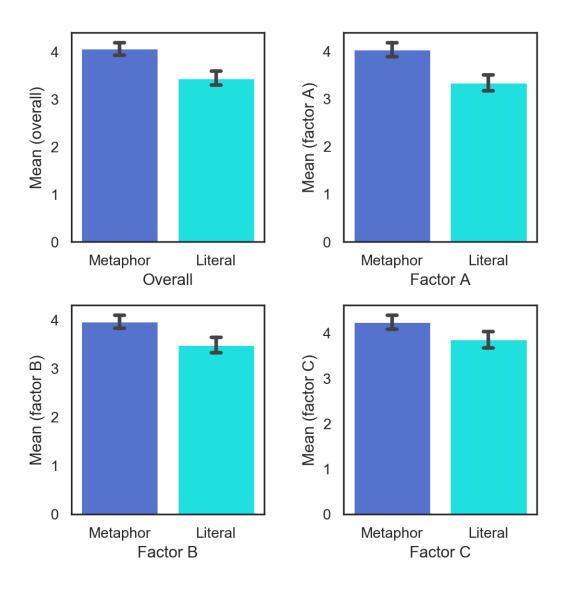


Figure 2. Plots of metaphor vs. literal vignette ratings

Table 6 and Figure 2 show the relevant statistics (error bars=95% confidence intervals). Paired samples t-tests show that metaphor ratings were statistically significantly higher across all comparisons (p<0.001). In addition, Bayes factor analyses were conducted to supplement the frequentist p-value by providing a graded (i.e. relative evidence of H<sub>1</sub> against H<sub>0</sub>) rather than categorical assessment of statistical significance (i.e. either accept or reject). The Log(BF<sub>10</sub>)

values all provide 'very strong evidence' (Jarosz & Wiley, 2014) of substantial differences in ratings.

These results lend support to the general claim that metaphor is an effective strategy in psychotherapy. Participants likewise justified their ratings in the follow-up semi-structured interviews, which again can only be summarized here due to space constraints. Many reasons for preferring the metaphorical vignette echo those commonly discussed in the literature. They include giving the client a better understanding and memory of the issues at hand, allowing more open and in-depth exploration by tapping source domain inferences, giving the client freer opportunities to articulate their feelings, and creating a friendly and empathetic environment for the client. Some participants also offered relatively original reasons that can be further explored in future work. For example, metaphors make the therapist's advice more coherent (cf. Ponterotto, 2003), consistent, facilitate topic development and management, and improve the 'flow' of the conversation. They also make the therapist seem more 'skilful' in asking questions and prompting for responses, and convey the impression that the therapist is willing to allow the client to lead the conversation. The few participants who preferred the literal vignette also provided their reasons, which likewise require further research given the prevalent assumption that metaphors are generally helpful in psychotherapy and elsewhere. For example, literal language was described as 'efficient', 'direct', 'focused', 'simple', 'objective', 'concrete', and 'does not involve head scratching'. Some also remarked that metaphors should only be used when the student finds it difficult to express something directly, and should otherwise be 'rejected'. This reminds one of the traditional view of metaphors as ornamental, once again raising the point that layperson versus expert perceptions need to be investigated in greater detail.

### 4. Conclusion

The major findings of this study are summarized as the following: i) layperson perceptions of metaphor functions are more holistic and less functionally distinct than those published in the expert literature; ii) metaphors are not perceived simply as 'add-ons' or alternatives to literal language, and iii) metaphorical language is preferred to literal language in performing therapeutic functions. These findings lend support to the general perceived utility of metaphors in psychotherapy. However, they remind applied metaphor researchers of the need to critically consider how stakeholders within a single context (e.g. teachers vs. students, or advertisers vs. consumers) can have different views of what metaphors can do. The attendant implications are particularly important in an interactive context like psychotherapy where client expectations and the immediacy of feedback often play a role in treatment outcomes (Claiborn & Goodyear, 2005; Greenberg et al., 2006). Rather than assert the ostensible functions of metaphor and prescribe techniques to use them, mental health researchers and practitioners could thus attempt ways to negotiate and manage their use with clients.

There are several limitations to the present study which point towards potential future research directions. Firstly, expert perceptions are assumed to be represented by published literature, but there might be further distinctions to be drawn between theorists and active practitioners. It would also be preferable to conduct a similar survey on theorists and/or practitioners for a more direct comparison with laypersons. Secondly, while the present sample size is adequate to investigate general layperson perceptions, a larger sample would enable more nuanced analyses of how perceptions vary according to specific characteristics of subjects. The

final point has been mentioned several times, which is the need to complement quantitative survey findings with closer examination of the reasons why people prefer one strategy over another. For example, although not mentioned by any participants, the general preference for the metaphorical exchange could partly be due to (unconscious) perceptions of stronger coherence with the earlier part of the stimuli ("I've been hiking since I was young..."). The limited examples offered in this paper already suggest interview data to be an important means of finding out how expert and layperson perceptions can differ in unexpected ways.

## References

- Angus, L. E., & Rennie, D. L. (1989). Envisioning the representational world: the client's experience of metaphoric expression in psychotherapy. *Psychotherapy*, 26(3), 372–379.
- Aronov, N. E., & Brodsky, S. L. (2009). The river model: a metaphor and tool for training new psychotherapists. *Journal of Contemporary Psychotherapy*, *39*, 187–195.
- Cardillo, E. R., Schmidt, G. L., Kranjec, A., & Chatterjee, A. (2010). Stimulus design is an obstacle course: 560 matched literal and metaphorical sentences for testing neural hypotheses about metaphor. *Behavior Research Methods*, 42(3), 651–664.
- Caruth, E., & Ekstein, R. (1966). Interpretation Within the Metaphor: Further Considerations. *Journal of the American Academy of Child Psychiatry*, 5(1), 35–45.
- Cirillo, L., & Crider, C. (1995). Distinctive therapeutic uses of metaphor. *Psychotherapy*, 32, 511–519.
- Claiborn, C. D., & Goodyear, R. K. (2005). Feedback in psychotherapy. *Journal of Clinical*

- Psychology, 61(2), 209–217.
- Costello, A., & Osborne, J. (2005). Best practices in Exploratory Factor Analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, 10(7), 1–9.
- Dwairy, M. (2009). Culture analysis and metaphor psychotherapy with Arab-Muslim clients. *Journal of Clinical Psychology*, 65(2), 199–209.
- Gibbs, R. W. (2010). The wonderful, chaotic, creative, heroic, challenging world of Researching and Applying Metaphor: A celebration of the past and some peeks into the future. In G. Low, Z. Todd, A. Deignan, & L. Cameron (Eds.), *Researching and Applying Metaphor in the Real World* (pp. 1–18). Amsterdam and Philadelphia: John Benjamins.
- Goldberg, R. M., & Stephenson, J. B. (2016). Staying with the Metaphor: Applying Reality

  Therapy's Use of Metaphors to Grief Counseling. *Journal of Creativity in Mental Health*,

  11(1), 105–117.
- Greenberg, R. P., Constantino, M. J., & Bruce, N. (2006). Are patient expectations still relevant for psychotherapy process and outcome? *Clinical Psychology Review*, 26(6), 657–678.
- Hill, C. E., & Regan, A. M. (1991). The use of metaphors in one case of brief psychotherapy.

  \*Journal of Integrative and Eclectic Psychotherapy, 10, 56–67.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural Equation Modelling: Guidelines for Determining Model Fit. *The Electronic Journal of Business Research Methods*, *6*(1), 53–60.
- Jarosz, A. F., & Wiley, J. (2014). What Are the Odds? A Practical Guide to Computing and

- Reporting Bayes Factors. *Journal of Problem Solving*, 7, 2–9. https://doi.org/10.7771/1932-6246.1167
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling* (4th ed.). New York and London: Guilford Press.
- Kopp, R. R. (1995). *Metaphor Therapy: Using Client-Generated Metaphors in Psychotherapy*. New York: Brunnel/Mazel.
- Kopp, R. R., & Craw, M. J. (1998). Metaphoric language, metaphoric cognition, and cognitive therapy. *Psychotherapy*, *35*(3), 306–311.
- Lakoff, G. (1993). The contemporary theory of metaphor. In A. Ortony (Ed.), *Metaphor and Thought* (2nd ed., pp. 202–251). Cambridge: Cambridge University Press.
- Lyddon, W. J., Clay, A. L., & Sparks, C. L. (2001). Metaphor and change in counselling. *Journal of Counseling & Development*, 79(3), 269–274.
- McMullen, L. M. (1996). Studying the use of figurative language in psychotherapy: the search for researchable questions. *Metaphor and Symbolic Activity*, 11(4), 241–255.
- Mead, N., & Bower, P. (2000). Patient-centredness: A conceptual framework and review of the empirical literature. *Social Science and Medicine*, *51*(7), 1087–1110.
- Norcross, J. C. (1990). An eclectic definition of psychotherapy. In J. K. Zeig & W. M. Munion (Eds.), *What is Psychotherapy? Contemporary Perspectives* (pp. 218–220). San Francisco, CA: Jossey-Bass.
- Ponterotto, D. (2003). The cohesive role of cognitive metaphor in discourse and conversation. In A. Barcelona (Ed.), *Metaphor and Metonymy at the Crossroads: A Cognitive Perspective*

- (pp. 283–298). Berlin and New York: Mouton de Gruyter.
- Revicki, D. A., Cook, K. F., Amtmann, D., Harnam, N., Chen, W. H., & Keefe, F. J. (2014). Exploratory and confirmatory factor analysis of the PROMIS pain quality item bank. *Quality of Life Research*, 23(1), 245–255.
- Stine, J. J. (2005). The use of metaphors in the service of the therapeutic alliance and therapeutic communication. *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry*, 33(3), 531–545.
- Stott, R., Mansell, W., Salkovskis, P., Lavender, A., & Cartwright-Hatton, S. (2010). Oxford

  Guide to Metaphors in CBT. Building Cognitive Bridges. Oxford and New York: Oxford

  University Press.
- Suit, J. L., Paradise, L. V, & Orleans, N. (1985). Effects of metaphors and cognitive complexity on perceived counselor characteristics. *Journal of Counseling Psychology*, 32(1), 23–28.
- Tay, D. (2013). *Metaphor in Psychotherapy. A Descriptive and Prescriptive Analysis*.

  Amsterdam and Philadelphia: John Benjamins.
- Tay, D. (2014). At the heart of cognition, communication, and language: The value of psychotherapy to metaphor study. *Metaphor and the Social World*, 4(1). https://doi.org/10.1075/msw.4.1.03tay
- Törneke, N. (2017). Metaphor in Practice. A Professional's Guide to Using the Science of Language in Psychotherapy. Oakland, CA: New Harbinger.

# **Appendix**

# Metaphorical vignette Literal vignette

T: 这学期的学习怎么样? So how is your school work going this semester?

S: 不怎么样。Not too well.

T: 能多讲讲吗? Can you tell me more?

S: 嗯,这学期的课程都挺难的。就觉得什么都很难,就觉得好像,我已经很努力了,但是感觉还是有很强的力量把我往下拉似的,就把所有的事情都变得更难。你明白我意思吗?我从小就喜欢爬山嘛,但是这座山就像是一座爬不上去的山这样。Well, courses are pretty hard. It just feels like everything is difficult, like I have been trying my best but it feels like there's this huge force that's pulling me down and making everything harder. Do you see what I mean? I've been hiking since I was young but this mountain is just too difficult for me.

T: 这学期感觉特别漫长特别艰难,是不是? It's been a long and difficult semester, hasn't it?

S: 对。Yes.

T: 能不能告诉我为什么这座山这么难爬。Tell	能不能告诉我为什么这学期这么难 Tell me why
me why this climb has been particularly difficult.	this semester has been particularly difficult.
S: 就是太费精力,太费劲了。特别多的事情要	就是太费精力,太费劲了。特别多的东西要
做。要是说我中间能停一下,歇一下也还好,	做。要是说我中间能停一下,歇一下也还好,
但是就感觉好像刚读完这本书然后明天又要交	但是就感觉好像刚读完这本书然后明天又要交

一份作业,然后再后天又要做报告。就觉得都没有能停下来的时候,你就只是一直往上爬呀爬呀,但是感觉永远看不到终点。It takes so much energy and effort. There's so much work to do. It might be okay if I get to stop and rest for a bit, but I just finished this book and there's an assignment due the next day, and then a presentation the next day. There's no stopping and all you do is keep climbing higher and higher, but I can never see where it ends!

T: 那你在爬这座山的时候,什么感觉呢? So how have you been feeling as you climb this mountain of work?

S: 就特别抑郁,特别不开心。真的很难跟你讲这个有多不爽。尤其是我看别人,就像大家都在爬这座山嘛,但是别人感觉都很开心,往上走得特别轻松,但是我就是一步一步特别痛苦地往上挪似的。对他们来说就好像周末出去玩爬个山似的,看看路上的风景什么的很开心,到我这儿就不是这样了。让我感觉自己不够厉害,就一直问自己说怎么自己这么挫。Very depressed and upset. It's really hard to tell you how screwed up this is. Especially when I look at

一份作业,然后再后天又要做报告。就觉得都没有能停下来的时候,你就只是一直拼命地做这个做那个,但是感觉好像永远没个完。It takes so much energy and effort. There's so much work to do. It might be okay if I get to stop and rest for a bit, but I just finished this book and there's an assignment due the next day, and then a presentation the next day. There's no stopping and all you do is keep working harder and harder, and it feels like it'll never be over!

那你在忙这学期学业这个过程中,什么感觉呢? So how have you been feeling as you handle this semester of work?

就特别抑郁,特别不开心。真的很难跟你讲这个有多不爽。尤其是我看别人,就感觉大家其实都上一样的课嘛,但是别人就很开心,然后学得也特别轻松,但是到我这儿就觉得特别困难。对他们来说这学期感觉特轻松,而且他们也挺享受整个过程的,但我就不是这样的。让我感觉自己不够厉害,就一直问自己说怎么自己这么挫。Very depressed and upset. It's really hard to tell you how screwed up this is. Especially when I look at others, I feel that we're all these

others, I feel that we're all these people on this hiking trip, but others are having fun and moving up so easily, but here I am taking these very painful steps. To them it's almost like a relaxing weekend hike and they're enjoying the scenery and all that, but not me. And it makes me feel I'm not good enough and I keep asking myself, why am I so weak?

people taking the same courses, but others are having fun and learning stuff so easily, but here I am finding it so difficult. To them it's almost like a relaxing semester and they're enjoying the process and all that, but not me. And it makes me feel I'm not good enough and I keep asking myself, why am I so weak?

T: 听起来你是经历了很焦虑的状态啊。像你说的,因为这条路特别陡爬得特别费劲,你都没办法去关注那些美好的事物,比如路上的风景啊,一起爬山的朋友们的陪伴啊什么的。
Sounds like you've been experiencing a lot of anxiety. Like you said, because the path has been so steep and drained so much of your energy, you haven't been able to focus on the pleasurable things like the scenery, the company of your fellow travelers, and all that.

听起来你是经历了很焦虑的状态啊。像你说的,因为这学期特别困难,特别费劲,你都没办法去关注那些美好的事物,比如你学到的有用的知识啊,一起上课的这些朋友们的陪伴啊什么的。Sounds like you've been experiencing a lot of anxiety. Like you said, because this semester has been so difficult and drained so much of your energy, you haven't been able to focus on the pleasurable things like the useful knowledge you're learning, the company of your classmates, and all that.

S: 可能吧。但是我不知道怎么去关注这些东西啊。Maybe, but I don't know how.

T: 我们一直在讲,说你在这个爬这个上坡路时候的感受。其实我不知道你有没有想过用另外一种方式去看它,就是你去想象你的学业这些其实是一个艺术作品,比如一个雕塑或者一个

我们一直在讲,说你在这么难的一个学期里的感受。其实我不知道你有没有想过用另外一种方式去看它,就是去想象你的学业最后的结果是只属于你一个人的。不用想着和别人比,而

手工艺品什么的。你不是要和别人比赛看谁先跑到那个终点,而是用你的精力去关注你这个最终的作品,它是很独特的,只属于你一个人的,一个能让你自己感到骄傲的成品。它不会说比别人的更好或者更差。We've been talking about how you feel on this exhausting uphill climb. I wonder if you've actually thought about it in another way, that is to imagine your studies as a unique artwork, like a statue or handicraft. Not trying to race others to the same destination, but focusing your energy on an end product that is uniquely yours, that you can be proud of. Not better or worse than others.

是用你的精力去关注你这个最终的结果,它是很独特的,只属于你一个人的,一个能让你自己感到骄傲的结果。它不会说比别人的更好或者更差。We've been talking about how you feel during this exhausting semester. I wonder if you've actually thought about it in another way, that is to understand that your studies result in something that is uniquely yours. Not trying to compare with others, but focusing your energy on an outcome that is uniquely yours, that you can be proud of. Not better or worse than others.

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# **Biographical notes**

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