Explanatory Styles of Counsellors in Training

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Accepted: 12 February 2021/ Published online: 10 March 2021
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Abstract
Explanatory style is based on how one explains good and bad events according to three dimensions: personalization, permanence, and pervasiveness. With an optimistic explanatory style, good events are explained as personal, permanent, and pervasive, whereas bad events are explained as external, temporary, and specific. For counsellors, an optimistic explanatory style creates positive expectancy judgments about the possibilities and opportunities for successful client outcomes. In this research study, we explored the explanatory styles expressed in 400 events (200 good events and 200 bad events) extracted from 38,013 writing samples of first year and final year graduate level counsellors in training. Across the three optimism dimensions and within good and bad events, there was one occurrence of a positive relationship between counsellor training time and the amount of expressed optimism. The implications of this study include the need to cultivate optimistic explanatory styles of counsellors in training and practicing counsellors.

Keywords Explanatory style · Optimism · Positive psychology · Counsellors in training · Quantitative content analysis

Introduction
Current researchers in counselling have identified the next generation of counsellors as valuing client strengths and diversity as well as valuing ways of ensuring a counselling experience and

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treatment plan that meets client needs and provides client-specific services (Bedi et al. 2018). Yet, McWilliams (2005) noted a threat to an ethic of care and therapeutic compassion within the counselling profession due to a programmatic emphasis on correcting, managing, and controlling behaviors to re-program human malfunctions. There is hope for addressing this challenge to practicing an ethic of care because counsellors experience and respectfully interact with diversity in client strengths and needs. The counsellor and client should engage as therapeutic allies in a process of negotiation and renegotiation of the client explanations for their concerns as a way to help clients process their diffuse cognitive and value orientations and beliefs as well as harmonize counsellor and client viewpoints (Guindon 2001). To provide an ethic of care for the diversity of client needs, world views, and cultural considerations, counsellors in training must develop validating explanations for client experiences.

**Explanatory Styles for Good and Bad Events**

Explanatory style is how people explain their experiences of good and bad events (Burns and Seligman 1989). An event is any stimulus in the individual’s environment or in their thoughts or feelings that “has a good or bad effect from an individual’s point of view” (Schulman et al. 1989, p. 510). A good event is a breakthrough, success, win, or favorable outcome according to the individual who experiences it, and a bad event is a setback, failure, loss, or unfavorable outcome according to the individual who experiences it (Seligman et al. 2007).

Explanatory style is comprised of three dimensions: personalization, permanence, and pervasiveness (Seligman 2006). The theoretical framework for explanatory styles appears in Fig. 1. Explanatory style is rooted in Positive Psychology, which is the “scientific study of the strengths that enable individuals and communities to thrive” (University of Pennsylvania 2018). Optimism is depicted with an arrow leading upward to highlight the positive nature of optimism and its contributions to the strengths of individuals in supporting their ability to thrive. Optimism is the way people explain the causes of events that maximizes good events and minimizes bad events (Peterson et al. 1992; Schulman et al. 1989). Optimists view the causes of good events as stemming from internal strength of fortitude and as a permanent part of their lives that can be globally seen in all parts of their lives, and they view bad events as part of external life circumstances that can be overcome, as temporary, and as applicable to a specific part of their lives (Peterson et al. 1992; Schulman et al. 1989; Seligman 2006). In comparison, pessimism is depicted with an arrow leading downward to highlight that it is the way people explain the causes of events that minimizes good events and maximizes bad events (Peterson et al. 1992; Schulman et al. 1989). Pessimists view the causes of good events as arising from someone else’s contributions or other external circumstances, as temporary and having no lasting impact, and as narrowly confined to a specific area of their lives, whereas they view bad events as personal, permanent, and pervasive (Peterson et al. 1992; Schulman et al. 1989; Seligman 2006).

**Using and Measuring Explanatory Styles**

Current research has used explanatory styles to explore the links between optimism and varied human life experiences. Gordeeva et al. (2019) considered the link between academic performance and optimism. Rezaei and Bahadori Khosroshahi (2018) investigated explanatory styles in their study of predictors of university students’ life satisfaction. Bharti and Ragnekar (2019) examined cross-sectional age and gender differences in optimism. D’Angelo et al.
(2019) studied bi-directional and longitudinal attributions, coping, and health functioning among adolescents with chronic illness and their parents. Explanatory styles have also been considered in the context of coaching women for health and lifestyle change (Stelter and Andersen 2018); learned helplessness and depression (Forgeard et al. 2011); varying cultural backgrounds and life experiences (Ghosh and Deb 2016); longitudinal health (Hajek and Konig 2017); Latinx college students (Vela et al. 2018); and psychiatric disorders in soldiers (Shrestha et al. 2018).

Explanatory style can be determined with a survey, such as the Attributional Style Questionnaire (ASQ), or from writing samples containing an individual’s description of a good or bad event and their explanation for the cause of the event (Schulman et al. 1989). Using the content analysis of verbatim explanations (CAVE) technique defined in Schulman et al. (1989), “an individual’s characteristic explanatory style” (Peterson 2000, p. 47) can be determined. The CAVE technique has been positively and highly correlated with the ASQ (Burns and Seligman 1989; Peterson 2000; Seligman 2006, 2018a; Seligman et al. 2007), and many researchers have used the CAVE technique for measuring explanatory styles (Abela et al. 2012; Adler et al. 2006; Boyer 2006; Clyman and Pachankis 2014; Henry 2005; Joseph and Gray 2011; Manley 2016; Moore and Fresco 2007; Schulman et al. 1989).

Enhancing Optimistic Explanatory Styles

An optimistic and positive explanatory style can be developed and enhanced over time and cross-situationally via self-reflection and cognitive attention to explanations for good and bad events (Burns and Seligman 1989; Seligman 2006). In particular, modulated self-doubt in self-reflection on counselling practices can encourage self-regulated behaviors of self-determination, autonomy, personal agency, engagement, motivation, and focused application of skills and competencies (Ryan and Deci 2006; Nissen-Lie et al. 2017; Wampold and Imel 2015). Modulating self-doubt with an optimistic explanatory style is an adaptive professional practice that can positively influence how we interpret and perceive others, our world, and who we are in relation to others (Wampold and Imel 2015). In contrast, maladaptive professional
cognitions can lead to unrelenting personal expectations that cannot be achieved (Kaeding et al. 2017).

An optimistic or positive explanatory style can provide psychological capital for the performance of professional counselling duties because it creates positive expectancy judgments about the possibilities and opportunities for successful outcomes (Lee et al. 1993; Sameer 2018). In essence, optimistic cognitive counselling practices include asking what the barriers to the process are, recognizing opportunities that can be explored, and seeking to collaboratively identify how challenges can be resolved in a way that is meaningful to all stakeholders (Peterson 2000; Wampold and Imel 2015; Willig 2019). Insofar as optimism is a foundational platform upon which hopeful strategies are built (Bartholomew et al. 2020), an optimistic explanatory style also encourages setting realistic, attainable, concrete goals developed collaboratively with and for others (Peterson 2000) such as counselling clients.

In general, these optimistic cognitive counselling practices can begin to develop during counsellor training as counsellors learn to consider and intentionally focus on the client and on meaningful ways to meet the client’s therapeutic needs (Norcross and Wampold 2018). As a result, researchers have posited that optimism in celebrating good events and overcoming bad events would intrinsically increase over training time of counsellors based on counsellors’ learning to value what can come from clients’ personal resources and cultural diversity and learning to constructively reflect on ways that clients’ challenges can be resolved (Bedi et al. 2018; Lee et al. 1993; Peterson 2000; Purswell 2019; Rogers 1951; Sameer 2018; Rønnestad and Skovholt 2003; Wampold and Imel 2015).

**Purpose of the Present Study**

The following research question was posed: Do the explanatory styles differ between those expressed in writing samples of first year and final year graduate level counsellors in training? The purpose of this study was to identify the explanatory styles that counsellors in training have. This study included an exploration of how counsellors in training explain breakthroughs and setbacks that they experience presently and foresee in their efforts to help clients. In this study, we also examined whether graduate counsellor training nurtures a positive explanatory style in counsellors in training. To test the relationships in the research question, the sampling unit of analysis was the good or bad event, along with the event’s explanations, expressed by counsellors in training in writing samples. Schulman et al. (1989) recommended analyzing good events and bad events separately because explanatory styles for good and bad events are slightly negatively correlated, which could cause their results to partially negate one another if combined. Each of the three explanatory style dimensions should also be examined distinctly from the other two because each had distinct tendencies yet also the “correlations between the dimensions were, in general, highly significant” (Schulman et al. 1989, p. 507).

In the following Hypotheses H1, H2, and H3, the focus was on the sample of good events, and in the following Hypotheses H4, H5, and H6, the focus was on the sample of bad events. Based on the prior literature, we expected a significant positive relationship between the amount of training time of the counsellors in training and optimism expressed in writing samples in the personalization (Hypotheses H1 and H4), permanence (Hypotheses H2 and H5), and pervasiveness (Hypotheses H3 and H6) dimensions, while controlling for the amounts of optimism expressed in the other two explanatory style dimensions.
Method

Sampling and Data Collection

The sampling unit of analysis was the good or bad event along with its explanations across the three dimensions of personalization, permanence, and pervasiveness. Events and event explanations were extracted from writing samples of graduate level counsellors in training (participants). The writing samples were collected from discussion forums of first and final year graduate courses offered by a North American university. The Institutional Research Ethics Board approved the application that was made to ensure that ethical standards were met, such as by anonymizing the discussion forum posts before analysis.

Writing Samples of the Participants

The writing samples were taken from existing data, specifically from discussion forum posts of participants enrolled in a first-year course exploring Models of Counselling and Client Change or a final year Advanced Counselling Practicum course. These courses were selected because they were at the beginning and end of the graduate counselling program and because there was substantial topical overlap in their weekly academic unit topics. The discussion forums containing the writing samples were focused on pre-defined weekly academic unit topics developed by the university faculty, and students were required to apply the academic unit topics to either present or eventual client interactions. Participation in these discussion forums was mandatory, and the typical course requirement for discussion forum participation was approximately four to nine 100- to 200-word thoughtful discussion forum posts per week. In the first-year course, there was a total of 11 course sections with 228 participants who completed a total of 23,593 writing samples. In the final year advanced practicum course, there was a total of 8 course sections with 85 participants who completed a total of 14,420 writing samples.

Event and Event Explanation Extraction

Events and event explanations were extracted from the 38,013 writing samples produced by the 313 participants using the following inclusion criteria defined by Schulman et al. (1989) in their Guidelines for Extracting and Rating Spontaneous Explanations:

1. The event must be clearly good or bad from the writer’s perspective.
2. The writing sample must express the writer’s own explanations about the event and not be a quote or story that another person told that individual.
3. The writer’s explanation must clearly express a cause for the event and not just be a list of events that the writer was documenting.

Due to the academic topic focus on the discussion forums, most of the writing samples did not meet these inclusion criteria. Based on this expected challenge in meeting the inclusion criteria, the target for the total number of good and bad events was set to \( N = 400 \). This consisted of the first 100 good events and 100 bad events, along with their event explanations, extracted from the discussion forum posts of first year participants, and the first 100 good events and 100 bad events, along with their event explanations, extracted from the forum posts.
of final year participants. Events and event explanations were classified as first year or final year depending on whether they were extracted from writing samples of first year or final year participants.

**Measures**

The content analysis of verbatim explanations (CAVE) is a measurement tool that provides researchers with a system for analyzing writing samples to extract explanations of good events (favorable outcomes) and bad events (unfavorable outcomes) and to quantitatively rate the explanations along a 7-point Likert scale for each of the explanatory style dimensions of personalization, permanence, and pervasiveness (Schulman et al. 1989; Seligman 2006). Measuring explanatory styles using CAVE results from writing samples has been positively and highly correlated with directly assessing participant explanatory styles using surveys (Schulman et al. 1989). Personalization is the amount of internalization or externalization of the cause of a good event or bad event (Schulman et al. 1989). A personalization rating is internalized if “the individual attributes cause to any behavioral, physical or mental characteristic about the self” (Schulman et al. 1989, p. 511), and it is externalized if the cause is attributed “to someone or something external to self” (Schulman et al. 1989, p. 511). Permanence is the amount of stability of the cause of a good event or bad event, which can be rated by asking, “if the cause can be changed or modified… [and] In the future, when this event occurs, will this cause again be present?” (Schulman et al. 1989, p. 511). Pervasiveness is the extent to which the cause of a good event or bad event impacts “an individual’s whole life (global) or just a few areas (specific)… It is useful to think of how a cause impacts the broad scope of an ‘average’ individual’s life in terms of two major categories - achievement and affiliation” (Schulman et al. 1989, p. 512). In order to characterize how people discuss good and bad events, regardless of the topic (such as a discussion forum topic), Schulman et al. (1989) provided rigorous guidelines and linguistic examples for all Likert scale ratings for each of the explanatory style dimensions.

**Procedure for Data Analysis**

Prior to computing descriptive and inferential statistics, the good events and bad events were rated to determine raw scores for each of the three explanatory style dimensions. For personalization, permanence, and pervasiveness, the raw scores measure the amount of the explanatory style dimension that manifests in an event explanation without regard for whether the event is good or bad. To study positive and negative explanatory styles, these raw scores must be converted into an amount of optimism expressed in the personalization, permanence, and pervasiveness of an event. If an event is a good event, then the raw score is the optimism score because a more optimistic interpretation of a good event is one that is more personalized, permanent, and pervasive. For a bad event, the raw score must be inverted by calculating 8 minus the raw score so that lower raw scores on bad events correspond to higher optimism scores and vice versa. This inversion is necessary because a more optimistic interpretation of a bad event is one that is less personalized, permanent, and pervasive. For example, a highly personalized bad event has a personalization raw score of 7 because the event is highly personalized, but it has a personalization optimism score of 8−7 = 1 because highly personalizing a bad event corresponds to a pessimistic or negative explanatory style for personalization.
As per the institutional ethics approval, the anonymized writing samples were made available for rating to only the first author to maintain anonymity of the participants. The first author was not an instructor of nor a student in the courses from which the discussion forum posts were extracted. Rating consistency was measured with intra-rater reliability, which has also been used in other studies when the application guidelines of the measure are rigorously specified (Alsiri et al. 2020; Baptista Teixeira et al. 2020; Lo et al. 2017). In such analytic cases, it is beneficial to document the researcher’s background and “prior understandings of the phenomena under study” (American Psychological Association [APA] 2020). Therefore, the possibility of an idiosyncratic interpretation of the CAVE rating process is substantially mitigated by the following: (a) the rigorous specification of definitions, guidelines, and linguistic examples appearing in Schulman et al. (1989); (b) the prior rating experience of the first author with multiple rater CAVE measurement results having an inter-rater reliability of 0.908 for good events and 0.917 for bad events (Boyer 2006), which is consistent with inter-rater reliability results in other studies (Abela et al. 2012; Clyman and Pachankis 2014; Joseph and Gray 2011); and (c) the explanatory style dimension intercorrelations were computed to enable comparison of their significance levels with those originally reported for the CAVE by Schulman et al. (1989).

The intra-rater reliability process consisted of re-evaluating the first 80 events as well as every 10th event thereafter, along with their event explanations, for a total of 112 of the 400 events. The re-evaluations were performed 10 or more days after the initial extraction and evaluation of an event and its event explanations, which is a longer reevaluation period than specified by Gall et al. (1996) for having an “observer twice code… events [separated by] a few days… during data collection” (p. 339). The rate of agreement between original evaluations and the re-evaluations was based on equality comparison of ratings for each of the three explanatory style dimensions as well as for distinguishing good versus bad events. For the three explanatory styles dimensions, the rates of intra-rater reliability agreement between first and final evaluations of the respective event explanations were 0.93 for personalization, 0.96 for permanence, and 0.95 for pervasiveness. The intra-rater reliability agreement rate for distinguishing between good and bad events across the 112 events was 0.99. The explanatory style dimension intercorrelations derived from the ratings in this study are shown in Table 1, and the statistical significance levels are all consistent with those of the six explanatory style dimension intercorrelations derived from the ratings in the original CAVE results and reported by Schulman et al. (1989).

The descriptive statistics included the means and standard deviations for good events and bad events within the first and final year event groups of the optimism scores (not raw scores)

| Event Type | Personalization | Permanence | Pervasiveness |
|------------|-----------------|------------|--------------|
| **Good**   |                 |            |              |
| Personalization | –              | 0.213**    |              |
| Permanence     | 0.213**         | –          |              |
| Pervasiveness  | 0.274**         | 0.191**    | –            |
| **Bad**      |                 |            |              |
| Personalization | –              | –          |              |
| Permanence     | –0.011          | –          |              |
| Pervasiveness  | 0.338**         | 0.130*     | –            |

*a N = 200. b N = 200. *p < .05. **p < .01
for each of the explanatory style dimensions. A two-model multiple linear regression (MLR) design was used to examine, within good events (hypotheses H1 to H3) and bad events (hypotheses H4 to H6), the relationships between optimism scores in each one of the three explanatory style dimensions and the amount of training time of the counsellors in training, while controlling for optimism scores expressed in the other two explanatory style dimensions. Each first model had one explanatory style dimension as the dependent variable and the other two explanatory style dimensions as independent variables, which set a baseline for the intercorrelations of the dimensions. Each second model added training time as another independent variable, which not only determined the relationship between training time and the dependent variable explanatory style dimension but also enabled, via comparison to the first model, the calculation of a $\Delta R^2$ and then Cohen’s $f^2$ that isolated the size of the effect that was uniquely attributable to training time. In accordance with the Bonferroni correction for multiple hypothesis testing, the $p$-value threshold of 0.05 was divided by the number of hypotheses (6), and an additional annotation for $p < 0.0083 = 0.05/6$ was added to each of Tables 3, 4 and 5.

Results

Within the sample of 400 events, there were 100 good events and 100 bad events extracted from the writing samples of first year participants and 100 good events and 100 bad events extracted from the writing samples of final year participants. Within the sample, there were no missing data values for any of the explanatory style dimensions. Table 2 summarizes the descriptive statistics for personalization, permanence, and pervasiveness within good and bad events for first and final year participants. For good events, the mean optimism scores on personalization (H1) were 4.91 for first year event explanations and 4.39 for final year event explanations. The standard deviations were 2.13 for first year and 2.15 for final year. For H2, first year good event explanations had a mean of 5.73 and standard deviation of 1.26, compared with a mean of 4.92 and standard deviation of 1.10 for final year event explanations. For pervasiveness expressed in good event explanations (H3), the mean of first year scores was 4.76 with a standard deviation of 1.96, compared with a mean of 4.80 and standard deviation of 1.54 in the final year event explanations. For bad events, the mean optimism scores on personalization (H4) were 3.52 for first year event explanations and 2.62 for final year event explanations. The standard deviations were 2.48 for first year and 2.01 for final year. For H5, first year event explanations had a mean optimism score of 2.40 and standard deviation of 1.24, whereas the final year mean of 3.22 and standard deviation of 1.04. For pervasiveness on bad events (H6), the means for the first and final year were 3.09 and 3.18 with standard deviations of 1.95 and 1.54.

The inferential results of testing the hypotheses for personalization of good events and bad events appear in Table 3. For hypothesis H1 (personalization of good events), the second MLR model that controlled for permanence and pervasiveness showed that personalization had no statistically significant relationship with amount of training time ($B = -0.336$, $p = 0.275$). For hypothesis H4 (personalization of bad events), the second MLR model that controlled for permanence and pervasiveness showed that there was a statistically significant relationship between personalization and amount of training time ($B = -0.964$, $p = .003$, $f^2 = 0.046$).

The inferential results of testing the hypotheses for permanence of good events and bad events appear in Table 4. For hypothesis H2 (permanence of good events), the second MLR model that
controlled for personalization and pervasiveness showed that there was a statistically significant relationship between permanence and amount of training time \((B = -0.775, p < .001, f^2 = 0.113)\). For hypothesis H5 (permanence of bad events), the second MLR model that controlled for personalization and pervasiveness showed that there was a statistically significant relationship between permanence and amount of training time \((B = 0.820, p < .001, f^2 = 0.125)\).

The inferential results of testing the hypotheses for pervasiveness of good events and bad events appear in Table 5. For hypothesis H3 (pervasiveness of good events), the second MLR model that controlled for personalization and permanence showed no statistically significant relationship between pervasiveness and amount of training time \((B = 0.339, p = 0.179)\). For hypothesis H6 (pervasiveness of bad events), the second MLR model that controlled for personalization and permanence showed that there was no statistically significant relationship between pervasiveness and amount of training time \((B = 0.194, p = 0.444)\).

Discussion

In this study, we explored the differences in explanatory styles between first year and final year graduate level counsellors in training, as expressed in writing samples about applying counselling topics to client-related interactions. We hypothesized significant positive relationships between counsellor training time and optimism expressed in the explanatory style dimensions of personalization, permanence, and pervasiveness, while controlling for optimism expressed in the other two dimensions. There was a significant positive relationship between counsellor training time and expressed optimism only for permanence of bad events (H5), significant negative relationships for permanence of good events (H2) and personalization of bad events (H4), and no relationships for the other three hypotheses: personalization of good events (H1) and pervasiveness of both good events (H3) and bad events (H6).
While the findings of mostly non-positive relationships were unexpected, a novel interpretation of these results is that the expectation of strong or typical positive relationships may be at odds with the practice of counselling. Rather than experiencing increased optimism in celebrating a client’s good events and the client’s overcoming of bad events, counsellors are theoretically oriented to attribute these good outcomes to their clients. They are attuned in their varied programs to highlighting the importance of valuing the individual person and validating their worth with awe and respect (Paré 2013). Counsellors care for and about their clients, hear them, and make efforts to understand their potentially kaleidoscopic worldviews (Arthur and Collins 2010; Landreth 2012; Landreth and Bratton 2019). Counsellors train to nurture a person-centered relationship with clients and to be responsive to client needs (Norcross and Wampold 2018). Counsellors in training are encouraged to work with clients to first identify the concerns to address, to then collaboratively discern ways that are meaningful to clients to address these concerns, and then to seek regular client feedback to consistently monitor their wellness progress (Paré 2013; Parrow et al. 2019; Sackett and Lawson 2016; Tickle and Murphy 2014; Yalom 2009). As counsellors care for clients, it is “not in a possessive way or in such a way as simply to satisfy the therapist’s own needs. It means caring for the client as a separate person, with permission to have his own feelings, his own experiences” (Rogers 1957, p. 98).

On the other hand, clients’ unresolved bad events and ongoing issues corresponded in the writing samples to bad events for the counsellors in training, which they tended to take more personally (less optimistically) because they had more training to address
client concerns. The negative relationship had a smaller than typical effect size (Ellis 2010), rather than the initially expected typical positive relationship. In terms of practical importance, the magnitude of the negative relationship for personalization was that final year writing samples averaged nearly one less point on the 7-point Likert scale. However, final year counsellors in training also generally considered bad events to be less permanent. The positive relationship was a little smaller than a typical effect size (Ellis 2010). In terms of practical importance, the magnitude of the positive relationship was that final year writing samples averaged almost one more point on the 7-point Likert scale for permanence. Final year participants expressed more optimism than first year participants about being able to address their bad events over time, which is in accord with the expectation from prior literature (Bedi et al. 2018; Ronnestad and Skovholt 2003; Wampold and Imel 2015).

Finally, it is noteworthy that counsellors with more training expressed less permanence in good events. The negative relationship had a smaller than typical effect size (Ellis 2010), rather than the initially expected typical positive relationship. In terms of practical importance, the magnitude of the negative relationship for personalization was that final year writing samples averaged about three quarters of a point lower on the 7-point Likert scale for permanence. Contrary to this negative relationship, a counsellor’s good events are important occurrences that they should unequivocally emphasize in order to help increase the likelihood of future occurrences.

### Table 4

Results for permanence in first and final year groups in good events and in bad events while controlling for personalization and pervasiveness (Hypotheses H2 and H5)

| Event Type | Variable | Permanence<sup>a</sup> |
|------------|----------|------------------------|
|            |          | Model 1 | Model 2 |  |
|            |          | B       | 95% CI  | B   | 95% CI  |
| Good<sup>b</sup> | Constant | 4.369*** | 4.818*** | [4.262, 5.375] |  |
|            | Personalization<sup>a</sup> | 0.101* | 0.077 | [−0.002, 0.155] |  |
|            | Pervasiveness<sup>a</sup> | 0.102* | 0.112* | [0.017, 0.208] |  |
|            | Training Time<sup>c</sup> | – | –0.775*** | [−1.099, −0.450] |  |
|            | Adjusted R² | .055 | .147 |  |  |
|            | R² | .064 | .160 |  |  |
|            | F | 6.783*** | 12.409*** |  |  |
|            | ∆R² | – | .095 |  |  |
|            | ∆F | – | 22.201*** |  |  |
| Bad<sup>b</sup> | Constant | 2.583*** | 2.122*** | [1.728, 2.516] |  |
|            | Personalization<sup>a</sup> | −0.033 | 0.008 | [−0.067, 0.084] |  |
|            | Pervasiveness<sup>a</sup> | 0.105* | 0.080 | [−0.017, 0.178] |  |
|            | Training Time<sup>c</sup> | – | 0.820*** | [0.494, 1.146] |  |
|            | Adjusted R² | .011 | .117 |  |  |
|            | R² | .020 | .130 |  |  |
|            | F | 2.057 | 9.748*** |  |  |
|            | ∆R² | – | .109 |  |  |
|            | ∆F | – | 24.636*** |  |  |

<sup>a</sup> Measured on a 7-point Likert scale. <sup>b</sup> N = 200. <sup>c</sup> Coded as 0 for first year and 1 for final year

*p < .05. **p < .01. ***p < 0.0083
Limitations

This study was limited to the writing samples of first and final year counsellors in training that were drawn from separate groups of participants. Some differences in the writing samples may be due to factors such as participant age (Lee et al. 2018). However, all writing samples were anonymized by the university prior to being analyzed. Furthermore, this limitation was mitigated by using a large writing sample size from many anonymous participants.

Implications for Future Research

This research has practical implications for counsellors in training, practicing counsellors, and counsellor educators. Based on finding two negative and three null relationships between counsellor training time and change of optimism across the three explanatory style dimensions within good events and bad events, there is strong support from this study for recommending that counsellors in training and practicing counsellors should formally study the language of optimistic explanatory styles and that counsellor educators should directly include the study of optimistic explanatory styles in counsellor training. Enhancing optimism in the explanatory style dimensions may help not only counsellors, but intentionally using optimistic language constructs with clients may also be an effective preventative and interventive measure to help them accentuate good events and minimize bad events in their lives (Boyer 2019).

Table 5 Results for Pervasiveness in First and Final Year Groups in Good Events and in Bad Events While Controlling for Personalization and Permanence (Hypotheses H3 and H6)

| Event Type | Variable | Pervasivenessa | Model 1 B | Model 2 B | 95% CI | Adjusted R2 | R2 | F | ΔR2 | ΔF | 95% CI |
|------------|----------|----------------|-----------|-----------|-------|-------------|----|----|------|----|-------|
| Goodb      | Constant | 2.811***       | 2.394***  | 1.161, 3.627 |       | .084        | .093 | 10.131*** |      | .819 |       |
|            | Personalizationa | 0.199*** | 0.204***  | 0.092, 0.316 |       |          |      |       |      |     |       |
|            | Permanencea | 0.196*      | 0.238*    | 0.036, 0.441 |       |          |      |       |      |     |       |
|            | Training Timec | –          | 0.339     | –0.157, 0.835 |       |          |      |       |      |     |       |
|            | Adjusted R2  | .084        | .088      |             |       |          |      |       |      |     |       |
|            | R2          | .093        | .102      |             |       |          |      |       |      |     |       |
|            | F           | 10.131***   | 7.388***  |             |       |          |      |       |      |     |       |
|            | ΔR2         | –           | .008      |             |       |          |      |       |      |     |       |
|            | ΔF          | –           | 1.819     |             |       |          |      |       |      |     |       |
| Badb       | Constant | 1.795***     | 1.749***  | 1.080, 2.417 |       | .124       | .132 | 15.031*** |      | .589 |       |
|            | Personalizationa | 0.259*** | 0.267***  | 0.165, 0.369 |       |          |      |       |      |     |       |
|            | Permanencea | 0.194*      | 0.167     | –0.035, 0.369 |       |          |      |       |      |     |       |
|            | Training Timec | –          | 0.194     | –0.304, 0.691 |       |          |      |       |      |     |       |
|            | Adjusted R2  | .124        | .122      |             |       |          |      |       |      |     |       |
|            | R2          | .132        | .135      |             |       |          |      |       |      |     |       |
|            | F           | 15.031***   | 10.196*** |             |       |          |      |       |      |     |       |
|            | ΔR2         | –           | .003      |             |       |          |      |       |      |     |       |
|            | ΔF          | –           | .589      |             |       |          |      |       |      |     |       |

*a Measured on a 7-point Likert scale. b N = 200. c Coded as 0 for first year and 1 for final year

*p < .05. **p < .01. ***p < 0.0083
This research also has scholarly implications for counsellor education researchers due to the unexpected findings of non-positive relationships between optimism and counsellor training time. Future research could replicate this study on non-anonymized participants to enable statistical control for natural changes due to age such as those reported by Burns and Seligman (1989). A similar study could be performed longitudinally to track changes of optimism in the same counsellors in training at the beginning and end of their programs. Furthermore, practicing counsellors have noted increases of their hope and optimism through their work with victims of interpersonal trauma based on an effect called vicarious resilience (Silveira and Boyer 2015). Therefore, future research could also explore the quantitative differences between the explanatory styles of counsellors in practice for a varying number of years and those of final year counsellors in training to note whether having the years of practice affects explanatory styles of counsellors with no direct training on the language of optimistic explanatory styles. As Seligman (2018b) asserts, pessimism comes more naturally, and optimism needs nurturance because “the human brain pays more attention and responds more strongly to negatives than to positives” (Rashid and Seligman 2019, p. 1). Future research could therefore use an experimental design to measure the effects of optimistic explanatory styles training on expressed optimism of counsellors in training and counsellors in practice, on retention of counsellors in training and in practice, and, ultimately, on client retention and client outcomes. Ideally, by improving their own knowledge and intentional use of optimistic explanatory styles, counsellors will be able to better cope with the demands of the counselling profession and better serve their clients.

Declarations

Conflict of Interest We have no known conflict of interest to disclose.

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