RESEARCH PAPER

Does positive affect lead to perceptions of meaning in life? The moderating role of self-connection

Kristine Klussman[1], Austin Lee Nichols[1], Julia Langer[1] and Nicola Curtin[1]

Corresponding author

[1] Kristine Klussman, Connection Lab, San Francisco, CA, USA

Email: research@connectionlab.com

Affiliations

Connection Lab, San Francisco, CA, USA

Abstract

Background/Aims/Objective: Positive affect has established itself as a strong, robust correlate of meaning. Although research on self-connection has only just begun, it also appears to be an important part of this nomological network. There is reason to believe that self-connection may moderate the relationship between positive affect and meaning due to its emphasis on focusing one's attention inward.

Methods/Methodology: The current research examined this potential moderation across two studies. The first study asked participants to answer questions designed to measure all three constructs while the second study experimentally manipulated participants' focus on their own or another person's values.

Results: Across both studies, positive affect and meaning were not significantly related when self-connection was high. Furthermore, when participants focused on their own values, positive affect was not related to meaning. Only when participants focused on another person and were low in self-connection did the relationship between positive affect and meaning remain significant.

Discussion: Self-connection, and not positive affect, reliably related to increased meaning in life. Only when participants were low in self-connection and focused on others were positive affect and meaning related. Results highlight the need to better understand self-connection and its potential to increase meaning.

Conclusions: Self-connection appears to be sufficient to increase meaning, regardless of one's positive affect.

Key words: self-connection; positive affect; meaning; moderation; purpose

Abstrait

Contexte / Buts / Objectif: L'affect positif s'est imposé comme un corrélat fort et robuste avec le sens dans la vie. Bien que la recherche sur la connexion avec soi-même ne fasse que commencer, elle semble également être un élément important de ce réseau nomologique. Il y a des raisons de croire que l'auto-connexion peut modérer la relation entre l'affect positif et le sens dans la vie en raison de son accent mis sur la concentration intérieure.

Méthodes / Méthodologie: La recherche actuelle a examiné cette modération potentielle dans deux études. La première étude a demandé aux participants de répondre à des questions conçues pour mesurer les trois concepts tandis que la deuxième étude a manipulé expérimentalement la concentration des participants sur leurs propres valeurs ou celles d'une autre personne.

Résultats: Dans les deux études, l'affect positif et le sens dans la vie n'étaient pas significativement liés lorsque l'auto- connexion était élevée. De plus, lorsque les participants se concentraient sur leurs propres valeurs, l'affect positif n'était pas lié au sens dans la vie. Ce n'est que lorsque les participants se sont concentrés sur une autre personne et étaient peu connectés à eux-mêmes que la relation entre l'affect positif et le sens dans la vie est restée significative.

Discussion: L'auto-connexion, est liée de manière fiable à un sens accru dans la vie et non l'affect positif. Ce n'est que lorsque les participants étaient peu connectés à eux-mêmes et concentrés sur les autres que l'affect positif et la signification étaient liés. Les résultats mettent en évidence la nécessité de mieux comprendre l'auto-connexion et son potentiel pour augmenter le sens dans la vie.

Conclusions: L'auto-connexion semble être suffisante pour augmenter le sens, indépendamment de l'affect positif d'une personne.

Mots-clés: auto-connexion; affect positif; sens; modération; objectif

The benefits of positive affect and perceived meaning in life are substantial (Baron, 1990; Connolly & Viswesvaran, 2000; Meisel & Palfai, 2015; Zhang et al., 2017). A little over a decade ago, King and her colleagues supplied some of the most convincing evidence, to date, for the relationship between positive affect and people's perceptions of meaning in life (King, Hicks, Krull, & Del Gaiso, 2006). Despite the contribution that their research made to the meaning literature, they have only begun to hint at boundary conditions that may limit the effect of positive affect on meaning (Hicks & King, 2008; 2009). As important as positive affect clearly is to increasing people's meaning, the research on various quality of life variables is likely to add to our understanding of and ability to predict or increase meaning.

The emphasis on positive affect as a way to increase meaning is also limited in its applicability. That is, although various contextual variables can influence a person's momentary affect, the tendency to experience positive affect is quite dispositional in nature (Charles, Reynolds, & Gatz, 2001). Practically speaking, this makes increasing people's positive affect, in ways that will lead to increased meaning, quite challenging. However, practices that clinicians and the general public already use may also be important to finding meaning and might reduce the need for positive affect. One such possibility is focusing one's attention inward versus externally. We concentrate the current research on this very practical alternative.

As a new, relatively unstudied concept, self-connection in part reflects a person's tendency to focus internally. Specifically, self-connection seeks to complete the picture that related concepts, such as mindfulness and authenticity, have painted for some time now. Being self-connected means being aware of oneself, accepting this self, and acting in alignment with that self (see Klussman, Nichols, Curtin, & Langer, 2020). As such, it subsumes, but goes beyond related concepts (e.g., Buddhist principles and the "self-as-instrument"; Cheung-Judge,2001). In fact, initial evidence suggests that it relates to many of the most important quality of life concepts yet is distinct from other predictors of meaning (Klussman, Nichols, et al., 2020).

It also may account for relationships that have long been established in the literature (e.g., Klussman, Curtin, Langer, & Nichols, 2020). Consequently, as one concept related to an internal focus, we seek to examine here if it moderates the relationship between positive affect and meaning in life.

Background Literature

The support for positive affect's role in increasing meaning in life is considerable (Hicks & King, 2008, 2009; Hicks, Schlegel, & King, 2010; King et al., 2006). Across many studies, conducted in different contexts, with diverse populations, and using different measures and manipulations, positive affect reliably correlates with increased meaning. Although this includes employing both cross-sectional and longitudinal designs, both measuring and manipulating positive affect (King et al., 2006), it is worth noting that most of the research is correlational in nature. Despite the dearth of experimental evidence for this relationship, the two variables do reliably relate to one another, and some evidence does exist for the causal nature of positive affect predicting meaning (Hicks et al., 2012; King et al., 2006; Martela, Ryan & Steger, 2017). As such, we focus on this directionality in the current research. Furthermore, given the emphasis on moderators of this relationship, we focus our investigation on a novel concept within an established framework that may help people understand when this relationship holds.

Many other concepts have also received support for their ability to predict meaning in life (Allan, Bott, & Suh, 2015). In particular, mindfulness and authenticity, concepts theoretically related to, yet conceptually and statistically distinct from, self-connection (see Klussman, Nichols, et al., 2020 for a discussion) have amassed support for their role in increasing meaning. Although the concept itself is quite varied and often means different things to different people, researchers have recently laid out the process by which mindfulness, in particular, results in increased meaning (Garland, Farb, Goldin, & Fredrickson, 2015; Garland, Hanley, Goldin, & Gross, 2017; Garland et al., 2017). Similarly, initial evidence suggests that authenticity also leads to increased meaning (Ménard & Brunet, 2011). Given the strong relationships between these constructs and self-connection, it stands to reason that self-connection also may facilitate the perception of a meaning in life. Furthermore, self-connection may play a role in who or when people find increased meaning.

Current Research

Some research has already begun to examine the potential moderators of the relationship between positive affect and meaning (Hicks & King, 2007; 2008; Hicks, Trent, Davis, & King, 2012; Ward & King, 2016). In general, it appears that positive affect may only be necessary to increasing meaning when people lack something else important to the process of finding meaning.

Under the assumption that positive affect predicts meaning, the current research focused on when positive affect is important in the making and finding of meaning and when it becomes less important or even irrelevant. In particular, we concentrate on the focus of one's attention and use self-connection along with an experimental manipulation to operationalize this internal focus.

In the current study, we hypothesize that an individual's focus is important to this meaning-making process. Despite the negative effects that are often prevalent in the literature (e.g., Ingram & Smith, 1984; McNevin, Shea, & Wulf, 2003), the effects of an internal focus on positive outcomes are highly dependent on several contextual variables (Field, Joudy, & Hart, 2010; Gibbons & Wicklund, 1982). In the current study, we hypothesize that an internal focus will actually increase people's perceived meaning. The reason for this centers on understanding one's priorities and goals as a way to find meaning. In particular, we believe that accepting one's internal values is imperative if one is to feel life is meaningful. In fact, we believe that having an internal focus will make positive affect unnecessary in the prediction of meaning. In the current research we examine this in two ways: 1. By examining the moderating role of self-connection, 2. By manipulating individuals' foci and examining this as an additional moderator.

A new concept in positive psychology, self-connection is defined as an awareness of oneself, (2) an acceptance of oneself based on this awareness, and (3) an alignment of one's behavior with this awareness. It requires an internal focus so that one can become aware of oneself, can accept that self, and can act in alignment with that awareness (Klussman, Nichols, et al., 2020). First, awareness within the self-connection framework is thought of as noticing self-relevant aspects of experiences that provide clarity on the perceived self. Second, acceptance involves meeting one's experiences with acceptance rather than a pure, valence-free, judgement. Finally, alignment highlights the need for acting upon what one perceives and accepts. As such, self-connection might be considered a proxy for an internal focus, yet a concept that goes well beyond simply focusing inward. For this reason, we decided to examine this potentially important variable as a moderator of the positive affect-meaning relationship.

Although research on self-connection is only in its infancy, there already exists support for its role in increased well-being (Klussman, Curtin, et al., 2020). In general, self-connection is significantly related to flourishing, life satisfaction, and meaning. Importantly, these relationships hold even when controlling for related constructs. Work currently underway even suggests that self-connection predicts meaning above and beyond the effects of mindfulness, authenticity, and self-concept clarity (Klussman, Nichols, et al., 2020). Given these findings and the beneficial nature of being self-connected, we believe that being self-connected is enough to perceive meaning in one's life. However, when people are not self-connected, positive affect is likely to still have a significant relationship with meaning.

Going one step further, we also examine a person's current focus and its ability to moderate these relationships. In particular, although self-connection requires an internal focus, it is thought to be more of a dispositional trait. That is, evidence currently suggests that self-connection is likely built over time, and no research has yet examined its ability to change momentarily. As such, examining an individual's current focus allows us to explore the effects of both a dispositional trait as well as a momentary situation. We expect that the combination of the two will result in a more complete understanding of the role that focus plays in well-being. Specifically, we expect that positive affect will have the weakest relationship with meaning when highly self-connected individuals are internally focused and the strongest relationship when individuals are both low in self-connection and other-focused.

We examine this assertion in two studies. First, we measure all three concepts and examine if self-connection moderates the relationship between positive affect and meaning. Next, we add an experimental variable to further understand these relationships. Specifically, Study 2 adds a self/other-focused manipulation to examine if focusing on oneself versus others further moderates this relationship. In all, we expected that being self-focused and/or self-connected would eliminate the effect of positive affect on meaning.

STUDY 1

In the first study, we aimed to obtain an initial test of the relationship between self-connection and meaning and its potential as a moderator of the relationship between positive affect and meaning. To accomplish this, we recruited a convenience sample of participants and asked them to answer questions related to all three constructs. We avoided initially revealing to participants any details regarding the details of the study or our hypotheses to avoid crosstalk or demand characteristics (Edlund et al., 2015; Nichols & Maner, 2008).

Participants
Prior to recruitment, IntegReview IRB (protocol #CONNECT_ PR005) reviewed and approved the study based on the US

Table 1

Regression Results for Study 1

Model	Variable Entered	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	p
Mean	(Constant)	5.38	0.15		36.98	<.01
	Self-Connection	0.67	0.12	0.54	5.44	<.01
	Positive Affect	0.67	0.17	0.39	3.92	<.01
	Interaction	-0.45	0.13	-0.32	-3.59	<.01
-1 SD	(Constant)	6.19	0.21		29.02	<.01
	Self-Connection	0.67	0.12	0.54	5.44	<.01
	Positive Affect	0.12	0.23	0.07	0.52	0.60
	Interaction	-0.45	0.13	-0.44	-3.59	<.01
+1 SD	(Constant)	4.57	0.20		22.40	<.01
	Self-Connection	0.67	0.12	0.54	5.44	<.01
	Positive Affect	1.22	0.23	0.71	5.32	<.01
	Interaction	-0.45	0.13	-0.47	-3.59	<.01

Notes: All entered predictors were first centered.

Measures

Affect. We assessed affect using Watson and Clark's (1988) Positive and Negative Affect Schedule (PANAS). The Positive Affect portion of the scale asked participants to rate the extent to which they felt ten emotions (e.g., "Interested": 1= very slightly or not at all; 5= extremely). Higher scores reflect greater positive affect (M = 3.24, sd = 0.87, α = .89).

Meaning. Meaning was assessed using the Presence of Meaning subscale of the Meaning in Life Questionnaire (MLQ-P; Steger, Frazier, Oishi, & Kaler, 2006). Participants responded to five items on a seven-point scale (e.g., "My life has a clear sense of purpose": 1= absolutely untrue; 7 = absolutely true). Higher scores corresponded to participants feeling they had greater meaning (M = 5.33, sd = 1.50, α = .93).

Self-Connection. We measured self-connection using the one-item, definition-based measure used in prior research (Klussman, Curtin, et al., 2020). Specifically, we defined self-connection to participants as when you feel "a sense of closeness to yourself and/or are particularly aware of and attuned to yourself…". Participants indicated the extent to which they felt self-connected using a seven-point scale (1 = I rarely or never feel self-connected; 7 = I always or often feel self-connected). Higher scores indicated greater self-connection (M = 5.35, sd = 1.22).

Federal Policy for the Protection of Human Subjects. Given that a regression with two predictors, an alpha of .05, and a moderate effect size requires 50 participants to obtain 95% power, we set out to recruit a sample of 50 participants from the U.S. In all, we recruited a convenience sample of fifty-two participants from Amazon's Mechanical Turk (MTurk). In particular, we posted the "HIT" on MTurk and required that participants currently reside in the USA. Of those recruited, 46 completed the entire questionnaire. This final sample of participants was, on average, 37.39 years old (sd = 12.92), mostly male (70%) and White/European American (85%) and had either completed some college (30%) or a bachelor's degree (50%). With the exception of a majority of the sample being male, these statistics roughly coincide with those provided from the 2018 U.S. census.

Results and Discussion

The current study employed a continuous (positive affect) X continuous (self-connection) fully-factorial design. To examine our hypothesis that self-connection moderates the relationship between positive affect and meaning, we performed a multiple regression with positive affect and self-connection as predictors, including the interaction between the two, and meaning as the outcome. Main effects of positive affect, β = .39, p < .01, and self-connection resulted, β = .54, p < .01. The expected interaction between positive affect and self-connection was also significant, β = -.32, p < .01, suggesting that self-connection does moderate the relationship between positive affect and meaning (See Table 1).

Due to the significant interaction, we next performed simple slopes tests to dissect the interaction (Aiken & West, 1991). In particular, we performed two additional regression analyses with:

Figure 1:
The moderating role of self-connection in Study 1
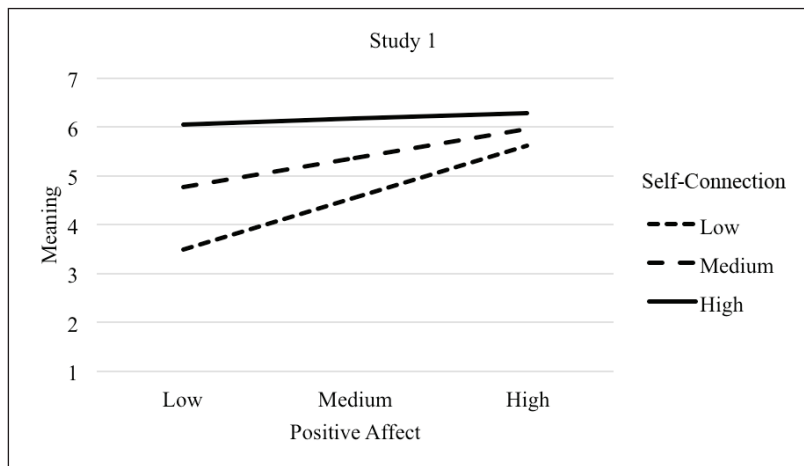
1. Self-connection centered at one standard deviation below its mean, 2. Self-connection centered at one standard deviation above its mean. Similar to our initial analysis, the first equation resulted in a significant relationship between positive affect and meaning, β = .71, p < .01. In contrast, the second equation resulted in a nonsignificant relationship between the two variables, β = .07, p = .60. These findings suggest that positive affect and meaning are only related when self-connection is at low or medium levels. When self-connection is high, it is only self-connection and meaning that are significantly related (see Figure 1).

STUDY 2

Study 1 suggested that positive affect only relates to meaning when people are not self-connected. To expand on this finding, the current study used an experimental manipulation to understand if a focus on oneself, versus others, would additionally moderate this effect. To accomplish this, we had participants either focus on the values important to them or to choose from a list of adjectives describing a fictitious other. We then asked them to answer questions related to the same three constructs.

In all, this second study contributed in three main ways. First, it sought to conceptually replicate the findings from Study 1, with a new sample of participants, thus providing additional confidence in these findings. Second, it employed a different measurement scale for self-connection to additionally examine the reliability of its role in this relationship. Finally, it sought to expand on the findings from Study 1, using an experimentally manipulated variable, to further examine the importance of an internal versus external focus. As such, this study further highlights the role of attending to and connecting to one's internal self versus externally focusing on others.

Participants

Under the same IRB protocol as Study 1 (IntegReview protocol #CONNECT_PR005), we used the same sampling procedure to obtain a convenience sample from MTurk. In particular, although our desired number of participants in Study 1 was 50, we sought to recruit 50 participants in each manipulation group for the current study. By doubling our sample size, we far surpassed the number of participants necessary to detect a medium effect in our analysis. In total, we recruited a total of one hundred twenty-one participants. Of those recruited, 86 completed the entire questionnaire. This final sample of participants was, on average, 34.76 years old (sd = 10.50), mostly female (52%) and White/European American (80%) and had completed either some college (40%) or a bachelor's degree (40%). In all, this sample was very similar to the general demographics of the U.S.A.

Procedure

The current study employed a continuous (positive affect) X continuous (self-connection) X 2 (focus: internal or external) design with meaning as the continuous outcome. Although focus was manipulated and participants were randomly assigned to one of the two conditions, self-connection and positive affect were both measured. As such, the study is best described as quasi-experimental.

After completing demographic questions, we randomly assigned participants to one of two conditions. In the self-focused condition (n = 44), they completed a task that required them to focus on themselves and their values. They indicated their own values, identified themes across them, and ranked the most important ones. Participants in the other-focused condition (n = 42) did a similar task, but it revolved around adjectives related to someone else. In particular, we presented participants with a description of a person who was matched with their gender identification. We then asked participants to indicate the adjectives they believe represented that person, create themes

Table 2

Omnibus Regression Results for Study 2

Variable Entered	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	p
(Constant)	5.33	0.21		25.38	<.01
Self-Connection	0.03	0.01	0.42	2.74	0.01
Positive Affect	0.34	0.25	0.20	1.40	0.17
Condition	-0.41	0.29	-0.13	-1.38	0.17
Condition X Self-Connection	0.01	0.02	0.09	0.64	0.53
Condition X Positive Affect	-0.46	0.36	-0.18	-1.28	0.20
Positive Affect X Self-Connection	-0.02	0.01	-0.36	-2.40	0.02
Three-Way Interaction	0.03	0.01	0.34	2.28	0.03

Notes: All continuous predictors were first centered

based on those adjectives, and rank those they believed best described that person.

Once the task was complete, participants answered questions similar to Study 1. Our measures of positive affect (M = 2.78, sd = 0.89, α = .91; Watson and Clark, 1988) and meaning (M = 5.02, sd = 1.57, α = .95; Steger et al., 2006) were unchanged from Study 1. However, instead of using a likert-type scale to measure self-connection, as in Study 1, we asked participants to indicate their self-connection using a sliding scale (0 = Not at all to 100 = Completely; M = 68.97, sd = 21.03).

Results and Discussion

In addition to replicating the interaction that emerged in Study 1, we added focus (internal v. external) as a categorical moderator in the equation. Specifically, we performed a multiple regression with positive affect, self-connection, and condition as predictors, including the 2-way and 3-way interactions of all three variables, and meaning as the outcome. The only main effect that resulted was of self-connection, β = .42, p < .01, again indicating that it independently predicted greater meaning. The expected interaction between positive affect and self-connection was also significant, β = -.36, p = .02, suggesting that self-connection again moderated the relationship between positive affect and meaning (see Table 2).

To replicate the findings from Study 1, we again performed simple

slopes tests to dissect the interaction (Aiken & West, 1991). In particular, we performed two additional regression analyses with: 1. Self-connection centered at one standard deviation below its mean, 2. Self-connection centered at one standard deviation above its mean. Consistent with Study 1, the first equation resulted in a significant relationship between positive affect and meaning, β = .48, p = .02. The second equation resulted in a nonsignificant relationship between the two variables, β = -.09, p = .58. These findings again suggest that positive affect and meaning are not significantly related when self-connection is high. When self-connection is high, it is only self-connection and meaning that are significantly related.

Finally, the predicted three-way interaction also emerged as significant, β = .34, p = .03. To examine it, we performed separate regressions, for each condition, at the mean, at one standard deviation above the mean, and at one standard deviation below the mean of self-connection. Simple slopes tests suggested that, regardless of condition, positive affect did not relate to meaning at high (Other: β = .18, p = .16; Self: β = -.07, p = .67), or mean levels of self-connection (Other: β = -.09, p = .58; Self: β = .02, p = .89). Only at low levels of self-connection, when focusing on others, was the relationship between positive affect and meaning still significant, β = .44, p = .02. This was not the case when participants were low in self-connection and focused on themselves, β = -.16, p = .49. That is, having either a dispositional or momentary focus on oneself was enough to increase meaning. Only when people were low in self-connection and focused externally was positive affect still beneficial to meaning. In all, this highlights the ability of being connected to and focusing on oneself to increase meaning and to essentially eliminate the effect that positive affect has on meaning (see Figures 2 and 3).

GENERAL DISCUSSION

Support abounds for the relationship between positive affect and the presence of meaning in one's life (King et al., 2006). However, little is known about when or how this takes place. In particular, it is unclear if positive affect is necessary to finding

Figure 2:
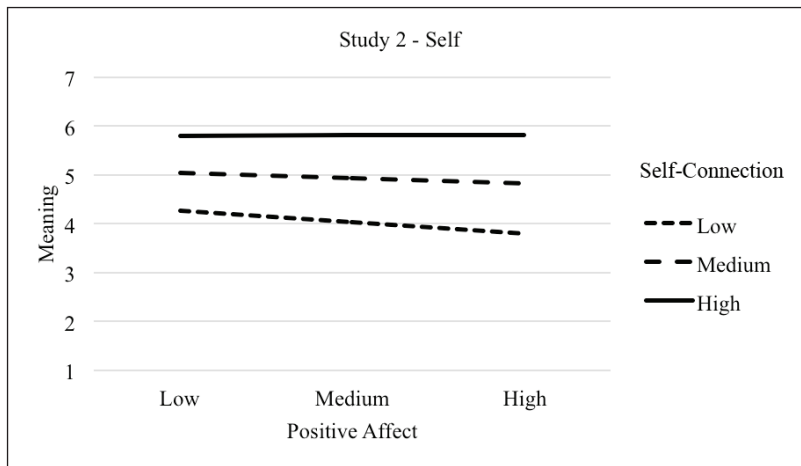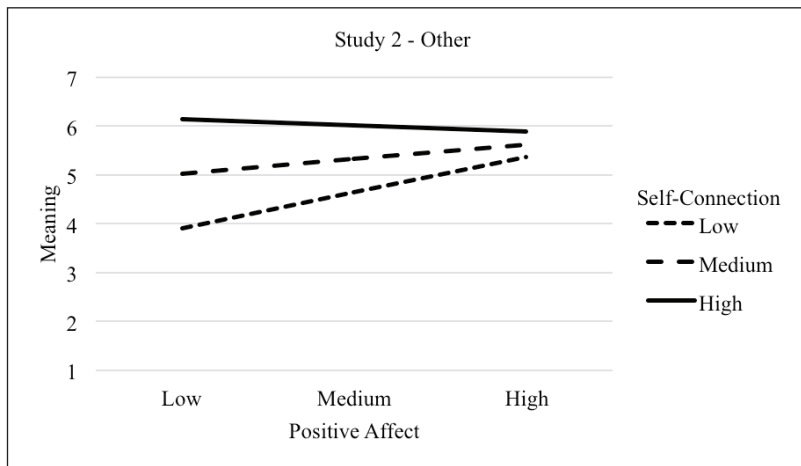**The moderating role of self-connection among self-focused individuals in Study 2**

Figure 3: The moderating role of self-connection among other-focused individuals in Study 2

meaning in life or if there are other means by which meaning can emerge without the need for positive affect. As a means to look inside oneself to find meaning, having an internal focus was hypothesized to be one such moderator of this relationship.

Research has long been interested in the effects of an internal versus external focus (Ingram & Smith, 1984). Recently, self-connection, as a consequence of an internal focus, has received support as an independently positive predictor of a variety of health and well-being outcomes (Klussman, Nichols, et al., 2020). The goal of the current research, therefore, was to understand the role of focus, using self-connection as one operationalization, in the relationship between positive affect and meaning.

Across two studies, we investigated the moderating effect of focus on the relationship between positive affect and meaning. Results suggested that self-connection practically eliminates the relationship between positive affect and meaning. Furthermore, a momentary focus on one's values, versus adjectives describing an "other", further moderates this effect of self-connection and weakens the relationship between positive affect and meaning. In all, these findings combine to provide new evidence of the potential benefits of focusing one's attention internally (Field et al., 2010; Gibbons & Wicklund, 1982).

The moderating role of self-connection was consistent across both studies. As expected, the relationship between positive affect and meaning was significant at low levels of self-connection. For people that were highly self-connected, the relationship no longer remained. That is, being self-connected acted as a boundary condition of the relationship between positive affect and meaning. High self-connection was itself sufficient to predict meaning; positive affect no longer seemed to matter for self-connected people.

We additionally examined this relationship across two tasks. The first task aimed at getting people to focus on themselves while the second task aimed at

having people focus on someone other than themselves. This task also moderated the relationship of self-connection on positive affect and meaning. Focusing on oneself seemed sufficient to eliminate the effect of positive affect on meaning. When people engaged in this task, a slightly negative effect of positive affect resulted. Only when people were low in self-connection and focused on others did positive affect still relate to meaning.

LIMITATIONS AND FUTURE RESEARCH

One limitation of this research that is worth noting is the fact that participants provided self-reported ratings for all measured variables. In addition to potential self-report biases that are involved in most research, this means that all variables were rated by the same source. However, the second study added a manipulated variable, in a quasi-experimental design, that expanded on the findings of the self-reported variables alone. Combined with the fact that the moderating effect of self-connection clearly replicated across two distinct samples, these effects appear to be robust and meaningful. However, future research may consider experimentally manipulating additional variables or seeking others to report on these constructs to avoid these potential biases.

The sample size of the first study also limits the generalizability of the findings. However, we doubled the sample in the second study. Although these are not huge samples, they were enough to detect main effects and interactions. In addition, a post-hoc power analysis suggested that we achieved 62% and 85% power in studies 1 and 2, respectively. This suggests that the effects are large enough as to be detectable by the sample sizes used in the current research. Additionally, these effects emerged in both studies and resulted in similar effect sizes. Despite this, future research could potentially benefit from testing these relationships, while expanding on our findings, with larger samples.

Beyond addressing potential limitations of this research, future research should continue to explore self-connection as an independent and moderating variable in the prediction of a variety of health and well-being outcomes. If people with low positive affect, but high self-connection, can still find greater meaning in life, it is likely that self-connection results in a variety of other positive outcomes as well. This includes greater life and work satisfaction, engagement, well-being, and lower levels of negative outcomes such as stress and even depression. To date, research has only just begun to understand how self-connection fits into this nomological network (Klussman, Nichols, et al., 2020). The more research reveals the role of self-connection in these outcomes and discovers how people can become more self-connected, the more people's lives and the lives of others and organizations to which they associate may improve.

IMPLICATIONS

People have focused on and relied upon positive affect to increase meaning for some time. Although there is substantial support for this relationship (King et al., 2006), the current findings suggest a much finer grained relationship between these two variables. As far as research is concerned, the support provided here for focus and self-connection as moderators opens the door for new and substantial avenues of research. First, the results suggest that self-connection, on its own, appears to be important to finding meaning in life. Since little is yet known about the concept, research in quality of life is likely to benefit from exploring self-connection and determining how big of a role it plays in people's health and well-being.

Beyond the simple direct effect of self-connection on meaning, the hypothesized and moderating role of self- versus other-focus on the relationship between positive affect and meaning has the potential to inform and contribute to the literature and to future meaning research. Across two studies, positive affect was not significantly related to meaning at high levels of self-connection and not at all related to meaning when people focused on their own values. Meaning research would benefit from examining this relationship further to determine if a connection to and/or focus on oneself is, in fact, enough to lead people to perceive meaning in their lives. If so, it would be important to discover ways in which people can become self-connected.

Practically speaking, these results shed light on a new focus for individuals and organizations that seek to increase meaning in their lives and the lives of their patients, employees, customers, etc. in ways that do not require positive affect. Primarily, self-connection strongly and consistently related to meaning regardless of participants' levels of positive affect. This means that improving self-connection among oneself and/or others is likely to result in an increase in one's perceived meaning. Furthermore, since a simple task that focused people on their own values further decreased the importance of positive affect in finding meaning, practitioners may consider a similar exercise for themselves and/or others as a way of increasing the meaning that people find in their lives. Taken together, helping people to focus greater attention to themselves and the things important to them

has the potential to increase meaning in life. The implications of this have the potential to affect individuals and organizations in measurable and important ways.

In all, these implications can best be put into a set of succinct recommendations for personal growth and for people hoping to help others find meaning in life. First, we recommend deemphasizing affect. Although it is important, it appears that several other variables are more important in finding meaning. Second, focus inward to allow yourself to understand what matters most to you and where meaning can best be found. This includes being both dispositionally self-connected as well as having a momentary focus inward. Together, it is this focus and desire to understand oneself, accept the self, and act in alignment with the self that is likely to increase the meaning you perceive and find in life. It is only when you lack this internal focus that affect begins to make a difference.

CONCLUSION

Despite a strong and reliable relationship between positive affect and meaning, little is known about the boundaries of this relationship. Across two studies, the current research examined focus as a moderator of this relationship. Both studies suggested that the relationship between positive affect and meaning essentially disappears when people are highly self-connected. Additionally, the moderating role of self-connection was itself moderated by a person's current focus. Positive affect and meaning only remained significantly related when people focused on adjectives that described another person, and not their own values, and were low in self-connection. Otherwise, self-connection itself was solely related to meaning. In all, these results point to the promising nature of self-connection in meaning research and practice and supply a new avenue by which researchers and practitioners alike can better understand and attempt to increase meaning in their own and others' lives. ■

Biographies

Kristine Klussman is the founder of the Purpose Project, a nonprofit organization aimed at increasing people's well-being. She received her Ph.D. in Clinical Psychology from Palo Alto University. In addition to overseeing the organization's research, she is a clinician, author, and speaker.

https://orcid.org/0000-0002-3842-3768

Austin Lee Nichols is the Director of Research at Connection Lab. He received his Ph.D. in Social Psychology from the University of Florida. Prior to working at Connection Lab, he held various faculty positions around the world in both Psychology and Business.

https://orcid.org/0000-0003-4580-3301

Julia Langer is a Research Associate at Connection Lab, the research arm of the Purpose Project. She received her M.H.Sc. in Public Mental Health from the Johns Hopkins Bloomberg School of Public Health and has focused her career on using mental health interventions to improve well-being.

https://orcid.org/0000-0002-4225-1081

Nicola Curtin was one of the founding members of Connection Lab. She received her Ph.D. in Personality and Social Contexts from the department of Psychology at the University of Michigan and is currently a Senior Learning and Development Specialist at Alameda Health System.

https://orcid.org/0000-0003-2012-3932

References

Aiken, L. S., & West, S. G. (1991). *Multiple Regression: Testing and Interpreting Interactions.* Newbury Park: Sage.

Allan, B. A., Bott, E. M., & Suh, H. (2015). Connecting mindfulness and meaning in life: Exploring the role of authenticity. *Mindfulness*, 6(5): 996-1003. https://doi.org/10.1007/s12671-014-0341-z

Baron, R. A. (1990). Environmentally induced positive affect: Its impact on self-efficacy, task performance, negotiation, and conflict. *Journal of Applied Social Psychology*, 20(5): 368-384. https://doi.org/10.1111/j.1559-1816.1990.tb00417.x

Charles, S. T., Reynolds, C. A., & Gatz, M. (2001). Age-related differences and change in positive and negative affect over 23 years. *Journal of Personality and Social Psychology*, 80(1): 136-151. https://doi.org/10.1037/0022-3514.80.1.136

Cheung-Judge, M. Y. (2001). The self as an instrument. *OD Practitioner*, 33(3): 33-39.

Connolly, J. J., & Viswesvaran, C. (2000). The role of affectivity in job satisfaction: A meta-analysis. *Personality and Individual Differences,* 29(2): 265-281. https://doi.org/10.1016/S0191-8869(99)00192-0

Edlund, J. E., Nichols, A. L., Okdie, B. M., Guadagno, R. E., Eno, C. A., Heider, J. D., Hansen, E., Sagarin, B. J., Blackhart, G., Cottrell, C. A., & Wilcox, K. T. (2014). The prevalence and prevention of crosstalk: A multi-institutional study. *Journal of Social Psychology*, 154: 1-5. https://doi.org/10.1080/00224545.2013.872596

Field, N. P., Joudy, R., & Hart, D. (2010). The moderating effect of self-concept valence on the relationship between self-focused attention and mood: An experience sampling study. *Journal of Research in Personality,* 4*4*(1): 70-77. https://doi.org/10.1016/j.jrp.2009.11.001

Garland, E. L., Farb, N. A., R. Goldin, P., & Fredrickson, B. L. (2015). Mindfulness broadens awareness and builds eudaimonic meaning: A process model of mindful positive emotion regulation. *Psychological Inquiry*, 26(4): 293-314. https://doi.org/10.1080/1047840X.2015.1064294

Garland, E. L., Hanley, A. W., Goldin, P. R., & Gross, J. J. (2017). Testing the mindfulness-to-meaning theory: Evidence for mindful positive emotion regulation from a reanalysis of longitudinal data. *PloS one*: 12(12), e0187727. https://doi.org/10.1371/journal.pone.0187727

Garland, E. L., Thielking, P., Thomas, E. A., Coombs, M., White, S., Lombardi, J., & Beck, A. (2017). Linking dispositional mindfulness and positive psychological processes in cancer survivorship: a multivariate path analytic test of the mindfulness-to-meaning theory. *Psychooncology*, 26(5): 686-692. https://doi.org/10.1002/pon.4065

Gibbons, F. X., & Wicklund, R. A. (1982). Self-focused attention and helping behavior. *Journal of Personality and Social Psychology*, 43(3): 462-474. https://doi.org/10.1037//0022-3514.43.3.462

Hicks, J. A., & King, L. A. (2007). Meaning in life and seeing the big picture: Positive affect and global focus. *Cognition and Emotion*, 21(7): 1577-1584. https://doi.org/10.1080/02699930701347304

Hicks, J. A., & King, L. A. (2008). Positive mood and religious commitment as information about meaning in life. *Journal of Research in Personality,* 42: 43-57. https://doi.org/10.1016/j.jrp.2007.04.003

Hicks, J. A., & King, L. A. (2009). Positive mood and social relatedness as information about meaning in life. *Journal of Positive Psychology*, 4: 471-482. https://doi.org/10.1080/17439760903271108

Hicks, J. A., Trent, J., Davis, W. E., & King, L. A. (2012). Positive affect, meaning in life, and future time perspective: An application of socioemotional selectivity theory. *Psychology and Aging*, 27(1): 181-189. https://doi.org/10.1037/a0023965

Ingram, R. E., & Smith, T. W. (1984). Depression and internal versus external focus of attention. *Cognitive Therapy and Research*, 8(2): 139-151. https://doi.org/10.1007/BF01173040

King, L. A., Hicks, J. A., Krull, J. L., & Del Gaiso, A. K. (2006). Positive affect and the experience of meaning in life. *Journal of Personality and Social Psychology*, 90(1): 179-196. https://doi.org/10.1037/0022-3514.90.1.179

Klussman, K., Curtin, N., Langer, J., & Nichols, A. L. (2020). Examining the effect of mindfulness on well-being: Self-connection as a mediator. *Journal of Pacific Rim Psychology*, 14(e5), 1-7. https://doi.org/10.1017/prp.2019.29

Klussman, K., Nichols, A. L., Curtin, N., & Langer, J. (2020). The importance of awareness, acceptance, and alignment with the self: Developing a theory and measure of self-connection. Manuscript under review.

Martela, F., Ryan, R. M., & Steger, M. F. (2017). Meaningfulness as Satisfaction of Autonomy, Competence, Relatedness, and Beneficence: Comparing the Four Satisfactions and Positive Affect as Predictors of Meaning in Life. *Journal of Happiness Studies*, 19(5):1261-1282. https://doi.org/10.1007/s10902-017-9869-7

McNevin, N. H., Shea, C. H., & Wulf, G. (2003). Increasing the distance of an external focus of attention enhances learning. *Psychological Research*, 67(1): 22-29. https://doi.org/10.1007/s00426-002-0093-6

Meisel, S. N., & Palfai, T. P. (2015). Meaning in life goal pursuit moderates the effects of social influences on college student drinking.

Journal of Applied Social Psychology, 45(10): 561-567. https://doi.org/10.1111/jasp.12319

Ménard, J., & Brunet, L. (2011). Authenticity and well-being in the workplace: A mediation model. *Journal of Managerial Psychology*, 26(4): 331-346. https://doi.org/10.1108/02683941111124854

Nichols, A. L., & Maner, J. K. (2008). The good subject effect: Investigating participant demand characteristics. *Journal of General Psychology,* 135: 151-165. https://doi.org/10.3200/GENP.135.2.151-166

Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53(1): 80-93. http://doi.org/10.1037/0022-0167.53.1.80

Ward, S. J., & King, L. A. (2016). Poor but Happy? Money, mood, and experienced and expected meaning in life. *Social Psychological and Personality Science*, 7: 463-470. https://doi.org/10.1177/1948550615627865

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54(6): 1063-1070. https://doi.org/10.1027//1015-5759.19. 2.131.

Zhang, D., Chan, D. C. C., Niu, L., Liu, H., Zou, D., Chan, A. T. Y., … Wong, S. Y. S. (2017). Meaning and its association with happiness, health and healthcare utilization: A cross- sectional study. *Journal of Affective Disorders*, 227, 795–802.

https://doi.org/10.1016/j.jad.2017.11.082