How Cynicism Affects Meaning in Life: An Attempt to Examine the Causal Relationship

Between Cynicism and Meaning in Life

Pril, K.T.T.

ANR: 196889

SNR: u1264280

Date: 12-6-2017

Abstract

Multiple studies have focused on either cynicism or meaning in life, but these constructs have not been studied together yet. Do they influence each other? More specifically, does being cynical lead to perceiving less meaning in life? The present study was the first one to examine the causal relationship between cynicism and meaning in life. Additionally, it was tested whether sense of belonging mediated the relationship between cynicism and meaning in life. Data has been obtained from a sample of college students (N=246) who filled out an online questionnaire in exchange for course credit. Cynicism was manipulated using a scrambled sentence task (Lam, 2011). Because the manipulation did not work and the groups did not differ significantly in their cynicism level, no causal conclusions could be drawn. Eventually, manipulation check questions were used to measure cynicism. Finally, the current study showed that cynicism, meaning in life and sense of belonging were correlated with each other significantly. Moreover, cynicism and sense of belonging both significantly predicted meaning in life scores and sense of belonging significantly mediated the relationship between cynicism and meaning in life scores.

Keywords: meaning in life, cynicism, sense of belonging

Introduction

Human beings have a universal motive to search for meaning in their daily lives (Reker, Peacock, & Wong, 1987) because they want to understand themselves and their environment (Heine, Proulx, & Vohs, 2006). Even though it has been recognized that meaning in life is subjective in nature, researchers converge on defining it as: having the feeling that your life matters in some large sense and that it has purpose (King, Hicks, Krull, & Del Gaiso, 2006) or as having the feeling that your life makes sense, that it is understandable, contains regularities, reliable connections and is predictable (Heintzelman & King, 2014).

Having meaning in life is related to certain beneficial aspects, whereas lacking meaning in life is related to disadvantages. Moreover, having meaning in life is associated with positive feelings about one's mental and physical well-being, higher quality of life and a lower chance to die young, less thoughts of committing suicide and a lower chance to attempt suicide, being less likely to experience depression symptoms and being hopeful, being seen as more socially appealing to others, living a happier life, and being better in managing challenges in life (Reker, Peacock, & Wong, 1987; Krause, 2009; Kleiman & Beaver, 2013; Mascaro & Rosen, 2005; Stillman, Lambert, Fincham, & Baumeister, 2010; King, Hicks, Krull, & Del Gaiso, 2006; Steger, 2012). Contrarily, lacking meaning in life is associated with both psychological and physical problems, negative affect, negative emotions and stress, and a higher rate of drug abuse (Reker, Peacock, & Wong, 1987; Steger, 2010; Nicholson, Higgins, Turner, James, Stickle, & Pruitt, 1994). In short, from the above it can be deduced that having meaning in life leads to many beneficial aspects in the lives of human beings. Therefore, it is important to enhance the understanding about meaning in life and its relationships to other factors.

But how do people give meaning to their lives? Different perspectives are taken on the means through which people establish meaning in their lives. According to Sommer, Baumeister, and Stillman (1998), people attain meaning in their lives after they have fulfilled

four different psychological needs, namely: self-worth, value, efficacy, and purpose. Another perspective is that from King (2004), who developed a meta-model in which she argues that human beings attribute meaning to their lives through three essential ways: (1) having relationships with others, (2) doing meaningful things, and (3) understanding oneself and the world. Moreover, it is important to note that individual differences are at play in the process of meaning giving (King, 2004). While some people attach nearly all their meaning to one life theme solely, others divide their meaning attachment almost equally among multiple themes. Hence, for some people their relationships with other people (i.e. belonging) are the primary source of meaning in their lives. Which source of meaning is preferred by an individual depends on several influential factors, such as, their environment, family and culture (King, 2004).

One factor that might be related to meaning in life, is a person's level of cynicism. Cynicism can be defined as the belief that the behavior of others is mainly motivated by their selfish concerns, or as a common feeling or expression of mistrust concerning both the motivation and truthfulness of others' actions (Smith, Glazer, Ruis, & Gallo, 2004; Kaplan, Bradley, & Rusher, 2004). Furthermore, cynicism has been recognized as a component of hostility, which can be defined as a negative stance towards other people, by means of antipathy, denigration, and ill will (Smith et al., 2004). Besides that, human beings that are socially cynical possess a negative perspective on human nature and they also evaluate life events in a biased manner (Leung et al., 2002). Consequently, this biased perspective implies that cynical individuals only see the obscure characteristics of human beings and that they are vigilant, skeptical and experience less pleasure in their lives (Chen et al., 2016). This results in negative consequences, such as low life satisfaction, low self-esteem and low interpersonal trust (Chen et al., 2016).

Even though many studies have been conducted on meaning in life and cynicism separately, the relationship of these two concepts together has not been studied yet. The current

study will be the first to do this, and with that it will try to fill the contemporary gap in meaning in life literature. More specifically, the current study will try to reveal whether there is a causal relationship between cynicism and meaning in life. Despite the lack of empirical evidence, there are some findings that lead to the expectation that there could be a causal relationship between cynicism and meaning in life. To begin with, Leung et al. (2002) found that social cynicism can be classified as a social axiom. Social axioms are generalized beliefs people have about, among other things, others, phenomena and events in the world (Leung et al., 2002). Social cynicism as a social axiom therefore influences how cynical individuals understand events in the world, meaning that they are biased when perceiving life events (Leung et al., 2002). Thus, cynical individuals are more likely to perceive everything in life to be more negative than people who are not cynical. Besides that, Leung et al. (2002) also found that cynical individuals have a lower life satisfaction than non-cynical individuals. Consequently, it is expected that cynical individuals perceive their life to be less meaningful than non-cynical individuals do. Additionally, Krause (2007) illustrated that over time, receiving emotional support from others correlated with an increase in experiencing meaning in life. However, cynical individuals receive, on average, less social support than non-cynical individuals and besides that, they have a hard time recognizing that others have supported them affectionately (Kaplan, Bradley, & Ruscher, 2004). Accordingly, Leung et al. (2002) demonstrated that cynical individuals interpret their life experiences in a negative fashion and often only see the egocentric characteristics of human beings. Thus, through this perception bias or through experiencing more negative life events (i.e., receiving less social support), it could be that cynical individuals perceive less meaning in life than non-cynical individuals. The findings lead to the first research question: Do cynical individuals perceive their lives to be less meaningful than non-cynical individuals?

Of course, it is likely that besides cynicism, other factors might also influence meaning in life. Sense of belonging might be one of these factors. When people have a sense of belonging, they are related to another human being or to a group of human beings (Lambert et al., 2013). Yet, having a sense of belonging does not just refer to having relationships, but rather to having relationships that generate secure feelings of being affiliated with (Lambert et al., 2013). Additionally, having a sense of belonging is also associated with a good fit with the social environment and the feeling that others have accepted you for who you really are (Raphael, Brown, Renwick, & Rootman, 1996). Moreover, human beings have both a need to belong (i.e., being extremely motivated to have social connections) and the competence to comprehend meaning systems (Baumeister & Leary, 1995; Baumeister, 2005). According to Baumeister (2005), these two are inseparably related to each other. Hence, these points bolster the expectation that meaning in life is at least partially dependent on a person's amount of sense of belonging. Evidence for this belief has already been provided by Lambert et al. (2013). Their research showed that having social relationships is related to perceiving meaning in life. Moreover, Lambert et al. (2013) conducted correlational, longitudinal and experimental studies on sense of belonging and meaning in life and illustrated that a person's sense of belonging predicted how meaningful this person perceived its life to be. Besides that, Lambert et al (2013) showed that both participants primed with having a sense of belonging, and participants who increased in their sense of belonging during the experiment, indicated their lives to be more meaningful than the other participants. Furthermore, the importance of having a sense of belonging in relation to meaning in life has also been emphasized in the current meaning models. First, the meta-model of King (2004) accentuates the importance of having sense of belonging in the establishment of meaning in life, as one of the three pathways of her model is belonging (i.e., having relationships with others). Second, Heine, Proulx, and Vohs (2006) also included an aspect of belonging in their Meaning Maintenance Model, namely, affiliative needs

(i.e., an individuals' desires to belong to close-knit social groups). They state that these needs must be fulfilled for an individual to be able to maintain meaning in life. To summarize, from the contemporary literature it can be deduced that sense of belonging and meaning in life clearly have something to do with each other. Based on the above, it is expected that having a higher sense of belonging leads to perceiving more meaning in life.

Nevertheless, until now no research has been conducted on the relationship between cynicism and sense of belonging. Hence, the current study will be the first to do this. Specifically, it is expected that cynicism leads to having less meaning in life, unless the cynical individual has a high sense of belonging. In this case, it is expected that having a sense of belonging lessens the negative effect of cynicism on meaning in life by being a sort of buffer. This leads to the second research question, namely: Does having a sense of belonging mediate the relationship between cynicism and meaning in life?

The main focus of this study will be on the relationship between cynicism and meaning in life, with sense of belonging as a mediator. Besides that, however, alternative mediation models will also be tested to explore the relationships between cynicism, sense of belonging, and meaning in life more extensively. Therefore, the three variables will be tested in all possible combinations, meaning that they will be examined at the position of the dependent variable, independent variable, and mediator. For that reason, in addition to the main mediation model, five alternative mediation models will also be tested.

In short, this study aims to extend the current meaning in life literature. More specifically, the present study is the first to examine (1) the causal relationship between cynicism and meaning in life, and (2) if sense of belonging is a mediator in this relationship. While doing this the current study tries to fill a gap in social psychology literature. From the research questions two hypotheses can be derived:

Hypothesis 1: Being cynical leads to perceiving less meaning in life.

Hypothesis 2: Sense of belonging mediates the relationship between cynicism and meaning in life by diminishing the negative effect of cynicism on meaning in life.

To examine these hypotheses, an online survey study was conducted, in which the cynicism state of participants was manipulated by a scrambled sentence task. Afterwards cynicism, meaning in life and sense of belonging were measured.

Method

Participants and procedures

Participants were 244 college students (73 males, 173 females, M_{age} = 21.69, SD_{age} = 6.57), who participated in exchange for course credit. They completed an online questionnaire in which they were randomly assigned to one of two conditions: cynicism (n = 124) or neutral (n = 122). The conditions differed in the type of manipulation they received. The manipulation consisted of a scrambled sentence task, which was retrieved from Lam (2011), yet most sentences of the neutral condition were adjusted. In the scrambled sentence task, individuals had to unscramble 13 scrambled sentences by rewriting them in the right sequence. Moreover, in the cynicism condition, individuals completed the scrambled sentence task with sentences designed to evoke cynicism (e.g., *People create hurdles to prevent others from succeeding", or "People who become rich and successful forget the people who helped them along the way"*), whereas individuals in the neutral condition completed the task with neutral sentences, composed in such a way that they did not evoke anything at all (e.g., "*An apple a day keeps the doctor away" or "Amsterdam is the capital of the Netherlands"*). The answers to the scrambled sentences task were checked for nonsense sentences. Only one participant in the neutral condition came up with an extraordinary sentence, however, this sentence was also neutral of nature and the other sentences of this participant made sense, therefore the participant was approved to stay in the dataset.

Measures

(Cynicism) Manipulation check. To examine whether the scrambled sentences task worked or not, the cynicism measure of Lam (2011) was used as a manipulation check. It should be noted that cynicism was measured as a state and not as a trait. Participants were presented with a total of seven traits, of which four were positive and three were negative. Participants were asked to indicate the extent to which they believed each trait characterized human nature on a scale from 1 (*not at all*) to 7 (*a lot*). The three positive items had to be reverse coded (caring, loyal, and kind). Responses were averaged to generate a score of the manipulation check ($M = 3.48$, $SD = .91$), with a higher score implying being more cynical at that moment. The manipulation check had a reliability of $\alpha = .85$, which is high.

Meaning in life. Meaning in life was the dependent variable in this study and was measured as a state, not as a trait. For this, the 2-item measure of state meaningfulness from Lambert et al. (2013) was used. The items were respectively: *"How much meaning do you feel in your life at this very moment?"* and *"At this moment, how much do you think you have a good sense of what makes life meaningful?"*. Responses were given on a scale ranging from 0 to 100 ($M = 66.86$, $SD = 19.90$), with a higher score referring to higher meaning. Responses were averaged to generate a meaning in life score. Cronbach's $\alpha = .79$, which means that the scale was quite reliable.

Sense of belonging. To measure sense of belonging, items from the sense of belonging scale of Lambert et al. (2013) were used, but these were slightly altered to measure sense of belonging as a state rather than a trait. The items were, respectively: *"Right now, I don't feel like I belong"*, *"Right now, I feel a strong sense of belonging with my friends and family"*, and *"Right now, I really feel accepted by others in my life"*. The first item had to be reversed coded. Responses ranged from 1(*strongly disagree*) to 5 (*strongly agree*), with a higher score referring to a higher sense of belonging. Responses were averaged to generate a score of sense of

9

belonging ($M = 3.67$, $SD = .92$). In the current study, it is examined if sense of belonging is a mediator in the relationship between cynicism and meaning in life. The reliability of the scale was $\alpha = .74$, which illustrates that the reliability of the scale was adequate.

Results

An independent samples t-test illustrated that the scrambled sentences manipulation task did not work, $t(244) = .002$, $p = .999$, meaning that the control group and the cynicism group did not differ significantly in their cynicism level (see Table 1). To be more specific, in both conditions participants scored on average 3.49 out of 7 on the cynicism measure. This means that no conclusions can be drawn regarding causality. Therefore, the first hypothesis cannot be supported. Additionally, it was tested whether the manipulation affected one of the items of the cynicism scale solely. For that purpose, single item comparisons were conducted by t-tests for independent samples (see Table 2). The results illustrated that the manipulation also did not significantly affect one of the items individually either. Because the manipulation did not work, from now on, there will not be focused on experimental condition, but rather on manipulation check scores of cynicism to test the hypotheses. These scores will be referred to as cynicism scores and will be used as the independent variable.

Table 1. *Comparison of conditions by t-tests for independent samples*

Neutral condition		Cynicism condition				
M	SD	M	SD	t	df	p-value
3.49	.94	3.49	.88	-.002	244	.999

Table 2. *Single item comparisons by t-tests for independent samples*

	Neutral		Cynicism			
Items	Mean	SD	Mean	SD	t	p-value
Dishonest	3.82	1.48	3.94	1.43	-.62	.53
Kind	4.99	1.07	5.10	.94	-.82	.42
Untrustworthy	3.51	1.36	3.66	1.32	-.90	.37
Loyal	4.52	1.19	4.62	1.21	-.63	.53
Caring	5.22	1.23	5.27	1.04	-.31	.76
Corrupt	3.91	1.39	3.93	1.46	-.10	.92
Deceitful	3.92	1.21	3.88	1.17	.26	.80

Next, means, standard deviations and correlations are shown in Table 3. Results reveal that cynicism and meaning in life are moderately, negatively and significantly related to each other ($r = -.31$, $p < .001$), which means that the more cynical an individual is, the less likely he or she is to have much meaning in life. Likewise, cynicism and sense of belonging are also moderately, negatively and significantly related to each other ($r = -.33$, $p < .001$), which means that the more cynical an individual is, the less likely he or she is to have a great sense of belonging. Furthermore, sense of belonging and meaning in life are strongly, positively and significantly related to each other ($r = .59$, $p < .001$), which means that the higher sense of belonging an individual has, the more likely he or she is to experience much meaning in life. The correlations and corresponding directions are consistent with the hypotheses and expectations, as being cynical is related to a lower meaning in life and sense of belonging is both negatively related with cynicism and positively related to meaning in life.

Subsequently, a hierarchical linear regression analysis was conducted on meaning in life to determine whether cynicism and sense of belonging could predict meaning in life scores (results are shown in Table 4). In the first step, only cynicism was entered. Results of step 1 were in accordance with hypothesis 1, as cynicism negatively and significantly predicted meaning in life ($\beta = -.31$, $p < .001$). In other words, being more cynical is related to having less meaning in life. Moreover, cynicism alone explained about 10 percent of the variance in meaning in life, $F(1, 243) = 26,62$, $p < 0.001$. Adding sense of belonging in the second step illustrated that sense of belonging predicted meaning in life over and above cynicism ($\beta = .54$, $p < .001$). This means that having a higher sense of belonging is related to having more meaning

Table 3. *Means, SDs, and Correlations*

	M	*SD*	*1*	*2*	*3*
1. Meaning in Life	66.9	19.9	-	-	-
2. Cynicism	3.49	.91	-.31***	-	-
3. Sense of Belonging	3.67	.92	.59***	-.33***	-

Note. $N = 246$. *$p < .05$. **$p < .01$. ***$p < .001$.

in life. Sense of belonging significantly explained an additional 27% of variance, $F(1, 242) = 100,82$, $p < .001$, in meaning in life over cynicism. Still, cynicism remained to be a significant predictor in this second step as well, although its size was diminished ($\beta = -.13$, $p = .015$). Thus, even when sense of belonging was added, being cynical still was related to having less meaning in life. Altogether, cynicism and sense of belonging explained 36 percent of the variance $F(1, 242) = 69,19$, $p < .001$ in meaning in life. The results are supportive of hypothesis 2, which states that sense of belonging mediates the relationship of cynicism on meaning in life, as they illustrate that sense of belonging diminishes the negative effect of cynicism.

Since adding sense of belonging in step 2 diminished the effect of cynicism on meaning in life, there was additionally tested for mediation using Preacher and Hayes' (2008) bootstrapping method with 5,000 samples and a 95% bias-corrected confidence interval. Meaning in life was entered as the dependent variable, cynicism was entered as the independent variable and sense of belonging was entered as the mediator (see Figure 1 for the mediation model). Results indicated that sense of belonging partially, but not completely, mediated the relationship of cynicism on meaning in life. First, cynicism had a significant negative effect on sense of belonging (a path; $b = -.34$, $SE = .06$, $p < .001$), meaning that participants who had high scores on cynicism were perceived as having a lower sense of belonging. Furthermore, sense of belonging positively and significantly affected meaning in life (b path; $b = 11.79$, SE

**Table 4.** *Hierarchical Regression Analysis of Meaning in Life*

Variable	B	$SE\ B$	β	95% CI for B	R	R^2	ΔR^2
Step 1					.31	.10	.10
Cynicism	-6.90	1.34	-.31***	[-9.54, -4.27]			
Step 2					.60	.36	.27
Cynicism	- 2.91	1.19	-.13*	[-5.27, -.56]			
Sense of belonging	11.79	1.17	.55***	[9.48, 14.11]			

*$p < .05$. **$p < .01$. ***$p < .001$.

= 1.17, *p* < .001), meaning that participants who had a higher sense of belonging also reported having more meaning in life. Lastly, cynicism negatively and significantly affected meaning in life directly (c path; *b* = -6.90, *SE* = 1.34, *p* < .001), in other words, being more cynical was associated with experiencing less meaning in life. The test of Preacher and Hayes (2008) revealed the indirect effect of cynicism on meaning in life (c' path; coefficient = -2.91, *SE* = 1.19, *p* = .02), with a 95% confidence interval of [-5.81, -2.50]. Since the confidence interval did not contain zero, it can be concluded that sense of belonging is a significant mediator of the effect of cynicism on meaning in life. This leads to the conclusion that the second hypothesis is supported, however, it should be noted that sense of belonging does not mediate the relationship completely, only partially.

In addition to the former analysis, the sequence of the variables (i.e., cynicism, meaning in life, and sense of belonging) has been switched in all possible ways to create alternative mediation models. This resulted in a total of five alternative mediation models which have been examined using Preacher and Hayes' (2008) bootstrapping method with 5,000 samples and a 95% bias-corrected confidence interval. Results are summarized in corresponding mediation models (see Figure 2). The bootstrap tests revealed indirect effects of -.01, -.22, -.17, 11.79, and .02 with 95% confidence intervals of [-.01, -.002], [-.19, -.02], [-.25, -.11], [.17, 2,16], and [.0007, .005], in the order in which the models are pictured in Figure 2 respectively. The 95% confidence intervals never contained zero, therefore it can be concluded that all mediators of the alternative mediation models for the corresponding proposed relationships were significant. However, it should be noted that these are all partial and not complete mediators.

Figure 1. *Mediation model of the relationship between cynicism, sense of belonging and meaning in life*
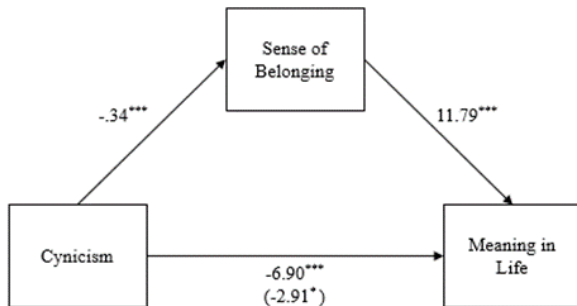
*$p < .05.$ **$p < .01.$ ***$p < .001.$

Figure 2. *Alternative mediation models of the relationship between cynicism, sense of belonging and meaning in life*

a.

b.

c.

d.

e.
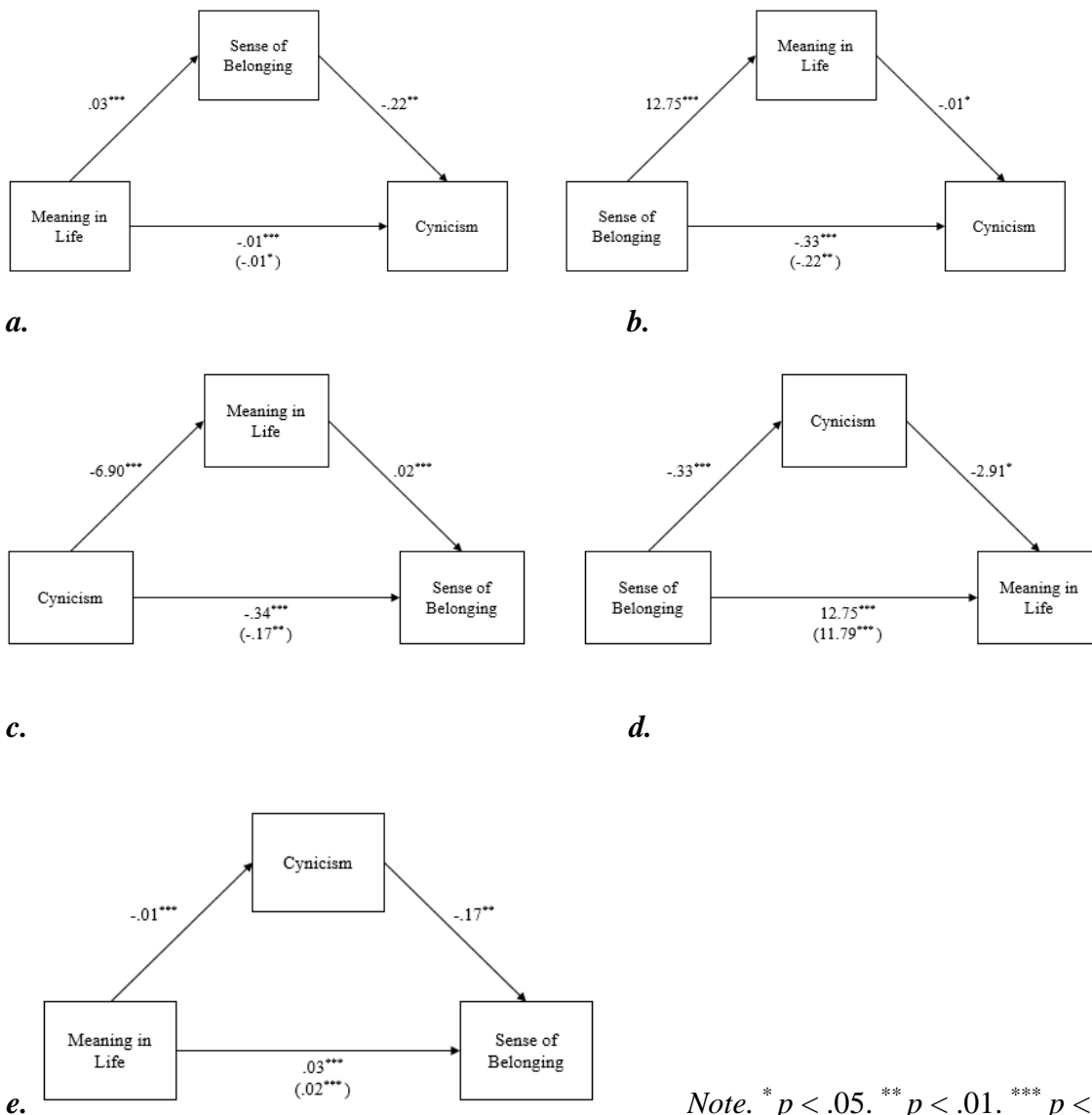
Note. *$p < .05.$ **$p < .01.$ ***$p < .001.$

Discussion

The present study was the first to examine the (causal) relationship between cynicism and meaning in life. In addition, it tested whether sense of belonging mediated this relationship. Participants (first and second year psychology students) filled out an online questionnaire during which their level of cynicism was manipulated using a scrambled sentence task. The manipulation of cynicism did not work and the groups did not differ significantly on their cynicism level. As a result, no causal conclusions could be drawn and the first hypothesis, that being cynical leads to less meaning in life, could not be confirmed.

However, the current study does contribute to meaning in life research by providing some new insights. First, it clearly illustrated that the three variables: cynicism, meaning in life, and sense of belonging are significantly correlated with each other, and that both cynicism and sense of belonging are important predictors for meaning in life scores, as they both explain a reasonable amount of variance in these scores. Second, the results demonstrated, and with that they confirmed the second hypothesis, that sense of belonging partially and significantly mediated the relationship between cynicism and meaning in life. Moreover, the finding that sense of belonging predicts and affects meaning in life corroborates the findings of concurrent literature about sense of belonging and meaning in life (e.g., Lambert, 2013; King, 2004; Heine et al. 2006).

Additionally, not only the mediation model that belonged to the hypothesis proved to be significant, but all of the alternative mediation models did too. This extends the knowledge about the relationships between the variables (i.e., meaning in life, sense of belonging, and cynicism), because it illustrates that they all affected each other significantly in multiple ways (as a mediator, dependent variable and independent variable). Clearly, more research is needed to disentangle how these and other variables are linked to meaning in life (e.g., positive affect, age, life history).

It should be noted that there are different explanations for the negative correlation between cynicism and meaning in life. The first explanation regards the biased perspective of cynical individuals which leads them to interpret things more negative than non-cynical individuals and to have lower life satisfaction (Leung et al., 2002; Chen et al., 2016). However, it might also be the case that cynical individuals just experience more negative things in their lives than non-cynical individuals, and therefore experience less meaning in their lives. For example, receiving less social support (Kaplan et al., 2004). What exactly underlies the negative correlation awaits future research.

The results of the current study have several implications. First, as stated above, meaning in life leads to various positive outcomes (e.g., Reker et al., 1987; Krause, 2009) and the current study, by finding a strong and positive correlation, adds sense of belonging to the list of these positive outcomes. Furthermore, sense of belonging mediated the relationship between cynicism and meaning in life partially. Thus, for cynical individuals, it might be beneficial to engage in activities that increase their sense of belonging, to maintain more meaning in life. Moreover, according to King (2004) people form relationships with others when they participate in different social groups, and these relationships give them a sense of belonging accompanied by the feeling that they can contribute valuable things to others. For that reason, it seems that motivating cynical individuals to become a member of a social group (e.g., a sports club, a hiking group, theater association, etc.) will pay off in terms of increased meaning in life.

Second, improving sense of belonging is not only beneficial for cynical individuals. Since sense of belonging is positively correlated to meaning in life, it might be beneficial for almost every human being to participate in different social groups and create new relationships. This will lead to a higher sense of belonging, which in turn is related to having more meaning in life.

Limitations and future research

To continue to study the relationship between cynicism, meaning in life and sense of belonging, limitations of the current study should be addressed. One limitation of the study was that the manipulation failed and hence, no conclusions regarding causality could be drawn. Specifically, the manipulation did not even succeed to elicit a small non-significant effect. This stands in stark contrast with the study of Lam (2011), from whom the manipulation was retrieved, as he found a significant difference in cynicism scores between conditions.

There are a few explanations for the failure of the manipulation. First, sentences of Lam (2011) were retrieved in Chinese. The translations to English were only available for the cynicism condition, not for the control condition. Because it was not possible to translate the Chinese control sentences correctly to English in a way that made sense, they have been replaced by new sentences that were also neutral of nature (e.g., *"Amsterdam is the capital of the Netherlands"*). However, it might be the case that the sentences differed too much in meaning from the control sentences by Lam (2011) and that they therefore restricted the effect of the manipulation. Second, the survey was an online questionnaire which made it possible for participants to fill it in everywhere and any time they wanted to (on any electronical device). Therefore, it could be that they were distracted while doing it (e.g., during train trips, while watching television, in a crowded or noisy place, etc.). Hence it is possible that the manipulation did not come out the way it was intended to and thus did not significantly alter the cynicism levels of the participants. Third, approximately 20% of the participants considered their English proficiency to be average or below average. As some sentences contained difficult English words (e.g., hurdles, deceitful) it is possible that some participants did not understand the sentences and hence did not interpret them correctly. This might have diminished the effect of the manipulation. Fourth, the scrambled sentence task required some effort because participants had to figure out how the sentence needed to be unscrambled and then had to retype the whole

sentence in the right order. It could be that the manipulation would have worked better if participants had to put less effort in it. Therefore, it might be useful for future studies to design the scrambled sentence task differently. For example, in such a way that participants just have to click on different parts of the sentence to arrange the sentence in the right sequence, that they only have to drag the scrambled sentence parts in a particular sequence, or that they only need to number them. Apart from the above, when looking at the construction of the sentences participants made, it became clear that some of the scrambled sentences could be unscrambled in more ways than they were intended to. As a result, the meaning of the sentence could have changed slightly and it could be that this affected the strength of the effect of the manipulation. Thus, for future research, it might be useful to make certain that the scrambled sentence task is used in an easier design, with sentences can be unscrambled in one way only.

The second limitation concerns the fact that participants were first and second year psychology students. It makes sense to think that older human beings value things in life differently. This has also been illustrated by a study of Reker et al. (1987), which showed that perceived life purpose increased with age. This might be because older people have been through a lot more than students. They may have had plenty of negative life experiences, or even near death experiences, and are glad that they have reached a certain age or that they are still alive. Therefore, it could be that they perceive the little things in their lives to be valuable, and thus their lives in general to be more meaningful. As a result, using an older subject pool could have led to different outcomes.

The third limitation is that, to measure meaning in life as a state, a 2-item measure was used. Even though this measure proved to be reliable ($\alpha = .79$) in the present study, it might be more convenient to use a more comprehensive scale for future research. It could be that using more than two items to measure meaning in life provides a better basis to draw conclusions upon about meaning in life scores. Moreover, the meaning in life measure consisted of two self-

report questions. It should be noted that using self-report measures is not ideal, since people might assume that their lives are meaningful, even though they do not think deeply about what makes a life meaningful and what it is that gives their lives meaning.

Additionally, because the current study attempted to manipulate cynicism, cynicism was measured as a state rather than a trait. Moreover, sense of belonging and meaning in life were also measured as states. However, states can change across different situations, whereas traits are usually rather stable over time (Waltz, Strickland, & Lenz, 2010). For this reason, it should be considered that there might be some differences in the way cynicism, meaning in life and sense of belonging are related as traits, compared to states.

Focusing on sense of belonging, it might be interesting to examine whether each type of sense of belonging is related equally strong to meaning in life. It might be the case that romantic partners have a stronger influence than just friends or acquaintances, or that bonds with people in large groups are more influential than people with people in smaller groups. Knowing this would make it easier to come up with interventions for those who lack meaning in life. Thus, for future research this is an interesting topic to investigate.

Because the manipulation did not work, no causal relations could be examined. Consequently, there is still no scientific knowledge on the causal relationship between cynicism and meaning in life. Since all correlations were significant, the current study has illustrated that cynicism, sense of belonging and meaning in life are important to each other. This makes the assumption of a causal relationship between cynicism and meaning in life, with sense of belonging as a mediator, seem plausible. But, to say this with certainty real experimental evidence is needed. Future research should concentrate on investigating whether there is a causal relationship between cynicism and meaning in life. Therefore, experiments must be designed in which cynicism is experimentally manipulated, with the expectation that high levels of cynicism are related to lower meaning in life and that sense of belonging mediates this effect.

But, as the scrambled sentence task did not work, possibly because it required too much effort, a simpler manipulation might be more convenient. One way that might work is by having one group of participants do a concentration task with subliminal primes of cynical words and the other group with non-cynical words. Another way to manipulate cynicism might be by having one group of participants to read a text that argues that all human beings are cynical, and another group of participants to read a text that is neutral of nature. Or, even though it is not as reliable or valid as a controlled experiment, a quasi-experimental design might also work to gain more information about cynicism and meaning in life. In that case, cynicism as a trait, rather than a state, will be used to study the relationship. In a quasi-experimental design, cynical and non-cynical individuals will fill out measures of their current state of meaning in life and sense of belonging. Afterwards the results can be compared with each other. However, in this case the conclusions that follow should be drawn carefully, because of possible problems with internal validity. In short, until now there is only little literature about cynicism and meaning in life, therefore, any kind of study on this topic will be interesting.

Conclusion

It is hard to define meaning in life because it is so subjective of nature. Therefore, it is also difficult to investigate it scientifically. However, as having meaning in life is a universal human motive (King, 2004), a universal human need (Heine et al., 2006) and is related to numerous beneficial outcomes (e.g., Reker et al., 1987) it is important to increase our knowledge about it. This way, solutions may be found to help people who lack meaning in life, which is related to negative outcomes (e.g., Steger, 2010), to increase their meaning in life. According to the current study, cynical individuals are one group of people who are more likely to have less meaning in life. Even though the current study could not confirm the causal relationship between cynicism and meaning in life, the corresponding correlation was negative and significant. This means that being more cynical is related to having less meaning in life.

However, sense of belonging proved to be a mediator of the relationship between cynicism and meaning in life. By showing this, the current study underscores that there might be possibilities to increase meaning in life of cynical individuals by increasing sense of belonging. Although probably many more factors are related to meaning in life, the present study found evidence that both sense of belonging and cynicism are associated with, and able to predict meaning in life.

References

Baumeister, R. F. (2005). *The cultural animal: Human nature, meaning, and social life*. New

York, NY: Oxford University Press.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal

attachments as a fundamental human motivation. *Psychological bulletin, 117*(3), 497.

Chen, S. X., Wu, W. C. H, Buchtel, E. E., Lam, B. C. P., Ng, J. C. K. & Guan, Y. (2016). Do

people's world views matter? The why and how. *Journal of Personality and Social*

Psychology, 110(5), 743-765.

Heine, S. J., Proulx, T., & Vohs, K. D. (2006). The meaning maintenance model: On the

coherence of social motivations. *Personality and Social Psychology Review, 10*(2), 88-

110.

Heintzelman, S. J., & King, L. A. (2014). Life is pretty meaningful. *American Psychologist,*

69(6), 561.

Kaplan, S. A., Bradley, J. C., & Ruscher, J. B. (2004). The inhibitory role of cynical

disposition in the provision and receipt of social support: The case of the September

11th terrorist attacks. *Personality and Individual Differences*, *37*(6), 1221-1232.

King, G. A. (2004). The meaning of life experiences: application of a meta-model to

rehabilitation sciences and services. *American Journal of Orthopsychiatry*, *74*(1), 72.

King, G. A., Cathers, T., Brown, E., Specht, J. A., Willoughby, C., Polgar, J. M., ... &

Havens, L. (2003). Turning points and protective processes in the lives of people with

chronic disabilities. *Qualitative Health Research*, *13*(2), 184-206.

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.

Kleiman, E. M., & Beaver, J. K. (2013). A meaningful life is worth living: Meaning in life as

a suicide resiliency factor. *Psychiatry Research*, *210*(3), 934-939.

Krause, N. (2007). Longitudinal study of social support and meaning in life. *Psychology and

Aging, 22*(3), 456-469.

Krause, N. (2009). Meaning in life and mortality. *Journal of Gerontology: Social Sciences,

64B*(4), 517-527.

Lam, B. C. P. (2011). *How do worldviews shape self-views: An examination of the causality

between cynicism and self-esteem* (Doctoral dissertation, The Hong Kong Polytechnic

University).

Lambert, N. M., Stillman, T. F., Hicks, J. A., Kamble, S., Baumeister, R. F., & Fincham, F.

D. (2013). To belong is to matter: Sense of belonging enhances meaning in life.

Personality and Social Psychology Bulletin, *39*(11), 1418-1427.

Leung, K., Bond, M. H., de Carrasquel, S. R., Muñoz, C., Hernández, M., Murakami, F., ... &

Singelis, T. M. (2002). Social axioms: The search for universal dimensions of general

beliefs about how the world functions. *Journal of Cross-Cultural Psychology, 33*(3),

286-302.

Mascaro, N., & Rosen, D. H. (2005). Existential meaning's role in the enhancement of hope

and prevention of depressive symptoms. *Journal of Personality, 73,* 985–1013.

Myers, D. (2000). Hope and happiness. In Gillham, J. E. (ed.), *The Science of Optimism and*

Hope. Templeton Foundation Press, Philadelphia, pp. 323–336.

Nicholson, T., Higgins, W., Turner, P., James, S., Stickle, F., & Pruitt, T. (1994). *The relation*

between meaning in life and the occurrence of drug abuse: A retrospective study.

Psychology of Addictive Behaviors, 8(1), 24.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and

comparing indirect effects in multiple mediator models. *Behavior Research Methods,*

40, 879-891.

Raphael, D., Brown, I., Renwick, R., & Rootman, I. (1996). Assessing the quality of life of

persons with developmental disabilities: Description of a new model, measuring

instruments, and initial findings. *International Journal of Disability, Development and*

Education, 43(1), 25-42.

Reker, G. T., Peacock, E. J., & Wong, P. T. (1987). Meaning and purpose in life and well-

being: A life-span perspective. *Journal Of Gerontology, 42*(1), 44-49.

doi:10.1093/geronj/42.1.44

Schulenberg, S. E., Strack, K. M., & Buchanan, E. M. (2011). The Meaning in Life

Questionnaire: Psychometric properties with individuals with serious mental illness in

an inpatient setting. *Journal of Clinical Psychology, 67,* 1210–1219.

Smith, T. W., Glazer, K., Ruiz, J. M., & Gallo, L. C. (2004). Hostility, anger, aggressiveness,

and coronary heart disease: An interpersonal perspective on personality, emotion, and

health. *Journal of Personality, 72*(6), 1217-1270.

Sommer, K. L., Baumeister, R. F., & Stillman, T. F. (1998). *The construction of meaning from

life events: Empirical studies of personal narratives*. NA.

Steger, M. F. (2012). *Experiencing meaning in life: Optimal functioning at the nexus of well-

being, psychopathology, and spirituality*. In P. T. P. Wong & P. S. Fry (Eds.), Handbook

of personal meaning: Theory, research, and application (2nd ed., pp. 165-184). Mahwah,

NJ: Lawrence Earlbaum.

Stillman, T. F., Lambert, N. M., Fincham, F. D., & Baumeister, R. F. (2011). Meaning as

magnetic force: Evidence that meaning in life promotes interpersonal appeal. *Social

Psychological & Personality Science, 2,* 13–20.

Waltz, C. F., Strickland, O. L., & Lenz, E. R. (Eds.). (2010). *Measurement in nursing and health

research*. Springer Publishing Company.