

# Leader Attentive Communication: A new Communication Concept, Validation and Scale Development

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Anouk Decuyper<sup>1,2</sup>  and Armin Pircher Verdorfer<sup>3</sup>

## Abstract

Effective communication is a foundational leadership skill. Many leadership theories implicitly assume communication skills, without investigating them behaviorally. To be able to research leader communication as a building block of effective leader behavior, we propose a new concept, i.e., leader attentive communication which refers to “an open-minded, attentive demeanor while in a conversation with an employee”. Instead of focusing on the content or form of the communication, we propose to study the communication skills of the leader from the viewpoint of the employee. In this article, we both validate a questionnaire and test LAC’s influence on employee wellbeing in four different studies. We use information from 1,320 employees and their leaders, in 422 teams, in 3 different datasets. The result is a 10-item questionnaire with 2 dimensions consisting of general attention (towards the employee) and attention to non-verbal cues. We also find that LAC is associated with work engagement, psychological needs and Kahn’s conditions for work engagement. With this questionnaire, we contribute to calls for a more behavioral, detailed view on leader communication behavior.

## Keywords

leadership, leader behavior, leader communication, leader attention

“Are you still listening?” seems to be a common question in this era full of distractions. Communicating well face-to-face may feel like a lost art to some (Murphy, 2020), yet it is especially important for leaders, for whom a primary activity is communicating with employees in one form or another (Wajcman & Rose, 2011). Many leadership scholars posit that effective and skilled communication is crucial for leadership (Fairhurst & Connaughton, 2014; Neufeld et al., 2010; Riggio & Darioly, 2016). Some scholars even go so far as to argue that successful leadership is a direct consequence of effective communication (Ruben & Gigliotti, 2017). In line with this, positive leadership frameworks (e.g., transformational and charismatic leadership typically include indicators of effective communication. Research has repeatedly indicated that communication abilities of leaders are related to leader performance (De Vries et al., 2009; Van Quaquebeke & Felps, 2016), even when there is physical distance between leaders and remote employees (Neufeld et al., 2010). Conversely, poor communication can frustrate employee needs (Van Quaquebeke & Felps, 2016), harming the quality of relationships as well as employee satisfaction (Erben et al., 2019; Mayfield & Mayfield, 2009). One pattern that particularly stands out in this context is a lack of attention during communication, e.g., through boss phone snubbing, and has

been shown to substantially undermine employee trust and engagement (Roberts & Williams, 2017).

However, while previous research on leader communication has predominantly focused on distinct communication styles (Bakker-Pieper & De Vries, 2013) and on leader non-verbal behavior (Bellou & Gkorezis, 2016), there has been little communication research through the lens of leader attention. In addition, the popular management and leader development literature also appears to focus more strongly on how to talk to employees or what to say to get results (e.g., Miller, 2020), while being attentive to responses from employees has been given short shrift. This is surprising, since recent research indicates that leader attention is associated with enhanced interpersonal skills (Jones et al.,

<sup>1</sup>Digitax, Faculty of Law, Antwerp University, Belgium

<sup>2</sup>Department of Human Resource Management and Organizational Behavior, Faculty of Economics and Business Administration, Ghent University, Belgium

<sup>3</sup>Leadership & Management Department, Faculty of Economics and Business, University of Amsterdam, Netherlands

## Corresponding Author:

Anouk Decuyper, Digitax, Faculty of Law, Antwerp University, Gratiekapelstraat 10, 2000 Antwerp, Belgium.  
Email: anouk.decuyper@uantwerpen.be

2016), and may be uniquely important for establishing positive relationships with employees (Good et al., 2016). Moreover, this problem is further exacerbated by the fact that prominent people-oriented leadership approaches, such as transformational or servant leadership (Avolio et al., 1999; van Dierendonck & Nuijten, 2011), include the notion of leaders paying attention to employees only implicitly, while remaining silent about its behavioral underpinnings and what exactly the leader pays attention to. Overall, this lack of explicit theorizing is unfortunate as it leaves us with an incomplete and rather fragmentary understanding of the nature and unique features of leader attentiveness as an important communication quality. Naturally, these conceptual shortcomings impede related efforts to measure leader attentiveness as well as to investigate its underlying mechanisms and, eventually, to develop and test effective interventions.

With these problems in mind, we herein introduce *Leader Attentive Communication* (LAC) as a novel communication concept that distinctively substantiates the relevance of leader communication skills and the role of leader attention for communication specifically. By explicitly positioning LAC as a narrow behavioral approach, we then develop and validate a psychometrically sound measurement instrument that captures the actual behaviors that typify leader attentive communication. This will enable us to assess the unique position of LAC in the nomological network of leadership and leader communication research as well as to explore its mechanisms.

In doing so, we respond to ongoing calls for more thoroughly specifying the behavioral basis of effective leadership, as behaviors “tend to predict more variance across a variety of effectiveness criteria than do leader traits” (Derue et al., 2011, p. 40). As the proposed positive communication behavior may be shared across different positive leadership styles, having a thorough understanding of its nature and measurement will help research reduce redundancies and identify points of integration within the positive leadership domain. Finally, as behaviors can be learned, knowledge about basic building blocks of effective communication are not only relevant for the development of better leadership theories, but also for creating more practical evidence-based interventions for leader development programs.

## Leader Attentive Communication (LAC)

Leadership is commonly described as an influence process (Northouse, 2021) and thus inherently connected to communication. That said, efficient leaders have traditionally been portrayed as skilled communicators who create and send intentional messages to their followers with a specific outcome in mind (Fairhurst & Connaughton, 2014). As the field developed, research has increasingly stressed the relational nature of leadership, prompting a more

differentiated view on communication skills. That is, communication in leadership is not adequately described as merely sending information downwards but, rather, leaders and followers interact and communicate reciprocally. Accordingly, effective leader communication has been linked to relationship building abilities such as active listening and empathy (Bodie, 2011; Holt & Marques, 2012). While these lines of inquiry often refer to leader attentiveness as an important feature of high-quality communication, it has been given surprisingly short shrift on its own and explicit theorizing and empirical evidence is scarce. The few attempts that are available have focused on individuals’ self-descriptions as attentive communicators (Norton and Pettegrew, 1979), as opposed to other perceptions of attentive behaviors. In a similar vein, Arendt et al. (2019) focused mostly on internal states (e.g., being impatient) in their operationalization of leaders paying attention, while not saying much about the expressed behaviors that demonstrate attentiveness in leader communication.

## Definition Development

Because of this lack of specification in the existing literature, we adopted an inductive approach in our endeavor to define and measure LAC. Our first step in developing a working definition was an interview pilot with a small group of leadership experts in our network ( $N=5$ ). They all had more than twenty years of experience in the field of leadership consultancy, mindfulness training, and counseling. The interviews centered on attentiveness as a *process* of communication, rather than the content of what is being discussed. That is, we sought to flesh out *what* a leader does (i.e., paying attention while communicating with an employee), as well as *the specific object* to pay attention to (i.e., physical characteristics, emotional reactions, facial expressions, and body postures of an employee). The preliminary theme that emerged from the interviews described LAC as “a non-judgmental comprehensive observation of an employee while communicating”. On this basis, we developed 20 preliminary descriptors, capturing attentive communication behaviors that were derived from the interviews. These descriptors were then presented to a panel of 17 subject matter experts leaders who were following a one-year postgraduate HR degree at a large Belgian university. The leader panel had the opportunity to comment on the presented descriptors as well as to propose new ones. Based on this inductive expert interview process, along with our review of the previous literature, we define LAC as a leader’s “*open-minded, attentive demeanor while in a conversation with an employee*”. In what follows, we briefly describe the main features of this definition.

First, the most important part is the focus on the quality of communication, i.e., *attentive*, since it can be seen as a building block from which effective leader communication

behaviors emerge. Second, paying attention *open-mindedly* helps to maintain a level of openness from which a comprehensive image of an employee can be formed. In this context, LAC, and especially a focus on open-mindedness, will help the leader to see the situation clearly, without judgments of others or past experiences influencing his/her perception. This also relates to putting values, opinions and attitudes aside, while trying to fully comprehend the message of the employee. Third, the nonverbal *demeanor* entails a general conduct in which the leader embodies the principles of attentiveness and open-mindedness in the conversation with the employee. It therefore entails a particular way to attend to an employee's use of words, tone of voice, facial expressions, body posture, etc., and an appropriate response to those cues during the conversation.

### *Distinctiveness from Related Concepts*

LAC is related to but distinct from conceptually similar constructs. From our review of the literature, it seemed most important to differentiate LAC from related constructs in three different areas: leadership constructs, communication constructs, and attention-based constructs. The boundaries between these categories are not clear cut, as some constructs contain features that fit into several categories (e.g., leader mindfulness in communication). We therefore followed theoretical as well as pragmatic considerations and used the focal perspective of each construct to assign it accordingly. Table 1 shows an overview of similarities and differences per construct. While we only briefly go over each of the constructs in the Table as well as in the paragraphs below, we summarize that in every comparison with LAC, the other constructs either fail to include or underrepresent important aspects of LAC, they measure LAC-irrelevant features, or both problems occur at the same time.

*Leadership constructs* entail transformational leadership (and specifically the "individualized consideration" dimension; Avolio et al., 1999), servant leadership (van Dierendonck & Nuijten, 2011), and leader-member exchange (LMX; Schriesheim et al., 1999). These constructs are similar to LAC in that they all include an implicit emphasis on paying attention when interacting with employees. Nonetheless, they are all different from LAC based on their focus. Transformational and servant leaders are commonly portrayed as showing genuine concern for the needs and development of their followers, while LMX describes the degree to which the relationship between leaders and followers is characterized by mutual obligation, trust, and respect. While these constructs implicitly include the notion of leaders showing attention, they do not specify actual attentive behaviors.

*Communication constructs* entail respectful inquiry<sup>1</sup> (Van Quaquebeke & Felps, 2016), humble inquiry<sup>1</sup> (Schein, 2013), and leader listening (Castro et al., 2016). In addition,

we included empathy (Cornelis et al., 2013), active-empathic listening (Bodie, 2011) and emotional intelligence (Bar-On, 1997; Mayer et al., 2008) as they are commonly seen as important prerequisites of good communication. In general, the constructs in this category are similar to LAC with regard to their focus on communication quality. Also, they naturally include elements of attentiveness. For instance, empathic reactions to the observed experiences of others require an accurate knowledge about the contents of another person's mind. Similarly, emotional intelligence, with its focus on adequately perceiving and understanding emotions in oneself and others, depends on the ability to be attentive to these emotions (Pekaar et al., 2018). At the same time, however, these constructs are conceptually different from LAC with regard to the actual behaviors they focus on (i.e., respectful and humble inquiry) or the emphasis that is placed on perspective taking and the ability to empathize (i.e., empathy, active empathic listening, and emotional intelligence). In a similar vein, leader listening measures typically focus on rather general listening attitudes and skills such as not interrupting and perspective taking (Mishima et al., 2000), or showing personal interest in conversations (Lloyd et al., 2017).

Last, *attention-based constructs* are different operationalizations of mindfulness, which is typically described as a state of nonelaborative and nonjudgmental attention and awareness, oriented to the present moment (Brown & Ryan, 2003). Among the most frequently used measures is the Mindfulness Attention and Awareness Scale (Brown & Ryan, 2003), focusing on the presence or absence of attention and awareness. Other measures, such as the Five Facets Mindfulness Questionnaire (Baer et al., 2006), include a more nuanced notion of mindfulness, distinguishing between several subdimensions, i.e., observing, describing, acting with awareness, non-judging, and non-reactivity. Furthermore, we also include the more recently developed notion of mindfulness in communication (Arendt et al., 2019), capturing the degree to which employees perceive their leaders to show awareness and acceptance during conversations. In general, these constructs share the focus on paying attention, but the operationalizations are different from LAC. Whereas LAC focuses on how leaders pay attention to employees and what they notice (including specific objects of attention), both mindfulness and mindfulness in communication focus more on the internal states of the leader, either via self-ratings of leaders or other-ratings of followers.

Taken together, LAC is analytically different from all these concepts, while also inherently linked to them. It may represent a behavioral building block underlying them (e.g., leadership and communication behaviors) or emerging from them (e.g., from leader mindfulness as a capacity to pay attention). See Figure 1 for a visualization of the proposed nomological network.

A major goal of the present research was to develop a psychometrically sound measure of LAC and to establish its construct validity. Table 2 shows our approach expanding over different measurement development and validation phases.

**Table 1.** Related Constructs: Definition, Similarities and Differences.

Construct category	Definition	Differences		Similarities
		Related construct	LAC	
<b>Leadership constructs</b>				
<i>Transformational leadership (dimension individualized consideration)</i>	The leader “focuses on understanding the needs of each follower and works continuously to get them to develop to their full potential” (Avolio et al., 1999, p. 444).	General focus on followers’ needs Individual feedback or providing development opportunities. No explicit focus on open-mindedness	Specific focus on attentive communication No specification of communication content or leader responses -Explicit focus on open-mindedness	Giving personal attention to employees Leader-Employee relationship context
<i>Servant leadership</i>	No general accepted definition; the core concept seems related to “going beyond one’s self-interest” (Greenleaf, 1977; Van Dierendonck & Nuijten, 2011, p. 250); 8 dimensions: empowerment, standing back, accountability, forgiveness, courage, authenticity, humility and stewardship (van Dierendonck & Nuijten, 2001).	Implicit assumption of communication skills Different subdimensions No explicit focus on open-mindedness	Explicit focus on attentive communication skills Different subdimensions Explicit focus on open-mindedness	Focusing on the employee Leader-Employee relationship context
<i>Leader-Member Exchange</i>	“the quality of the exchange relationship between leader and subordinate” (Schriesheim et al., 1999, p. 77), comprised of (1) a contribution to the exchange, (2) loyalty and (3) affect	Quality of the exchange Positive content or balance of the exchange General focus on a positive exchange relationship Positive affect or ‘liking’ each other as a core aspect Loyalty as a (possible) core aspect Implicit focus on attention paid to employees No focus on open-mindedness Explicit assumption of differentiation between employees	Attention paid during the exchange Attention paid during the exchange regardless of content Narrow focus on the attention paid and demeanor during conversations No explicit assumptions concerning (leader/ employee) liking No mention of loyalty Explicit focus on attention paid to employees Explicit focus on open-mindedness No assumption concerning differentiation between employees	Context: leader-employee dyads
<b>Communication constructs</b>				
<i>Respectful inquiry</i>	“The multidimensional construct of asking questions in an open way and subsequently listening attentively” (Van Quaquebeke & Felps, 2016, p. 6)	An explicit focus on being respectful Importance of asking questions Focus on asking open questions	Only a focus on being “open-minded” No restrictions on communication form	Paying attention during communication Attentive listening Leader-Employee relationship context
<i>Humble inquiry</i>	“The fine art of drawing someone out, of asking questions to	A focus on humility A focus on inquiry	A focus on being “open-minded”	Paying attention

(continued)

Table 1. (continued)

Construct category	Definition	Differences		Similarities
		<i>Related construct</i>	<i>LAC</i>	
	which you do not already know the answer, of building a relationship based on curiosity and interest in the other person" (Schein, p. 2)		No specific form of communication	Curiosity (open-mindedness) Leader-Employee relationship context
<i>Empathy</i>	(1) "The ability to comprehend another's feelings and to re-experience them oneself" (Salovey & Mayer, 1990, p. 194); (2) "The ability to accurately recognize, perceive, and experience another's emotions" (Cornelis et al., 2013, p. 606)	Feeling or comprehending A focus on solely feelings or emotions	Observing A more broad attention span, i.e., also observing/noting specific nonverbal behavior, message content, employee energy level,	Perception of feelings Comprehension of feelings
<i>Active Empathic Listening</i>	".. the active and emotional involvement of a listener during a given interaction – an involvement that is conscious on the part of the listener but is also perceived by the speaker" (Bodie, 2011, p. 278); Dimensions = sensing, processing, responding	Emotional involvement The conceptualization contains specific listeners' behaviors and communication strategy	Emotional involvement is not necessary Communication is operationalized more broadly Large behavioral differentiations on an item level	Attentive listening Suspending judgment is similar to being open-minded
<i>Leader listening</i>	"A behavior that manifests the presence of attention, comprehension, and good intention toward the speaker" (Castro et al., 2016, p. 763).	An explicit focus on comprehension An explicit focus on having good intentions towards the speaker (i.e., the employee) Listening A bigger focus on listening to message content	An implicit focus on comprehension of the observed (non)verbal cues No explicit focus on good intentions Listening and speaking Paying equal attention to observing nonverbal communication	Paying attention during communication Leader-Employee relationship context
<i>Emotional intelligence</i>	(1) "The ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought" (ability-based emotional intelligence (EI); Mayer et al., 2008, p. 511); (2) "An array of non-cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures" (mixed-based EI; Bar-On, 1997, p. 14)	Umbrella term Understanding Observing, feeling or understanding emotions and feelings A focus on everyone (including oneself) Implicit 'open(minded)' and attentive demeanor	More specific leader behavior Perceiving Observing verbal and nonverbal behavior more broadly A focus on the employee with whom the leader is conversing Explicit open-minded and attentive demeanor of the leader	Perception of emotions or feelings Use of nonverbal sensitivity
<i>Attention-based constructs</i>				
<i>Mindfulness</i>	(1) "The state of being attentive to and aware of what is taking place in the present" (Brown & Ryan, 2003, p. 822); (2) "An open-hearted,	General attention to the present moment (wide attentional breadth) Explicit focus on being	Paying attention with a specific focus (the employee), during a specific activity (communicating)	Being attentive or observant The focus on being <i>non-judgmental</i> awareness may be interpreted

(continued)

Table 1. (continued)

Construct category	Definition	Differences		
		Related construct	LAC	Similarities
	moment-to-moment, non-judgmental awareness” (Kabat-Zinn, 2005, p. 24); unidimensional or multidimensional depending on resource; proposed dimensions = observing, describing, acting with awareness, non-judging, non-reactivity (Baer et al., 2006)	open-hearted and non-judgmental Depending on the resource, explicit focus on different dimensions	Explicit focus on being open-minded No explicit focus on describing, acting with awareness, non-judging or non-reactivity	similarly to being open-minded, although leaders do need to be able to make judgments in the moment, even when communicating attentively
<i>Mindfulness in communication</i>	“leaders’ mindfulness when communicating with followers” (Arendt et al., 2019; p. 5); dimensions = (1) present, impatient or only half-listening, (2) open and non-judging and (3) calm and non-impulsive	Focus on leaders’ internal states related to paying attention No object of attention Different subdimensions with explicit focus	Focus on leaders’ attention paid to the employee in general and to employees’ nonverbal communication Clear attentional focus; the employee No explicit focus on being impatient, calm or impulsive	Paying attention during conversations Being open

Note. Related constructs: definition, similarities and differences. Leader attentive communication (LAC) is defined as “an open-minded, attentive demeanor while in a conversation with an employee”.

## Study 1: Instrument Development and Exploratory Factor Analysis

Based on our definition of LAC and the descriptors emerging from the inductive approach outlined above, we generated 28 initial items. All items capture LAC as perceived by the employees. Based on the initial item pool, we conducted Study 1 and used exploratory factor analysis (EFA) to assess the new measure’s factor structure for scale refinement.

### Sample and Procedures

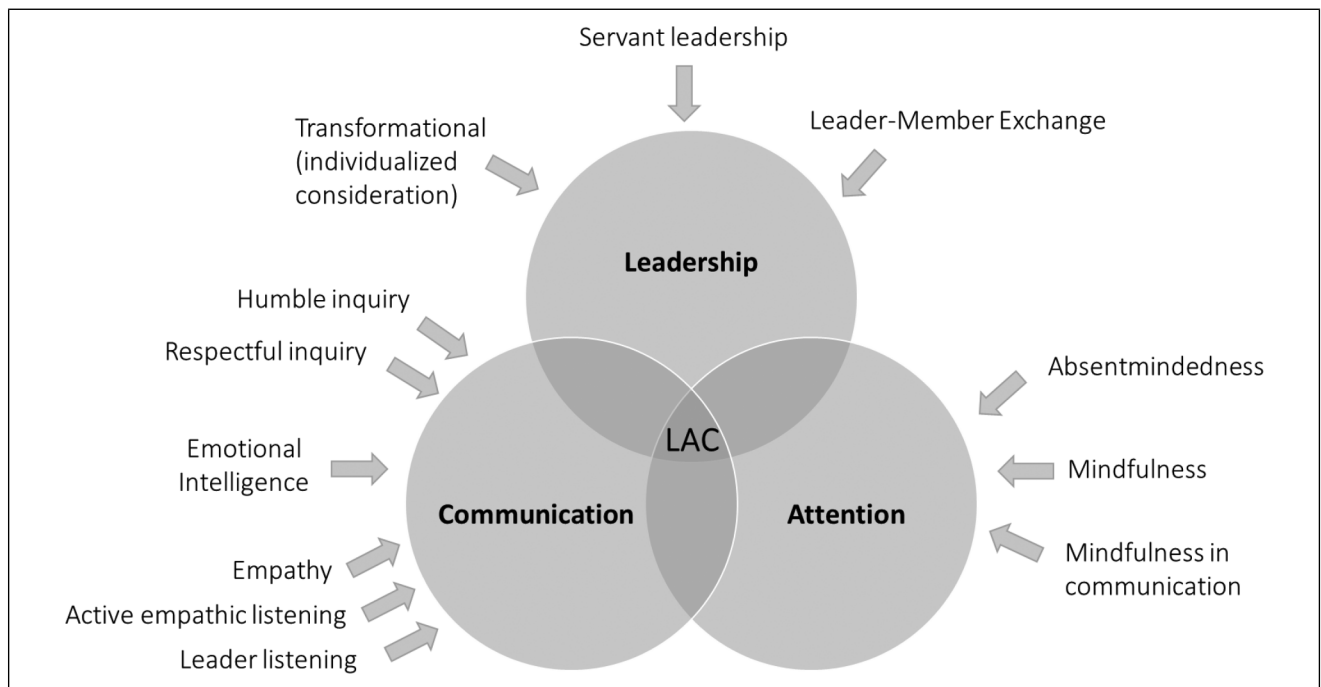
The first sample (hereinafter Sample 1), was collected in 2018 in Belgian employment agencies. These agencies are usually relatively small with few employees and one leader per branch on each separate location. The data-collection was part of a larger data-collection that was used for master’s theses. Overall, we obtained valid responses from 314 employees and 141 leaders forming 165 teams (not every leader had employees who filled in the questionnaire and vice versa). With regard to employees, the mean age was 29.34, while 86 percent were female. The average tenure with the leader was 1.96 years. With regard to leaders, the mean age was 37, while 75.7 percent were female. The average tenure with the team was 3.78 years (for more detailed demographic information see Table 3). For the purpose of Study 1, only the data obtained from followers (i.e., their ratings of LAC) were used.

### Measures

Employees were asked to rate their immediate leader in terms of LAC, using the initial 28 item pool. All items were in Dutch and responses were given on a 7-point agreement scale, ranging from 1 = *strongly disagree* to 7 = *strongly agree*. As the data of sample 1 are also used in later validation phases (see Study 3 and 4), several other measures were included.

### Results

First, we tested whether the obtained LAC responses were suitable for EFA. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .93 and thus above the commonly accepted threshold of .60 (Tabachnick & Fidell, 2001). Bartlett’s (1950) test of sphericity was also significant ( $\chi^2(378)=5,840.72, p < .001$ ), indicating there was enough similarity for structure detection in our data. The extraction method was principal axis factoring with an oblique rotation (direct oblimin with Kaiser Normalization), using the Kaiser Criterion (i.e., Eigenvalues >1) and the scree plot to determine the number of factors. In the first round, five factors emerged that explained 58% of the variance. Next, we inspected the communalities and removed items which correlated less than .40 with the other items (Costello & Osborne, 2005). Moreover, items with poor item loadings or a cross-loading that exceeded .32 and differed less than .20 with the highest



**Figure 1.** Nomological network.

**Table 2.** Overview Studies, Purposes and Samples That Were Used.

Methodology and purpose	Sample 1	Sample 2	Sample 3
<i>Study 1: Exploratory factor analysis</i> • Assess factor structure for scale development	X		
<i>Study 2: Confirmatory factor analysis</i> • Test the hypothesized two-factor structure		X	X
<i>Study 3: Nomological network analysis</i> • Convergent validity • Discriminant validity	X	X	X
<i>Study 4: LAC and follower outcomes</i> • Semi-partial correlations • Hypothesis testing	X	X	X

loading (Tabachnick & Fidell, 2001) were removed. Also, we removed some remaining items, as they confounded LAC with its effects (e.g., “My leader makes me feel understood”). While this procedure suggested a three-dimensional solution, the items of the third factor had rather low factor loadings and seemed somewhat redundant. Therefore, we restricted the remaining items to load on two factors. The final two-dimensional solution includes 10 items that explained 66% of the variance and adequately balance psychometric criteria

with theoretical accuracy and interpretability. Factor 1 was labeled *general attention* and includes items such as “My leader is perceptive during conversations”. Factor 2 was labeled *attention to nonverbal cues* and is characterized by items such as “My leader notices my facial expressions”. Table 4 shows the final items and the factor loadings. Cronbach’s alpha for the composite LAC measure was .90.

## Study 2: Confirmatory Factor Analysis

In this study, we administered the 10-item measure derived from the EFA to two separate samples. Then, we used confirmatory factor analysis (CFA) using the Lavaan package in R (Rosseel, 2012) to test whether the hypothesized two-factor structure holds.

## Samples and Procedures

We collected data from two samples, hereinafter referred to as Sample 2 and Sample 3. Sample 2 consisted of 522 employees and 253 leaders from various jobs and industries in Belgium that were recruited by students attending a Business Economics course at a large university in Belgium. Recruiters invited participants from their personal networks to fill in an online survey and were provided with course extra credit. In terms of sociodemographics, employees’ mean age was 38.6, while 54.4 percent were female. The average tenure with the leader was 5.14 years. With regard to leaders, the mean age was 45.61, while 28.5 percent were

**Table 3.** Demographics and Control Variables of the Samples.

	Sample 1 Recruitment offices		Sample 2 Various industries		Sample 3 Schools	
	Employees	Leaders	Employees	Leaders	Employees	Leaders
<b>Demographics</b>						
Total respondents	314	141	522	253	484	48
Gender (% female)	86	75.7	54.4	28.5	62.8	60.4
Non responders	14	2	27	35	16	0
Age (SD)	29.34 (6.01)	37 (8.01)	38.6 (11.24)	45.61 (10.17)	39.72 (10.27)	48.46 (8.37)
Tenure (SD)	4.3 (5.07)	11 (7.54)	11.87 (11.03)	18.22 (11.2)	14.95 (9.88)	8.24 (6.48)
Tenure with leader/with team (SD)	1.96 (2.25)	3.78 (4.02)	5.14 (6.1)	7.49 (7.07)	5.88 (5.27)	7.23 (5.92)
Education						
% none or up to 12 y/o	0.3	0	0.8	0.4	0	1
% vocational secondary	4.1	2.1	6.5	0.8	0.4	0
% technical secondary	17.6	16.7	9	4.3	2.3	0
% general secondary	9.4	6.3	10.3	7.1	0.4	0
% higher education	44	50	36.4	39.9	56.6	29.2
% university education	19.7	23.6	34.7	43.9	37.6	66.7
Non-responders	0	0	0	0	13	0
<b>Extra control variables</b>						
Assessment quality <sup>a</sup>	1.48 (.58)		1.39 (.53)		4.70 (1.23)	
Interaction frequency with leader/team <sup>b</sup>	1.41 (.67)	1.13 (.43)	1.79 (.84)	1.36 (.68)	3.57 (1.63)	
<b>Extra info for sample 2</b>						
Sector according to						
% sales			6.5			9.1
% transportation			1.9			2
% IT/Information			6.1			7.8
% media			1.3			0.8
% hospitality			4.4			3.6
% industry			9.4			13.8
% finance			12.6			13.8
% education			3.6			3.2
% government			8			7.5
% "other"			43.5			35.6
Nr of employees (SD)					2 426.94 (12 213.10)	
<b>Extra info for sample 3</b>						
Nr of students in school (SD)					563.83 (371.89)	
Lesson hours					18.42 (5.45)	
Actual working hours					35.46 (10.75)	

Note. SD = Standard Deviation.

<sup>a</sup>Assessment quality = the answer to "How well can you assess your leader" on a scale from 1 (not at all) to 7 (very well).

<sup>b</sup>Interaction frequency with leader/team = the answer to "How much contact do you have with your leader/team" on a scale from 1 (less than monthly) to 6 (daily).



female. The average tenure with the team was 7.49 years (for more detailed demographic information see Table 3)

For Sample 3, data were gathered from 484 teachers and 48 principals in different middle and high schools in Belgium. This data-collection was part of a larger data-collection effort for master's theses at a large University in Belgium. With regard to the teachers, the mean age was 39.72, while 62.8% were female. The average tenure with the principal was 5.88 years. For the principals, the mean age was 48.46, while 60.4% were female. The average tenure at the school was 7.23 years (for more details see

Table 3). Again, for the purpose of Study 2, only the LAC ratings obtained from the followers were used.

### Measures

In both sample 2 and sample 3, participants were instructed to rate their immediate supervisor using the newly developed 10-item LAC measure. The same response format as in sample 1 was applied (for means and Cronbach's alphas, see Appendix Table 10 and 13). Once again, the data of both samples are used for additional validation analyzes in the present research, which is why we included multiple other measures for Study 3 and 4 (see below).

**Table 4.** Exploratory Factor Analysis (Study 1).

Factor	1	2
<i>General attention</i>		
1* My leader is perceptive during conversations	.72	
2* My leader displays a keen awareness during our conversations	.79	
3* When I talk to my leader, I get his/her full attention	.74	
8* My leader accurately hears the verbal message I want to convey (for instance through repeating the message, summarizing it or asking additional questions)	.82	
9* When I communicate with my leader, he or she is able to describe my points accurately	.89	
10* My leader rephrases my intended message accurately	.76	
<i>Attention paid to nonverbal cues</i>		
4* My leader notices my facial expressions		.88
5* My leader notices my body posture		.89
6* My leader notices the tone of my voice		.92
7* My leader notices my main/predominant emotions		.59

Note. Factor loadings of the LAC scale with principal axis factoring and oblique rotation (direct oblimin); factor loadings lower than .30 were omitted.

\*The numbers indicate the best order in which to administer the items. The scale is designed to both increase in difficulty and capture respondents' attention and curiosity until the end by letting the items build on one another.

### Results

The LAC responses from sample 2 and 3 were submitted to CFA following established recommendations in the field (Hinkin, 1995). We compared the fit of a single-factor model with a two-factor model in which the factors were allowed to correlate. As shown in Table 5, the two-factor models in the different samples showed a good fit and were preferable over the single-factor model across all samples.

### Study 3: Nomological Network Analysis

In this section, we examine how LAC is empirically related to, but also distinct from, other constructs reflected in convergent and discriminant validity. In order to determine the unique position of LAC in the monological space, we compared it to several theoretically viable constructs. In line with our theoretical discussion above about conceptual similarities with and differences from related constructs, we focus on leadership, communication, and attention-based constructs.

The *leadership constructs* in the nomological network entailed transformational leadership (Avolio et al., 1999), servant leadership (van Dierendonck & Nuijten, 2011), and LMX (Graen & Uhl-Bien, 1995). Empirically measurable *communication constructs* entailed leader listening (Castro et al., 2016), empathy (Cornelis et al., 2013; Salovey & Mayer, 1990), active-empathic listening (Bodie, 2011) and emotional intelligence (Bar-On, 1997; Mayer et al., 2008). Last, *attention-*

**Table 5.** Confirmatory Factor Analysis (Study 2).

	Fit indices of LAC							
	Chi-square	df	Chi-square/df	RMSEA	CFI	NFI	TLI	IFI
<i>Sample 2</i>								
Two-factor model	181.88(34)	10	071.66	0.090.55	.96	.94	.10	.04
One-factor model	320(35)	10	619.44	0.637.43	.80	.74	.21	.09 549.79(1)***
<i>Sample 3</i>								
Two-factor model	481.66(34)	9	319.69	9.339.89	.93	.91	.12	.05
One-factor model	1425.97(35)	10	262.00	10.281.24	.77	.70	.29	.13 944.31(1)***

Note. CFA results for the factor structure of the LAC questionnaire in three datasets; in the two-factor model, the factors were allowed to correlate. \*\*\* $p < .001$ .

**Table 6.** Overview Constructs in the Data-Collections.

	Sample item	Sample 1 Recruitment offices	Sample 2 Various industries	Sample 3 Schools	Scale reference
<i>N</i> employees		314	522	484	
<i>N</i> leaders		141	253	48	
<b>Employee Ratings</b>					
<b>Leadership constructs</b>					
Leader-Member Exchange	"I usually know where I stand with my supervisor"	X	X	X	Graen & Uhl-Bien (1995)
Transformational leadership	"My leader helps employees to develop themselves."		X	X	Avolio and Bass (2004)
Servant leadership	"My supervisor learns from criticism."			X	Van Dierendonck and Nuijten (2011)
<b>Communication constructs</b>					
Leader listening <sup>a</sup>	"My leader... doesn't interrupt me."			X	Castro et al. (2018)
<b>Attention-based constructs</b>					
Mindfulness in communication	"In conversations, my supervisor is impatient." (R)		X	X	Arendt et al. (2019)
<b>Leader Attentive Communication</b>	"My leader is perceptive during conversations."	X	X	X	This study
<b>Wellbeing</b>					
Work engagement	"At my work, I feel bursting with energy."	X	X	X	Schaufeli et al. (2017)
Need satisfaction	"I feel like I can be myself at my job."	X	X	X	Van den Broeck et al. (2010)
Conditions for engagement	"The work I do on this job is very important to me."			X	May et al. (2004)
<b>Leadership constructs</b>					
<b>Leadership constructs</b>					
Transformational leadership	"I help my employees to develop themselves."	X			Avolio and Bass (2004)
<b>Communication constructs</b>					
Active-empathic listening	"I am sensitive to what others are not saying."			X	Bodie (2011)
Emotional intelligence	"I know what to do to improve people's mood."	X	X	X	Pekaar et al. (2018)
Cognitive empathy	"I can tell when someone is afraid"	X	X	X	Vachon and Lynam (2016)
<b>Attention-based constructs</b>					
Mindfulness (FFMQ)	"I perceive my feelings and emotions without having to react to them."	X	X		Baer et al. (2006)
Mindfulness (MAAS)	"I snack without being aware that I'm eating." (R)	X	X		Brown and Ryan (2003)
<b>Leader attentive Communication</b> <sup>b</sup>	"I am perceptive during conversations."	X	X		This study (adapted to self-report)

Note. Overview of constructs measured in each of the studies.

<sup>a</sup>Cronbach's alpha and factor loadings were too low, so we did not use this measure for further analysis; (R) = a reversed item.

<sup>b</sup>Adapted to self-report for exploratory purposes, employee-reported LAC remains the focal construct of this study.

based constructs included leader mindfulness (Brown & Ryan, 2003) and mindfulness in communication (Arendt et al., 2019). As all these constructs include an implicit emphasis on paying attention when interacting with employees, we expect a moderate and positive correlation with LAC.

### Sample and Procedures

For this study, we used data from sample 1, 2, and 3 (see Table 3 for detailed demographic information). While LAC was assessed in all samples, each sample contained a specific set of additional variables that was used to determine convergent and discriminant validity. In addition to follower-rated leader behaviors, several of these constructs were captured via leader self-ratings, for exploratory purposes, as we outline below. Table 6 delineates all measures collected in each sample.

### Measures

In sample 1, employees rated LMX (Graen & Uhl-Bien, 1995), in addition to LAC. Leader self-reports included emotional intelligence (Pekaar et al., 2018), cognitive empathy (Vachon & Lynam, 2016), transformational leadership (Avolio & Bass, 2004) and two mindfulness measures (FFMQ; Baer et al., 2006; MAAS; Brown & Ryan, 2003). For the FFMQ, we administered the abbreviated 15-item version (Baer et al., 2012). For exploratory purposes, we also measured leader-rated LAC to assess the correlation with employee-rated LAC. Responses for all measures were given on a 7-point Likert scale, capturing the level of agreement with a particular item (1 = *strongly disagree* to 7 = *strongly agree*). Sample items are provided in Table 6. Correlations and descriptive statistics pertaining to sample 1 are provided in the appendix (Tables 8 and 9).

In sample 2, we included the same employee and leader measures that we used in sample 1. In addition, we also measured employees' ratings of transformational leadership (Avolio & Bass, 2004) and leader mindfulness in communication (Arendt et al., 2019). For exploratory purposes we also included leader self-ratings of their LAC. All items were measured on a 7-point Likert scale. Sample items are provided in Table 6. Correlations and descriptive statistics pertaining to sample 2 are provided in the appendix (Tables 10 and 11).

In sample 3, employee-rated measures included servant leadership (van Dierendonck & Nuijten, 2011), leader listening (Castro et al., 2018), and LMX (Graen & Uhl-Bien, 1995). For leader listening, Cronbach's alpha and factor loadings were too low for further analysis. Leader-rated variables included active-empathic listening (Bodie, 2011) and cognitive empathy (Vachon & Lynam, 2016). All items were measured on a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). Sample items are provided in Table 6, correlations, and descriptive statistics pertaining to sample 3 are provided in the appendix (Table 12–13).

### Results

To assess the relationship between LAC and the similar constructs outlined above, we inspected the correlations among these variables. The results of this procedure are reported in the Appendix (Table 8–13). The obtained correlation patterns were in the expected directions in that followers' ratings of LAC were positively correlated with their perceptions of our focal leadership variables across all samples, i.e., LMX ( $r_{sample1} = .65, p < .01$ ;  $r_{sample2} = .64, p < .01$ ;  $r_{sample3} = .64, p < .01$ ), transformational leadership ( $r_{sample2} = .73, p < .01$ ), and servant leadership ( $r_{sample3} = .74, p < .01$ ). Moreover, LAC was positively related to similar follower-rated indications of leaders paying attention, most notably mindfulness in communication ( $r_{sample2} = .65, p < .01$ ;  $r_{sample3} = .67, p < .01$ ). The correlations were high but not as high as to indicate construct redundancy, thus supporting discriminant validity (John & Benet-Martinez, 2000).

As in all samples employees were nested in teams, we aggregated employees' individual LAC ratings to the team level in order to correlate them with leader self-ratings. Leader ratings included the focal communication behaviors under investigation as well as self-reported transformational leadership. In order to investigate whether there is support for aggregation, we performed an analysis of variance (ANOVA) on the differences between teams. We then calculated the  $r_{wg}$ , representing the observed variance in ratings compared to the variance of a theoretical distribution representing no agreement (Smith-Crowe et al., 2014). In sample 1, the ANOVA indicated a significant difference between teams ( $F(148,165) = 1.34; p < .05$  and strong intergroup agreement (LeBreton & Senter, 2008) on LAC scores ( $r_{wg} = .77$ ). In sample 2, the difference between teams was significant too ( $F(206,303) = 1.54; p < .001$ ), coupled with strong intergroup agreement on LAC scores ( $r_{wg} = .78$ ). Also, in sample 3 the ANOVA indicated a significant difference between teams ( $F(47,428) = 2.41; p < 0.001$ ), while intergroup agreement on LAC scores was moderate ( $r_{wg} = .53$ ).

Results revealed a moderate correlation between aggregated LAC and leader self-rated constructs i.e., transformational leadership ( $r_{sample1} = .22, p < .05$ ) and empathy ( $r_{sample2} = .17, p < .05, r_{sample3} = .38, p < .01$ ). However, it did not correlate with emotional intelligence (sample 1 and 2), and mindfulness (sample 1 and 2). Overall, this indicates that LAC is clearly distinct from these constructs, substantiating its unique position in the nomological network. Furthermore, our additional analysis with regards to the correlation between employee-rated LAC and leader self-report LAC (for exploratory purposes) indicated a substantial gap between employee and leader perceptions ( $r_{sample1} = .14, p > .05; r_{sample2} = .18, p < .05$ ).

Next, to further substantiate discriminant validity, we used followers' ratings of LAC and their perceptions of related leader behaviors, and compared a series of theoretically viable models via CFA. Our baseline model treated

LAC as a separate factor and we then tested this baseline model against a series of competing models, in which LAC and a particular validation construct (e.g., servant leadership or leader mindfulness in communication) were merged into one factor. The results of this procedure are reported in the appendix (Table 7). The models in which LAC was treated as a separate factor were consistently preferable over the alternative models, thus corroborating that LAC is related to but sufficiently distinct from them.

#### Study 4: LAC and Follower Outcomes

After having established the convergent and discriminant validity of the newly developed LAC measure, we investigate the effects of LAC on meaningful employee outcomes. In this endeavor, our focus is on selected features of employee wellbeing and the effects through which LAC may predict wellbeing.

Employee wellbeing is among the most commonly studied outcomes in constructive leadership research with work engagement as a key proxy for wellbeing (Inceoglu et al., 2018). Work engagement, typically defined as an affective-motivational state that is a combination of vigor, dedication, and absorption (Schaufeli, 2012), has long been recognized as a key source of employee performance and retention (Christian et al., 2011; Kim et al., 2013). Interestingly, while work engagement has been consistently linked to positive leadership styles (Decuyper & Schaufeli, 2020, 2021; Inceoglu et al., 2018), we know surprisingly little about the role of more narrow leader communication behaviors in this relationship. This is unfortunate from both a theoretical and practical perspective as it limits our understanding of which specific leader behaviors actually drive work engagement. We aim to address this gap while at the same time gaining important insights into the criterion validity of the newly developed LAC measure.

Below we delineate our theoretical model, which is visualized in Figure 2, and provide a theoretical rationale for the

proposed links. Specifically, we expect LAC to predict employees' work engagement through enhancing psychological need satisfaction and promoting Kahn's (1990) conditions for work engagement.

#### LAC and Employee Work Engagement

Using the Job Demands-Resources model as a framework, previous research has consistently shown that work engagement emerges from job resources and personal resources (Schaufeli, 2017). Leadership represent a key job resource, as leaders help reducing demands and achieving work goals, while stimulating personal development and growth (Schaufeli, 2015). We posit that the way leaders communicate with their followers is an essential factor in this equation. While empirical research is scant overall, there is initial evidence that a generally supportive communication style of leaders is positively related to follower engagement, while a generally aggressive or dominant communication style undermines engagement (Guo et al., 2015). That said, we contend that being highly attentive in conversations is a strong signal of value and care about the wellbeing of the employee, which is expected to positively relate to work engagement.

However, in line with previous research on the relationship between leader behaviors and employee wellbeing (Inceoglu et al., 2018), this effect may not be appropriately described solely as a direct effect. In the present research, we therefore seek to shed light on the mechanisms through which LAC influences employees' work engagement.

#### The Mediating Role of Psychological Need Satisfaction

An important line of inquiry in research about workplace wellbeing refers to the role of basic human needs. Arguably the most influential theoretical framework in

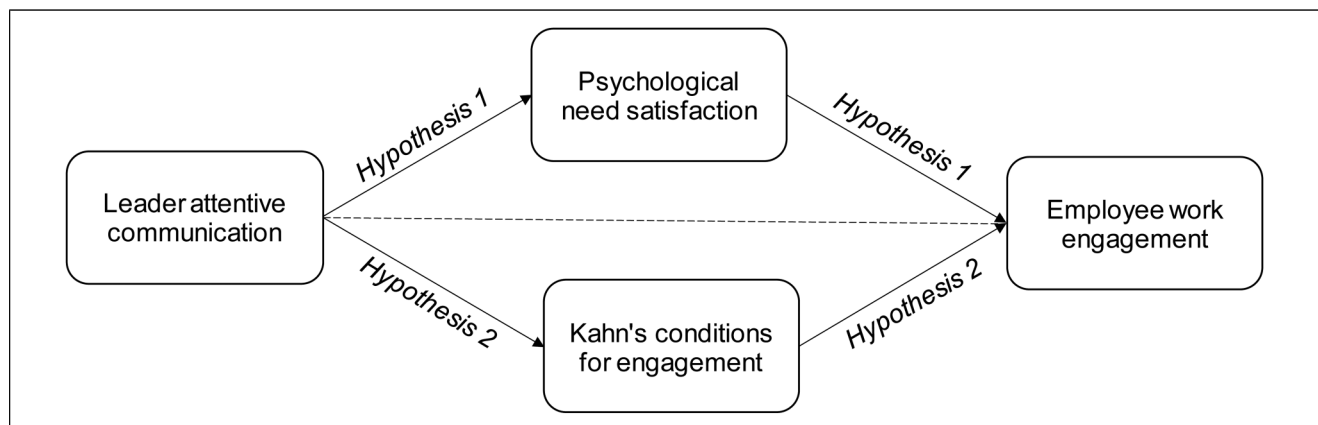


Figure 2. Research model.

this area is Self-Determination Theory (SDT; Deci & Ryan, 2008), which states that the fulfillment of three basic psychological needs, i.e., the need for autonomy, competence and relatedness, drives wellbeing and motivation at work. Accordingly, empirical evidence shows that basic psychological need satisfaction predicts employees' work engagement (e.g., Rahmadani et al., 2019).

In what follows, we outline why LAC is expected to promote basic psychological need satisfaction. Our reasoning is generally based on the idea that engaging in LAC enables leaders to more thoroughly gather relevant and more adequate knowledge about their employees. This, in turn, is likely to facilitate more tailored responses to the unique concerns and needs of employees with regard to their interactions, as well as their sense of autonomy and competence. Empirical support for this assumption comes from research in the field of mindfulness, indicating that leader mindfulness, characterized by an open, present moment attention span, can help leaders process information more accurately (Karelaia and Reb, 2015). This mindful attention, in turn, is positively associated with employee need satisfaction (Reb et al., 2014).

First, the *need for autonomy* constitutes "experiencing a sense of volition and psychological freedom" during work activities (Van Den Broeck et al., 2010, p. 981) or "experiencing choice and feeling like the initiator of one's own actions" (Baard et al., 2004, p. 2046). LAC may enhance employee autonomy need satisfaction, since it helps the leader to more thoroughly notice the individual preferences and interests of employees, allowing to more efficiently offer choice and opportunity for self-direction.

Second, the *need for competence* refers to "feeling effective" (Van Den Broeck et al., 2010, p. 981) or "succeeding at optimally challenging tasks and attaining desirable outcomes" (Baard et al., 2004, p. 2046). Through LAC, leaders can develop a better understanding of the unique strengths and weaknesses of their employees. This, in turn, enables them to provide employees with more effective skill-building assistance, or more challenging demands (if needed), most notably through tailored guidance and feedback (Reeve, 2018).

Third, *relatedness need satisfaction* can be described as feeling connected to others or being "loved and cared for" (Van den Broeck et al., 2010, p. 981) or "establishing a sense of mutual respect and reliance with others" (Baard et al., 2004, p. 2,046). When employees come to see their leaders take the time and put in the effort to pay attention and to acknowledge their perspective, they are likely to feel respected and cared for.

Taken together, the following prediction was specified:

**Hypothesis 1:** Psychological need satisfaction mediates the association between LAC and employee work engagement.

### *The Mediation Role of Safety, Meaningfulness, and Availability*

Besides basic human needs satisfaction, the social psychological literature examines other routes to work engagement. Most notably, Kahn (1990) has specified three major psychological conditions that are thought to promote engagement.

First, *psychological safety* is "being able to show and employ one's self without fear of negative consequences to self-image, status, or career" (Kahn, 1990, p. 708). This means that an employee feels safe to express opinions or take actions without fear of recrimination (Roberts & Williams, 2017). Work engagement increases when an employee trusts his/her leader to listen open-mindedly to what they have to say (Kahn, 1990). Naturally, higher levels of trust and respect signaled through being highly attentive in conversation will likely promote an atmosphere of safety. Support for this assumption comes from empirical research linking listening behavior to employee creativity through the mediating effect of psychological safety (Castro et al., 2018).

Second, *psychological meaningfulness*, is "a feeling that one is receiving a return on investments of one's self in a currency of physical, cognitive, or emotional energy" (Kahn, 1990, p. 703–704), or "the feeling that the behavior in question could be worthwhile, valuable, or enhance one's personal and/or professional growth" (Roberts & Williams, 2017, p. 208). LAC may enhance psychological meaningfulness since employees can feel more worthwhile, useful, and valuable (Kahn, 1990), because of the uninterrupted attention and time they get with their leader. A good working relationship, characterized by positive and trust-inducing interactions, can also contribute to a feeling of meaningfulness on the work floor (Roberts & Williams, 2017).

Finally, *psychological availability* refers to "the sense of having the physical, emotional, or psychological resources to personally engage at a particular moment" (Kahn, 1990, p. 714). Leaders, especially immediate supervisors, are an important resource for employees (Roberts & Williams, 2017). They can support employees through providing access to resources, but also via emotional support. When there is little ambivalence or annoyance about the lack of attention from or presence of the leader, this also releases resources for the employee to use in their work (Roberts & Williams, 2017). Taken together, the following hypothesis was specified:

**Hypothesis 2:** The psychological conditions of meaningfulness, availability and safety mediate the association between LAC and employee work engagement.

## Sample and Procedures

Data from sample 1, 2, and 3 were used to test the hypothesized model (see Table 3 for detailed demographic information). LAC and work engagement were assessed in all samples. Psychological need satisfaction was measured in sample 1 and 2, whereas Kahn's (1990) conditions of engagement (i.e., psychological safety, meaningfulness, and availability) were exclusively assessed in sample 3 (see Table 6 for all the measures used across samples).

## Measures

Work engagement was measured with the short three-item questionnaire from Schaufeli et al. (2017) and psychological need satisfaction with items from Van den Broeck et al., (2010). All items were anchored in a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). The item correlations, means, standard deviations and Cronbach's alphas for the measures can be found in the Appendix (Table 8, 10, and 12 for the respective samples). In sample 3 we also measured Kahn's conditions for engagement with the 14-item scale from May et al. (2004) based on Kahn's (1990) conceptualization.

In this study we also considered employees' estimates in how well they felt they could score their leaders' behavior (hereinafter "assessment quality") as a control variable. Moreover, we controlled for how much time they typically spend with their leader (hereinafter "interaction frequency"), as this naturally impacts the feedback and attention that can be gained (Kacmar et al., 2003).

To mitigate common method bias, we psychologically separated the measurement of the different predictors and outcomes, by dividing the data-collection into several chapters. (Podsakoff et al., 2003). In addition, respondents were guaranteed anonymity thus minimizing evaluation apprehension.

## Results

Hypothesis 1 predicted a positive effect of LAC on work engagement through the mediating effect of psychological need satisfaction. We tested this prediction using Hayes' PROCESS macro in SPSS (Hayes et al., 2017). All coefficients below are unstandardized unless otherwise noted. In sample 1, engagement was predicted quite well from LAC, while controlling for assessment quality, interaction frequency and LMX, with adjusted  $R^2 = .25$  and  $F(5,293) = 19.65, p < .001$ . LAC did not predict need satisfaction ( $a = .28, p < .001$ ), while need satisfaction did predict engagement ( $b = .49, p < .001$ ). Controlling for the mediator, there was a positive, direct effect of LAC on work engagement ( $c = .28, p = .001$ ). The indirect effect of LAC on engagement via need satisfaction was not statistically significant,  $ab = .03, 95\% \text{ CI } [-.03, .09]$ . Therefore, Hypothesis 1 was not supported in this sample.

In sample 2, engagement was predicted quite well from LAC, while controlling for assessment quality, interaction frequency, LMX, mindfulness in communication and transformational leadership, with adjusted  $R^2 = .31$  and  $F(7, 495) = 32.35, p < .001$ . LAC predicted need satisfaction ( $a = .11, p < .05$ ), which, in turn, predicted engagement ( $b = .68, p < .001$ ). Controlling for the mediator, the direct effect of LAC on engagement was not significant ( $c = .02, p > .05$ ). However, the indirect effect of LAC on engagement via need satisfaction was positive and statistically significant,  $ab = .07, 95\% \text{ CI } [.01, .16]$ , indicating an indirect-only mediation (Zhao et al., 2010). Hence, the results in sample 2 were in support of Hypothesis 1.

In order to gain more insight, we also analyzed the subcomponents of psychological need satisfaction as mediator (controlling for the same set of variables as before) in both sample 1 and 2. In sample 1, none of the subcomponents mediated the relationship between LAC and work engagement: indirect effect autonomy ( $ab = .04, 95\% \text{ CI } [-.04, .12]$ ), indirect effect competence ( $ab = .01, 95\% \text{ CI } [-.04, .05]$ ), indirect effect relatedness ( $ab = .01, 95\% \text{ CI } [-.01, .04]$ ). In sample 2, there was an indirect effect through *autonomy* ( $ab = .07, 95\% \text{ CI } [.01, .14]$ ), but no indirect effect through competence ( $ab = .01, 95\% \text{ CI } [-.04, .05]$ ) and relatedness ( $ab = .03, 95\% \text{ CI } [-.02, .08]$ ).

Next, we tested Hypothesis 2 which specified the mediation role of Kahn's (1990) psychological conditions and was exclusively tested in sample 3. Results show that engagement was predicted well from LAC, while controlling for quality, interaction frequency, LMX, mindfulness in communication and servant leadership, with adjusted  $R^2 = .33$  and  $F(7, 436) = 31.18, p < .001$ . LAC did not predict Kahn's conditions for engagement ( $a = .07, p = .11$ ), which, in turn, were related to engagement ( $b = .74, p < .001$ ). Controlling for the mediator, the direct effect of LAC on engagement was non-significant ( $c = .05, p > .05$ ). The indirect effect of LAC on engagement via need satisfaction was not significant,  $ab = .05, 95\% \text{ CI } [-.02, .11]$ . Therefore, Hypothesis 2 was not supported.

However, as an additional analysis, we also tested the mediation hypothesis with regards to the subcomponents of Kahn's psychological conditions for personal engagement at work (Kahn, 1990), i.e., meaningfulness, safety, and availability. With the same setup, thus controlling for the same set of variables, we found that *meaningfulness* did mediate the relationship between LAC and work engagement ( $ab = .10, 95\% \text{ CI } [.02, .17]$ ), whereas this was not the case for *safety* ( $ab = -.01, 95\% \text{ CI } [-.03, .02]$ ) and *availability* ( $ab = .01, 95\% \text{ CI } [-.03, .04]$ ).

## General Discussion

The main purpose of this paper was to propose a new construct and to create a reliable and valid measure of leader

attentive communication behavior. We focused our attention on developing this concept since leader communication is crucial to leadership (Fairhurst & Connaughton, 2014; Riggio, 2013). While previous theoretical and practical work in this field has stressed the importance of leader attention for effective communication, its theoretical nature and, even more importantly, its behavioral underpinnings have not yet been sufficiently specified. We found that LAC is a construct with two correlated subdimensions, i.e., general attention paid during conversations and attention paid to non-verbal cues. On this basis, we provide a quantitative instrument that further establishes and operationalizes the core behaviors of LAC. A particular strength of our approach is the use of both inductive and deductive methods for the purpose of construct and measurement development. By balancing theoretically derived insights from the extant literature with the perspectives of experts and practitioners, we not only thoroughly substantiate the construct validity of LAC, but also its acceptability and practicability in the field.

In fleshing out the behavioral underpinnings of LAC we enriched the literature in several ways. First, we position LAC as a novel construct that adds unique, rather than redundant, knowledge to our understanding of leader communication. In terms of discriminant validity, our empirical results show that LAC is sufficiently distinct from similar concepts and explains unique variation in relevant outcomes, most notably employee wellbeing. Second, we respond to ongoing calls for more thoroughly specifying the behavioral basis of effective leadership and leader communication (Derue et al., 2011). With this, we provide information that previously was unavailable or less adequately obtained in the rather broad approaches at the intersection of leadership and communication. Notably, as LAC adopts a more granular perspective as opposed to than larger behavioral categories, it may be able to explain more variance in leadership effectiveness than trait theories (Derue et al., 2011). Third, as the proposed positive communication behavior is thought to represent a non-specific factor that is shared across different positive leadership styles, our research helps identify points of integration within the positive leadership domain (Derue et al., 2011; Eberly et al., 2013; Rowold et al., 2015; Yukl, 2002).

Besides its theoretical relevance, our research also offers a series of practical implications. First, as poor communication may frustrate employee needs (Van Quaquebeke & Felps, 2016), and miscommunication is, at its best, inefficient, LAC seems to be a particularly effective resource for leaders to enhance single-tasking (i.e., focusing on one thing) (Levy et al., 2012), and reduce miscommunication due to less distractedness. Moreover, through increasing adequate employee information, LAC may improve leader decision making (Karelai & Reb, 2015), for instance via altering job demands and job resources based on employee

needs (Schaufeli, 2015). This is in line with the observation of House and Podsakoff (1994) that “outstanding leaders differ from less effective leaders in their higher consideration of and sensitivity to the needs of their followers” (Kellert et al., 2002, p. 527). The lens of LAC provides a resource from which to start building up the communication skills that help leaders to have this greater sensitivity. As such, LAC can also help leaders to detect the early signs of wellbeing issues on the work floor and respond adequately before costly interventions are needed.

In addition, LAC may enrich leadership training protocols. This is important as organizations invest a lot in leadership training pertaining communication or ‘people skills’. First, a distinction can be made between leader development i.e., (communication) skills at the individual level, and leadership development, i.e., practical (communication) skills at the interpersonal level (Day et al., 2014). In the context of leader development, (Day et al., 2014), one can focus on the two basic elements of LAC, i.e., increasing single focused (open) attention during regular conversations, as well as increasing awareness of nonverbal communication from conversation partners. In the context of leadership development, trainers can include exercises in which leaders apply leader attentive communication skills during difficult meetings such as employee feedback conversations. Practically, this means that leaders will learn to focus on both the content of an employees’ message, as well as the nonverbal communication.

### *Limitations and Future Research*

Despite its strengths, there are also some limitations of this study. One limitation is that all data are cross-sectional. While this is less relevant for establishing the psychometric properties of the newly developed measure, we are unable to make definitive causal conclusions about the proposed effects of LAC on employee wellbeing. Consequently, the hypothesized positive effect of LAC on work engagement (Study 4) is based on theoretical deliberations. Future research would benefit from the use of longitudinal or experimental approaches to draw stronger inferences regarding causality.

Another limitation is that our results about the mechanisms through which LAC is expected to promote engagement -psychological need satisfaction and psychological conditions- yielded somewhat inconsistent findings. While we found preliminary support for the mediating role of autonomy need satisfaction and meaningfulness, these patterns were not stable across samples. Thus, it will be important in future research to replicate our results and, in addition, to examine also other mechanisms. In expanding our focus on motivational mechanisms, subsequent research endeavors may also include affective (e.g., positive emotions), relational (e.g., trust), and identity-based (i.e.,

identification with the leader) mechanisms, ideally in conjunction (Inceoglu et al., 2018). Such studies would also benefit from considering specific boundary conditions when theorizing on a dyadic process between leader and employee. When, for instance, follower need satisfaction is already high, LAC might not be of additional importance (Van Quaquebeke & Felps, 2016). Also, when there are no problems or issues to be discussed, additional attentive communication may not add more to productivity levels. Instead, it may even hamper efficiency, since more time is consumed to communicate. Finally, it will depend in part on the (non-verbal) communication levels of the employee, and the level of emotionality, whether or not the leader accurately perceives the situation, independent of the level of attentiveness. In our definition of LAC, we also stress the importance of an open-minded demeanor. If this is absent, employees might feel uncomfortable with an attentive and perceptive leader.

Another issue with the assessment of LAC refers to the discrepancy between follower perceptions of LAC and leaders' self-rated LAC, as we found no substantial correlations (see appendix Table 9 & 11). While we included this comparison only for explorative reasons, this finding has interesting implications. For instance, previous research indicates that leaders with discrepant ratings may misdiagnose their strengths or weaknesses, which undermines their efficiency (Fleenor et al., 2010). On the other hand, it is possible, that employees under- or overestimate leader behaviors. Thus, future research should examine potential sources of leader-follower (in)congruency when it comes to assessing LAC, including individual (e.g., personality traits or empathy), contextual (e.g., culture or hierarchy) or relational (e.g., relationship quality, past experiences) factors (Fleenor et al., 2010).

Related to the above, an interesting area for future research refers to antecedents of LAC. Specifically, we propose that LAC is a behavior, but this behavior may be more prominent with leaders with certain personality characteristics such as agreeableness, openness, or humility. Therefore, research into this interplay would provide insight with regards to leader development and training for LAC; leaders who score high on these traits may 'naturally' score high on LAC and may e.g., have less need for additional training in this respect.

With regards to theorizing on LAC, we hypothesized that both psychological need satisfaction and psychological conditions would mediate the relationship between LAC and employee wellbeing. However, our study samples only permitted us to test these hypotheses separately and, therefore, future research may want to check for a parallel mediation.

Last, as this paper is only the first step into the development of LAC, future research may wish to research exactly how much attentive communication is typical of a certain positive leadership style, and whether a training in attentive communication may enhance leader effectiveness (Decuyper, 2021).

More specifically, future studies could include diary studies, e.g., following the protocol of Breevaart et al. (2014). In this sense, the questionnaire may be modified from "in general" to, "Today, when I communicated with my leader.." or even "During my performance appraisal..". After more research, it may even be possible to develop norms for LAC.

### Research Statement

All data can be acquired from the first author upon reasonable request.

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### ORCID iD

Anouk Decuyper  <https://orcid.org/0000-0003-1683-6665>

### Supplemental material

Supplemental material for this article is available online.

### Note

1. For respectful and humble inquiry, no questionnaire we know of has been developed.

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## Author Biographies

**Anouk Decuyper** is a postdoctoral researcher at DigiTax – an interdisciplinary research center at the University of Antwerp. Her research focuses on citizens' fairness perceptions of governmental AI use for tax decisions. Her other research interests include leadership behaviors, (digital) decision making and wellbeing.

**Armin Pircher Verdorfer** is an Associate Professor in the Leadership & Management Section at Amsterdam Business School. Currently, his research interests are primarily in the areas of ethical and destructive leadership, and moral and prosocial socialization in organizations.