FISEVIER

Contents lists available at ScienceDirect

Journal of Business Venturing

journal homepage: www.elsevier.com/locate/jbusvent



Say it like you mean it: The effect of cross-channel affective consistency on perceived preparedness and authenticity in funding pitches

Benjamin J. Warnick a,*,1, Thomas H. Allison b,1, Blakley C. Davis c,1

- ^a Department of Management, Information Systems, and Entrepreneurship, Carson College of Business, Washington State University, Vancouver, WA, 98686, United States of America
- ^b Department of Entrepreneurship and Innovation, Neeley School of Business, Texas Christian University, TCU Box 298530, Fort Worth, TX, 76129, United States of America
- ^c Department of Management and Entrepreneurship, School of Business, Virginia Commonwealth University, Richmond, VA, 23284, United States of America

ARTICLE INFO

Keywords: Crowdfunding Verbal expression Nonverbal expression Affect Cross-channel consistency Preparedness Authenticity

ABSTRACT

Entrepreneurs' funding pitches are inherently multimodal, conveying affective content through both verbal (words) and vocal (prosodic intonation) channels. Integrating theory of cross-channel consistency with the two-dimensional model of affect, we theorize that funding performance improves when entrepreneurs' verbal and vocal expressions are affectively consistent in terms of valence and arousal, as such consistency enhances perceptions of their preparedness and authenticity. Using a mixed-methods design, we first analyze over 500 crowdfunding pitch videos with computer-aided text and audio analysis to quantify cross-channel affective consistency (CCAC) and assess its impact on funding performance via perceived preparedness and authenticity. Results show that CCAC-particularly in arousal and the joint alignment of valence and arousal-predicts funding performance. While CCAC increased both perceived preparedness and authenticity, only preparedness further predicted funding performance. A complementary inductive study further revealed distinct manifestations of CCAC (i.e., warmth, enthusiasm, seriousness, and sadness) and inconsistency (i.e., monotone, low-arousal delivery, high-arousal delivery, and humor/dramatization). Notably, consistent sadness decreased funding performance, and one form of inconsistency-high-arousal vocal delivery paired with relatively ordinary, low-arousal language-increased funding performance. Overall, this work advances research on entrepreneurial rhetoric by providing a generalizable framework for multimodal affective expression, highlighting the persuasive value of CCAC, and illuminating the mechanisms through which CCAC shapes funding performance.

Executive summary

The effectiveness of entrepreneurial pitches hinges on the influence of both verbal and nonverbal expression channels. Prior

^{*} Corresponding author.

E-mail addresses: b.warnick@wsu.edu (B.J. Warnick), t.allison@tcu.edu (T.H. Allison), bcdavis@vcu.edu (B.C. Davis).

 $^{^{1}\,}$ Equal contribution.

entrepreneurship research has explored the power of verbal channels, such as linguistic framing and rhetorical content, as well as nonverbal channels such as gestures, facial displays, and vocal tone. Yet, these streams of inquiry have largely progressed in isolation, thus limiting our understanding of exactly how verbal and nonverbal expressions jointly shape the way potential funders perceive and respond to entrepreneurs and their pitched ventures. That being said, research in communication has led to the emergence of crosschannel consistency theory, suggesting that consistency across channels of expressions is linked to an array of positive perceptions, including favorable first impressions, truthfulness, and credibility. While funder perceptions of the pitching entrepreneur play a central role in decision-making, the perceptual mechanisms linking cross-channel consistency to positive outcomes in entrepreneurship remain unclear. Indeed, given that emerging theory of cross-channel consistency has yet to be integrated into entrepreneurship research, important questions remain about how cross-channel consistency manifests in entrepreneurial pitches, how it influences funders' perceptions of entrepreneurs, and ultimately, how it shapes funding performance. We investigate how cross-channel consistency between entrepreneurs' verbal and vocal expressions manifests within the funding pitch, shapes funders' perceptions, and ultimately influences funding performance. To achieve this, we first integrate emerging theory of cross-channel consistency with the two-dimensional model of affect to develop a theoretically robust and generalizable measure of cross-channel consistency. In doing so, we introduce the construct of cross-channel affective consistency (CCAC), which we define as the degree to which expressions across two or more channels are consistent in their respective valence (i.e., degree of positivity versus negativity) and arousal (i.e., degree of activation or intensity). We theorize that CCAC between entrepreneurs' verbal and vocal expressions enhances funding performance by shaping perceptions of entrepreneurial preparedness and authenticity (Study 1). Using a mixed-methods design, we first conduct computational text and audio analysis on over 500 video-based crowdfunding pitches to test our hypotheses. Findings show that CCAC, particularly with respect to arousal and the joint alignment of valence and arousal, predicts funding performance. We also find that CCAC enhances both perceived authenticity and preparedness, but only the latter significantly predicts funding performance. Post-hoc tests further reveal that CCAC matters most in pitches with high arousal vocal expressions. Finally, we complement this analysis with an inductive, qualitative study to explore how vocal-verbal cross-channel affective consistency (high CCAC) and inconsistency (low CCAC) manifest in entrepreneurial pitches (Study 2). We identify four types of vocal-verbal consistency (high CCAC) (i.e., warmth, enthusiasm, seriousness, sadness) and four types of vocal-verbal inconsistency (low CCAC) (i.e., monotone, low-arousal delivery, higharousal delivery, humor/dramatization). Together, our studies offer three main contributions. First, we extend cross-channel consistency theory, introducing a generalizable, affect-based framework that promises to unify fragmented knowledge concerning verbal and nonverbal communication in entrepreneurship. Second, we shed light on the perceptual mechanisms linking CCAC to funding performance, underscoring the particular importance of preparedness. Finally, we reveal important boundary conditions to the benefits of CCAC, finding that consistent sadness reduces funding, whereas inconsistency in the form of high-arousal delivery of relatively mundane, low-arousal content increases funding. Taken together, our theorizing and findings advance understanding of multichannel communication within entrepreneurship and offer practical guidance for entrepreneurs seeking to maximize the persuasive power of their pitches.

1. Introduction

Effective entrepreneurial pitches depend significantly on both verbal and nonverbal expressions. A substantial body of research has examined how entrepreneurs' verbal expressions—as manifest in their words and linguistic framing—shape audience evaluations and funding outcomes (Allison et al., 2013, 2017; Moss et al., 2018). In parallel, scholars have studied various nonverbal channels of expression, including body language (Clarke, 2011), facial expressions (Davis et al., 2021; Warnick et al., 2021), and vocal tone (Allison et al., 2022b). While traditionally investigated separately, a limited but promising stream of entrepreneurship research has begun to explore the intersection of verbal and nonverbal channels of expression (Viney et al., 2018). For instance, research has found that pairing verbal content with complementary body gestures (Cornelissen et al., 2012; Clarke et al., 2019) or visual imagery (Barberá-Tomás et al., 2019; Zamparini and Lurati, 2017) significantly enhances the persuasive power of entrepreneurs' pitches and stakeholder engagement. Although nascent, this emerging inquiry into multichannel communication in entrepreneurship is promising. This becomes particularly clear when considered in light of broader communication research, which suggests that alignment across different expression channels engenders positive perceptions and response to a message and its source (Krauss et al., 1981; ten Brinke and Weisbuch, 2020).

Despite this progress, noteworthy gaps remain in our understanding of verbal and nonverbal expression in entrepreneurial pitches. First, although communication research highlights that aligning verbal and nonverbal communication improves message coherence and clarity (ten Brinke and Weisbuch, 2020), entrepreneurship research has yet to explore how such alignment influences funders' perceptions and funding decisions. Outside entrepreneurship, consistency across channels of communication has been linked to an array of positive perceptions, including favorable first impressions (Weisbuch et al., 2010), truthfulness (ten Brinke and Weisbuch, 2020), and credibility (Gillis and Nilsen, 2017). Given the centrality of funder perceptions in their decision-making (Allison et al., 2022b; Oo and Allison, 2024), this omission is consequential. Second, entrepreneurship research has neglected the intersection of verbal and vocal expressions despite the fact that speech inherently integrates both (Van Zant and Berger, 2020). Unlike nonverbal expression channels such as body language or visual imagery, vocal tone is inseparable from spoken language, making the verbal-vocal pairing especially relevant for understanding how entrepreneurs' expressions are delivered and received. Compounding this issue is the field's reliance on channel-specific frameworks, limiting generalizability across channels of expression. Although communication scholars have advanced cross-channel consistency theory—arguing that persuasiveness improves when different channels communicate mutually reinforcing (consistent), rather than conflicting (inconsistent) information (Gillis and Nilsen, 2017; Weisbuch et al., 2010; Ziegler et al., 2002)—this theory has not yet been integrated into entrepreneurship research. As a result, important questions

remain about how cross-channel consistency manifests in entrepreneurial pitches, how it influences funders' perceptions of entrepreneurs, and ultimately, how it shapes funding performance.

We address these gaps by investigating how consistency between entrepreneurs' verbal and vocal expressions impacts funding performance. To provide a theoretically robust and generalizable measure of cross-channel consistency, we integrate emerging theory of cross-channel consistency with the two-dimensional model of affect, which holds that humans are wired to express and process others' expressions based on two key dimensions: valence (i.e., degree of positivity versus negativity) and arousal (i.e., degree of activation or intensity) (Russell et al., 2003). Through this integration, we introduce the construct of *cross-channel affective consistency* (*CCAC*), which we define as the degree to which expressions across two or more channels are consistent in their respective valence and arousal. We theorize that CCAC between entrepreneurs' spoken words (verbal expressions) and vocal intonation (vocal expressions) enhances funding performance by encouraging funders' perceptions of entrepreneurial preparedness and authenticity, two characteristics known to influence funding outcomes (Chen et al., 2009; Oo and Allison, 2024). Using a mixed-methods design, we first analyze over 500 video-based crowdfunding pitches using computational text and audio analysis to test our hypotheses. We complement this analysis with an inductive qualitative study of 100 of these pitches to explore how high and low consistency between entrepreneurs' verbal and vocal expressions manifest in practice.

Our studies offer three main contributions. First, we extend cross-channel consistency theory by introducing an affect-based framework rooted in valence and arousal, offering a unified lens for analyzing verbal and nonverbal communication in entrepreneurship. In doing so, we not only advance entrepreneurship-specific theory, but also contribute to the broader development of cross-channel consistency theory, where existing studies have often lacked shared theoretical and operational foundations. Second, we theorize and test mechanisms linking CCAC to funding performance, showing that although CCAC enhances perceptions of both preparedness and authenticity, only preparedness predicts funding performance. We thereby extend research on the antecedents of these important funder perceptions and underscore the centrality of perceived preparedness for funding. Third, our inductive analysis reveals distinct manifestations of high and low CCAC, including notable exceptions to their respective positive and negative relationship with funding. For instance, consistent sadness across verbal and vocal expressions was associated with lower funding, whereas one form of inconsistency—high-arousal vocal delivery of lower arousal, neutral language (i.e., "ordinary" language)—was associated with higher funding. These findings challenge the assumption that cross-channel consistency is always beneficial and suggest that high-arousal nonverbal expressions may effectively compensate for otherwise muted verbal content. Insights from our inductive analysis enrich our understanding of how CCAC manifests in practice and highlight novel directions for future work on the dynamics of entrepreneurial rhetoric.

We proceed as follows. First, we overview research on verbal and nonverbal expression in entrepreneurial pitches, cross-channel consistency, and the two-dimensional model of affect. Second, we build upon emerging theory of cross-channel consistency and the two-dimensional model of affect to introduce cross-channel affective consistency (CCAC), developing hypotheses regarding the funding benefits of consistency between entrepreneurs' verbal and vocal expressions in terms of their (a) valence, (b) arousal, and (c) joint alignment of these two dimensions. Third, we describe our methodological approach and present results from our analysis of over 500 video-based crowdfunding pitches. Fourth, we explain our inductive analysis of funding pitches characterized by particularly high or low CCAC, uncovering different ways in which CCAC manifests in entrepreneurs' funding pitches. Finally, we discuss the theoretical and practical implications of our findings.

2. Literature review

2.1. Verbal and nonverbal expression in funding pitches

Expressions are central to social interaction and are conveyed through two overarching channels: verbal and nonverbal. Verbal expressions encompass the linguistic features of spoken or written language (Krauss et al., 1981). In entrepreneurial contexts, research has shown that the words used in a pitch shape audience perceptions and funding outcomes (e.g., Allison et al., 2013, 2017, 2022a; Chandler et al., 2025; Su et al., 2024), highlighting the importance of presenting a clear and compelling narrative of the proposed venture (Martens et al., 2007; Garud et al., 2014; Suddaby et al., 2023). To that end, entrepreneurs strive to communicate the potential of their proposed ventures in a manner that is easily understandable to resource providers such that they are deemed legitimate and worthy of investment (Aldrich and Fiol, 1994; Cornelissen and Clarke, 2010; Pollack et al., 2012).

Highlighting the importance of verbal aspects of a pitch, research has shown that entrepreneurs benefit from using words that convey desirable traits (Allison et al., 2022a), such as those indicative of psychological capital (i.e., hope, optimism, resilience, confidence; Anglin et al., 2018a), charisma (Anglin et al., 2014; Short and Anglin, 2019), assertiveness (McSweeney et al., 2022), authenticity (Radoynovska and King, 2019), and even some degree of narcissism (Anglin et al., 2018b). Additionally, entrepreneurs may enhance the persuasiveness of their pitch by frequently mentioning their own name (Gafni et al., 2019) and using words that communicate immediacy (Grebelsky-Lichtman and Avnimelech, 2018), differentiate their idea from others (Kim et al., 2016), and highlight their progress (Cappa et al., 2021; Manning and Bejarano, 2017). Importantly, there is no single formula for success; rather, various approaches can prove effective (McSweeney et al., 2025). For instance, while many successful pitches use language that highlights a specific customer or social problem to underscore the need for a proposed solution, others emphasize user excitement and product appeal (Anglin et al., 2023).

Nonverbal expressions, by contrast, encompass communication not conveyed through words (Hall et al., 2019). Entrepreneurship research has examined a range of nonverbal expression channels, including facial expressions (Davis et al., 2021; Jiang et al., 2019; Warnick et al., 2021), hand gestures (Clarke et al., 2019), vocal expressions (Allison et al., 2022b; Niebuhr et al., 2017), and visual

symbols such as attire, imagery, and the pitch environment (e.g., Barberá-Tomás et al., 2019; Chan and Park, 2015; Clarke, 2011; Tsay, 2021). Across these studies, nonverbal expression consistently emerges as a key factor in funding success. For example, entrepreneurs who express passion through energetic body language, animated facial expressions, varied vocal tone, and dynamic gestures tend to secure more funding (Cardon et al., 2017; Jachimowicz et al., 2019; Li et al., 2017; Shane et al., 2020). Similarly, entrepreneurs' vocal expressions influence perceptions of their passion and preparedness, thereby impacting their funding prospects (Allison et al., 2022b). Although verbal and nonverbal expressions are often studied independently, they naturally co-occur in communication (Luo et al., 2024). Recognizing this multichannel nature of communication, entrepreneurship research has begun to study their intersection. For instance, recent work has examined the connection between entrepreneurs' words and gestures when pitching (Clarke et al., 2019), while others have studied how written language and visible imagery can work together as social entrepreneurs promote their cause through social media (Barberá-Tomás et al., 2019).

Within orally delivered speech, such as entrepreneurial pitch videos, the connection between verbal and vocal channels is particularly salient given the intimate connection between words and their vocalization. Communication and social psychology research has long emphasized the importance of studying vocal cues alongside verbal content (Hall et al., 2019; Knapp et al., 2014; Scherer, 2003; Van Zant and Berger, 2020). In contrast, entrepreneurship research has largely considered verbal (e.g., Allison et al., 2017; Anglin et al., 2018a; Martens et al., 2007) and vocal (e.g., Allison et al., 2022b; Niebuhr et al., 2017; Wang et al., 2021) expressions in isolation, overlooking their integrated delivery and reception in pitches. This oversight is significant, as verbal and vocal expressions are tightly coupled in speech, suggesting they jointly shape funders' impressions and decision-making.

2.2. Consistency and persuasion

The consistency principle, rooted in communication and social psychology, posits that persuasive messages are more effective when their various elements reinforce one another (Krauss et al., 1981; Rotenberg et al., 1989). Research shows that consistency within a single channel—such as facial expressions or language—speeds cognitive processing and drives positive evaluations. For example, Topolinski et al. (2009) found that consistent word triads (i.e., words that describe a common remote associate) led to faster processing and higher coherence ratings. Similarly, Winkielman and Nowak (2022) demonstrated that consistency between foreground and background elements in images, or between adjective-noun pairs in terms of valence, improved processing speed and trustworthiness perceptions.

Extending this principle to multichannel communication, scholars have proposed the concept of cross-channel consistency—the alignment of expressions across different communication channels (e.g., verbal and nonverbal). This work theorizes that consistency across channels enhances message clarity and persuasiveness (Gillis and Nilsen, 2017; Weisbuch et al., 2010; Ziegler et al., 2002). Research within this stream has used a variety of terms when describing cross-channel consistency, including synchronization (Chu and Hagoort, 2014), alignment (Eisenstein and Christoudias, 2004), congruence (Grebelsky-Lichtman, 2015), and perhaps most commonly, consistency (ten Brinke and Weisbuch, 2020). In accordance with this, we use the term *cross-channel consistency* to refer to the degree to which expressions are consistent across two or more channels of communication. Importantly, cross-channel consistency differs from within-channel consistency, as it refers to consistency across channels rather than within a single channel of expression (cf. Allison et al., 2022b).

Cross-channel consistency has been shown to improve message coherence (Winkielman and Nowak, 2022), enabling receivers to quickly and clearly process a message (Krauss et al., 1981; ten Brinke and Weisbuch, 2020). This is important, as message coherence or clarity is a hallmark of effective communication and persuasiveness (Allison et al., 2022b; Pollack et al., 2012). For instance, ten Brinke and Weisbuch (2020) found that consistency between a speaker's verbal and nonverbal expressions made it easier for receivers to understand a message, leading them to perceive the speaker as more truthful, whereas inconsistency triggered skepticism. Gillis and Nilsen (2017) similarly found that audiences rated speakers as more credible when the valence of their verbal and nonverbal expressions were consistent. Collectively, these findings underscore the persuasive benefits of cross-channel consistency.

2.3. The two-dimensional model of affect

Assessment of cross-channel consistency requires a common basis of comparison across channels. The two-dimensional model of affect provides such a structure by conceptualizing all affective expressions in terms of two dimensions: valence (positivity vs. negativity) and arousal (activation or intensity) (Russell et al., 2003). Building upon this model has the potential to significantly advance theory on cross-channel consistency in that much of the previous research in this area has been hampered by limited generalizability due to its reliance on self-reported or theoretically incomplete measures, precluding meaningful comparison of cross-channel consistency across studies. For instance, Gillis and Nilsen (2017) examined cross-channel consistency in terms of valence, while ignoring arousal, by pairing positive statements with a smile, negative statements with a frown, and conflicting combinations of these. ten Brinke and Weisbuch (2020), on the other hand, utilized a self-reported measure of perceived cross-channel consistency, asking participants to rate the degree to which speakers' "visible behavior was inconsistent with what they said aloud" (p. 3).

Capturing both the valence and arousal dimensions of expressions allows for theoretically comprehensive understanding of affective communication. Historically, research has focused on the valence of affective constructs such as mood and emotion, but this can prove problematic without also considering arousal. For instance, sadness and anger are both negatively valenced but differ in arousal: sadness is low-arousal, while anger is high-arousal, leading to important distinctions in their psychological experience, expression, and social perception (Keltner et al., 1993; Russell et al., 2003). Recognizing the joint importance of valence and arousal, entrepreneurship scholars have increasingly stressed the importance of examining the experience (Foo et al., 2015) and expression (e.g., Allison et al.,

2022b) of affect through both dimensions.

The two-dimensional model also offers a generalizable structure to operationalize cross-channel consistency, and particularly so with the advent of contemporary computational methods. Studies of cross-channel consistency have often depended on self-reported or visually assessed measures of consistency (e.g., Gillis and Nilsen, 2017; ten Brinke and Weisbuch, 2020). In contrast, modern computer-aided techniques—such as computer-aided audio analysis, text analysis, and facial expression analytics—facilitate precise and replicable quantification of valence and arousal. These advances not only enhance measurement reliability but also extend the model's applicability to a wide range of stimuli, including photographic images (Nielen et al., 2009), words (Kensinger and Schacter, 2006), and music (Sandstrom and Russo, 2010), among others, reinforcing the model's generalizability and practical utility. In summary, by addressing both theoretical comprehensiveness and measurement concerns, the two-dimensional model of affect provides the basis for our conceptualization of cross-channel affective consistency.²

2.4. Cross-channel affective consistency

Humans are evolutionarily attuned to evaluating stimuli in terms of valence and arousal (Russell et al., 2003; Russell, 2009), often doing so quickly and subconsciously (Kensinger and Schacter, 2006). Neuroscientific research supports this dual processing: valence is primarily processed in the orbitofrontal cortex, whereas arousal is processed by the amygdala (Lewis et al., 2007). Neurological specifications aside, scholars note the inherent reliability of this evaluative process, finding that receivers are able to identify the valence and arousal associated with an expression based on vocal or verbal cues alone (Russell et al., 2003; Sauter et al., 2010). Despite this, holistic evaluations of a given stimulus (e.g., an entrepreneur), which influence one's ability to determine an appropriate response (e.g., to provide funds), cannot be formed until valence and arousal are independently evaluated and then integrated (Winkielman and Nowak, 2022).

Cross-channel affective consistency (CCAC) has the potential to shape this evaluative process, making it more likely that positive perceptions will be formed (e.g., ten Brinke and Weisbuch, 2020; Newcombe and Ashkanasy, 2002). For instance, positive speech (positive verbal valence) delivered with a positive vocal tone (positive vocal valence) or a calm message (low verbal arousal) delivered with a calm voice (low vocal arousal) each exhibit a high degree of CCAC, encouraging message clarity and positive response. Conversely, a low degree of CCAC requires more cognitive effort to process (e.g., De Houwer, 2003), thus inviting increased scrutiny (Ziegler et al., 2002). As a result, low CCAC (i.e., inconsistency) often engenders negative perceptions and feelings of frustration in receivers (Topolinski et al., 2009; Weisbuch et al., 2010). Examples of a funding pitch with relatively low CCAC include positive pitch language (positive verbal valence) delivered with a negative vocal tone (negative vocal valence) or exciting pitch language (high verbal arousal) delivered with a calm voice (low vocal arousal).

We focus on cross-channel affective consistency (CCAC) between verbal and vocal channels, as these are salient in live entrepreneurial pitches and pitch videos, such as those commonly used on internet-based crowdfunding platforms (e.g., equity and non-equity platforms, including debt and rewards-based crowdfunding), which have grown to comprise a significant proportion of early-stage funding (Allison et al., 2017; Escudero et al., 2025). In pitch videos, entrepreneurs often use voiceover while displaying images and video related to the product being pitched, whereas an entrepreneur's facial expressions and body language may be obscured (Allison et al., 2022b). As a result, verbal and vocal expressions typically persist throughout pitch videos as primary channels of communication.

3. Theory and hypotheses

3.1. Sending mixed signals: the importance of cross-channel affective consistency

Integrating cross-channel consistency theory (Gillis and Nilsen, 2017; Newcombe and Ashkanasy, 2002; ten Brinke and Weisbuch, 2020) with the two-dimensional model of affect, we argue that cross-channel affective consistency (CCAC) between entrepreneurs' verbal and vocal expressions increases funding performance. CCAC facilitates processing fluency by reducing the cognitive effort required by receivers to interpret a message, increasing the likelihood of favorable evaluation and response (e.g., ten Brinke and Weisbuch, 2020; Newcombe and Ashkanasy, 2002). Accordingly, funders are more likely to respond positively to pitches in which an entrepreneur's verbal and vocal expressions are consistent. Research has routinely demonstrated that consistency in communication is associated with favorable perceptions of the message sender, including greater trustworthiness (Morioka et al., 2016; Winkielman and Nowak, 2022; Luo et al., 2024), credibility (Gillis and Nilsen, 2017), likeability (Weisbuch et al., 2010), and helpfulness (Quaschning et al., 2015). Consistency also encourages supportive behavior toward the message sender. For example, participants in trust games were more likely to respond cooperatively to those whose expressions were consistent with their words (Stouten and De Cremer, 2010). Similarly, an experiment manipulating a robotic storyteller's facial expressions found that audience members were more inclined to purchase a related product when the robot's facial expressions were consistent with the affective tone of the story (Appel et al., 2021). Together, this body of work suggests that a higher degree of CCAC may render an entrepreneur's pitch more effective in garnering funder support.

In contrast, low cross-channel affective consistency (CCAC) increases the cognitive effort required to process a message, prompting

² We define cross-channel affective consistency (CCAC) as the degree to which expressions across two or more channels are consistent in their respective valence and arousal.

heightened scrutiny and often resulting in negative perceptions and responses such as confusion and frustration (Gillis and Nilsen, 2017; ten Brinke and Weisbuch, 2020; Topolinski et al., 2009; Weisbuch et al., 2010). People are developmentally attuned to detect inconsistencies between verbal and nonverbal expressions (Gillis and Nilsen, 2017; Rotenberg et al., 1989), which may be interpreted as indicative of ambivalence or insincerity (Mongrain and Vettese, 2003). Reflecting this, low CCAC (i.e., inconsistency) in a pitch may hinder an entrepreneur's funding prospects.

In summary, we propose that entrepreneurs who deliver their pitch with affective consistency across their verbal and vocal expressions—specifically in terms of valence and arousal—will be more successful in securing funding. CCAC reduces the cognitive effort required by funders to process a pitch, encouraging more favorable impressions and responses (cf. Weisbuch et al., 2010; Winkielman and Nowak, 2022). Conversely, a lesser degree of CCAC increases processing difficulty and may trigger confusion, frustration, and suspicion (André et al., 2011; Cheshin et al., 2011), prompting greater scrutiny of the entrepreneur and their proposed venture. Thus, a lower degree of CCAC may increase the likelihood of negative evaluation and response, such as the decision not to provide funding (cf. Topolinski et al., 2009). Taken together, we expect that CCAC between the vocal and verbal expressions in a funding pitch in terms of valence and arousal, respectively, is positively related to funding performance.

Hypothesis 1. Cross-channel affective consistency (CCAC) between entrepreneurs' verbal and vocal expressions in terms of valence is positively related to funding performance.

Hypothesis 2. Cross-channel affective consistency (CCAC) between entrepreneurs' verbal and vocal expressions in terms of arousal is positively related to funding performance.

3.2. The joint importance of valence and arousal

The two-dimensional model of affect emphasizes that valence and arousal are independent yet jointly processed dimensions of expression (Russell et al., 2003). While an entrepreneur's verbal and vocal expressions may be consistent in terms of valence, they may be inconsistent in arousal, and vice versa. For instance, a pitch expressing concern or sadness about a troubling issue through negative, low-arousal language may be less effective if delivered with a negative but high-arousal vocal tone, which might come across as "fiery" or even angry rather than sincerely concerned (Warnick et al., 2021). Conversely, an entrepreneur might suggest their enthusiasm by using positive, high-arousal language (Cardon et al., 2017; Jiang et al., 2019) but speak these words in a low-arousal vocal tone that is serene or calm (i.e., positive valence but *low arousal*), thus exhibiting a low degree of CCAC between their verbal and vocal expressions.

These examples illustrate how cross-channel affective consistency (CCAC) entails alignment not only in valence but also in arousal. Because these dimensions are processed together in driving cognitive evaluations and behavioral responses (e.g., Robinson et al., 2004; Russell and Barrett, 1999; Winkielman and Nowak, 2022), full affective consistency and its persuasive benefits require alignment across both dimensions. A high (low) degree of CCAC in one dimension does not necessarily imply a high (low) degree of CCAC in the other. Accordingly, we propose the following:

Hypothesis 3. Cross-channel affective consistency (CCAC) between entrepreneurs' verbal and vocal expressions in terms of both valence and arousal is positively related to funding performance.

3.3. Mediating mechanisms: Perceived authenticity and perceived preparedness

While prior work suggests that cross-channel consistency enhances persuasion by improving message coherence (Gillis and Nilsen, 2017; Weisbuch et al., 2010), little is known about the mechanisms through which this occurs in entrepreneurial pitches. Outside of entrepreneurship, cross-channel consistency has been found to encourage favorable first impressions (Weisbuch et al., 2010), perceived truthfulness (ten Brinke and Weisbuch, 2020), and credibility (Gillis and Nilsen, 2017). However, because the expression and perception of affect is context-dependent (Barrett et al., 2011), the mechanisms that drive persuasive outcomes in entrepreneurial settings may differ from those in other domains. Drawing on both entrepreneurship research and cross-channel consistency theory, we propose two perceptual mechanisms through which CCAC influences funding performance: perceived authenticity and perceived preparedness.

3.3.1. Perceived authenticity

Authenticity is the extent to which an entity "is consistent in terms of its external expressions and internal values and beliefs" (Lehman et al., 2019: 6). A person is perceived as authentic when their behavior is believed to reflect their inner qualities and feelings (Bailey and Levy, 2022). In entrepreneurship, being perceived as authentic is often crucial for entrepreneurs seeking to attract and persuade potential funders (Oo and Allison, 2024; Radoynovska and King, 2019). Indeed, potential funders react more positively to a pitch and form more positive perceptions of an entrepreneur's behavioral integrity when the entrepreneur is perceived as authentic (Oo and Allison, 2024). Thus, being perceived as authentic may lend confidence that entrepreneurs are accurately representing themselves and their ventures, suggesting that they intend to deliver on their stated goals in good faith. Moreover, funders tend to feel a closer personal connection with entrepreneurs whom they perceive as authentic, thus enabling a greater sense of psychological utility to be obtained through funding (Radoynovska and King, 2019). This is important, as crowdfunders value a personal connection in their funding decisions (Anglin and Pidduck, 2022; Zhang and Chen, 2019).

Extant research suggests that cross-channel affective consistency (CCAC) may facilitate funder perceptions of an entrepreneur's authenticity. Consistency between verbal and nonverbal expressions increases the likelihood of positive perceptions and responses to

both a message and its sender (Gillis and Nilsen, 2017). Conversely, a lower degree of consistency increases the cognitive effort required by receivers to process a message (De Houwer, 2003) and may result in a higher level of message scrutiny and the formation of negative perceptions (André et al., 2011; Cheshin et al., 2011). Inconsistency is often viewed as indicative of surface acting (Gabriel and Diefendorff, 2015; Grandey et al., 2005; Groth et al., 2009; Wang et al., 2017) and perceived as inauthentic or deceitful (Gillis and Nilsen, 2017; ten Brinke and Weisbuch, 2020; Zuckerman et al., 1982). Furthermore, because consistency promotes message clarity and coherence, CCAC may also enhance perceptions adjacent to authenticity, such as message credibility and trustworthiness (Metzger et al., 2003; Winkielman and Nowak, 2022).

We expect that entrepreneurs who deliver their pitch with a high degree of cross-channel affective consistency (CCAC) will be perceived as more authentic, whereas those with lower CCAC raise doubts about their authenticity. Crowdfunders may be especially attuned to indicators of (in)authenticity given the significant uncertainty surrounding early-stage ventures, lack of third-party oversight to protect funder interests, and little direct access to pitching entrepreneurs, thus limiting their ability to rigorously vet the entrepreneur and their proposed venture (Radoynovska and King, 2019). Absent such valuable information and safeguards, perceived authenticity offers an important marker in funders' attempts to discern the integrity of pitching entrepreneurs' intentions and capabilities. Taking the above arguments together, we expect that CCAC predicts funding performance, at least in part, through its role in promoting perceived authenticity.

Hypothesis 4. The relationship between cross-channel affective consistency (CCAC) of entrepreneurs' verbal and vocal expressions (in terms of [a] valence, [b] arousal, and [c] valence and arousal considered jointly) and funding performance is mediated by perceived authenticity.

3.3.2. Perceived preparedness

Perceived preparedness is another key mechanism through which cross-channel affective consistency (CCAC) may increase funding performance. Defined as the extent to which an entrepreneur appears "ready to take the proposed venture forward if resources were provided" (Chen et al., 2009; 202), preparedness is a well-established predictor of funding performance (e.g., Allison et al., 2022b; Cardon et al., 2017; Chen et al., 2009; Pollack et al., 2012). Funders rely on perceptions of pitching entrepreneurs' preparedness as an indicator of cognitive legitimacy, such that entrepreneurs and their ventures represent more attractive funding prospects to the extent that they are perceived as prepared (Pollack et al., 2012). Entrepreneurs perceived as highly prepared tend to garner greater audience attention and elicit more favorable evaluations of their abilities and the commercial potential of their ventures (Galbraith et al., 2014).

Entrepreneurs demonstrate preparedness by delivering their pitches in a clear and coherent manner, suggesting that they have invested significant thought and effort into developing a compelling new venture pitch (Cardon et al., 2017; Chen et al., 2009; Pollack et al., 2012). To that end, perceptions of an entrepreneur's preparedness are influenced by the content of a pitch (Chen et al., 2009; Pollack et al., 2012) and its nonverbal delivery, including vocal intonation (Allison et al., 2022b). As a result, CCAC may encourage perceptions of preparedness by promoting message clarity and coherence via a reduction in processing difficulty (Newcombe and Ashkanasy, 2002; ten Brinke and Weisbuch, 2020; Winkielman and Nowak, 2022). Conversely, a low degree of CCAC increases processing difficulty (i.e., lower processing fluency; Topolinski et al., 2009; Ziegler et al., 2002), thus reducing message clarity and coherence, and potentially undermining perceptions of the entrepreneur's preparedness.

We thus expect that entrepreneurs who deliver pitches with a high degree of cross-channel affective consistency (CCAC) will be perceived as more prepared. CCAC enhances message clarity and coherence (Winkielman and Nowak, 2022), suggesting a positive effect on perceived preparedness. Conversely, a lower degree of CCAC increases the cognitive effort required by receivers to process a message (Krauss et al., 1981; ten Brinke and Weisbuch, 2020) due to diminished message clarity and coherence (Gillis and Nilsen, 2017; Topolinski et al., 2009; Ziegler et al., 2002). Given that message coherence and clarity are hallmarks of preparedness (Cardon et al., 2017; Chen et al., 2009; Pollack et al., 2012), it follows that a low degree of CCAC would diminish perceptions of an entrepreneur's preparedness. Therefore, we expect that the influence of CCAC on funding performance is mediated, at least in part, by funders' perceptions of pitching entrepreneurs' preparedness.

Hypothesis 5. The relationship between cross-channel affective consistency (CCAC) of entrepreneurs' verbal and vocal expressions (in terms of [a] valence, [b] arousal, and [c] valence and arousal considered jointly) and funding performance is mediated by perceived preparedness.

4. Study 1: Text and audio analysis of crowdfunding pitches

4.1. Data

To examine how entrepreneurs' verbal and vocal expressions influence funding performance, we selected a setting where the pitch is central and publicly accessible: rewards-based crowdfunding. We drew our sample from Kickstarter, one of the world's largest platforms (Davis et al., 2017; Oo et al., 2019; Scheaf et al., 2018; Soublière and Gehman, 2020). We randomly selected 1000 campaigns launched between 2009 and 2016 that included a video. Upon review, we excluded approximately half of these campaigns because their videos did not contain a discernible funding pitch. For example, they featured only product demonstrations, animation, music, or artistic performance, or otherwise lacked identifiable speech. This yielded a final sample of 558 campaigns. To address sample representativeness, we compared outcome and control variables between our sample and the population from which they were drawn. No significant differences emerged, except for a mean difference in fundraising goal, driven by 19 outlier campaigns in the population with funding goals of 100 million US dollars. These were determined to be non-serious attempts to raise the stated funding goal. After

removing these outliers, no significant differences remained, supporting the representativeness of our sample.

4.2. Measures

4.2.1. Dependent variable

Consistent with prior research on crowdfunding, we operationalized funding performance via a continuous measure: funds pledged in US dollars (e.g., Anglin et al., 2018a; Li et al., 2017). As in other entrepreneurial funding contexts, such as venture capital or angel investment, this measure often exhibits distributional deviations from normality. Specifically, zero-inflated data is typical because many ventures raise little or no funding, while a small number raise exceptionally large amounts. These outcomes are meaningful and expected. To address these deviations from normality, we operationalize our dependent variable as the natural logarithm of funds pledged, following established practice in crowdfunding and other entrepreneurial finance research (e.g., Allison et al., 2022b).

4.2.2. Vocal valence and vocal arousal: computer-aided audio analysis

To assess the valence and arousal of entrepreneurs' vocal expressions, we employed computer-aided audio analysis of the affect conveyed by speech. Through this approach, vocal valence and arousal are operationalized by measuring sound frequency (Hz), capturing the duration between frequency changes, and observing aberrations and patterns arising from those changes (Allison et al., 2022b; Banse and Scherer, 1996; Johnstone and Scherer, 2000). These vocal characteristics are then compared with affective constructs and prosodic patterns that have been observed and categorized by previous work to measure vocal valence and arousal. Compared to human coding, computer-based analysis offers greater precision in frequency discrimination, superior timing accuracy, and reduced susceptibility to coder fatigue or bias (e.g., Siegert et al., 2014). It also enables comparison to databases of affective speech based on prosodic features and affective ratings by thousands of human coders, enhancing reliability and validity.

Increased interest in analyzing speech has led to the development of multiple software options to analyze affect in speech (Garcia-Garcia et al., 2017). We sought software that met two important criteria: alignment with our study's emphasis on valence and arousal, and validation across a relatively broad set of uses. These criteria led us to select Beyond Verbal's Emotion AI API Version 5. The algorithm was initially trained on over 70,000 tagged voice samples, achieving an accuracy of 80 % (Mizroch, 2014). It has since been improved with an additional 2.5 million vocal samples (Beyond Verbal, 2019; Mack, 2017) and has been applied in multiple research studies (Allison et al., 2022b; Garcia-Garcia et al., 2017; Maor et al., 2018). Validation assessments of the Beyond Verbal Emotion AI API revealed that it produces "satisfactory results in a quiet environment" (Garcia-Garcia et al., 2017: 2) and can "identify emotions in dimensional terms" (i.e., valence and arousal) with strong test-retest reliability (Pearson correlation coefficient = 0.977) (Arana et al., 2020). In a crowdfunding context, Allison et al. (2022b) assessed its accuracy by coding the initial segments of 100 pitches, reporting strong reliability for those initial segments (Valence $\alpha = 0.937$; Arousal $\alpha = 0.860$), as well as for middle segments (Valence $\alpha = 0.962$; Arousal $\alpha = 0.921$) and end segments (Valence $\alpha = 0.801$; Arousal $\alpha = 0.875$). As a result, the Beyond Verbal Emotion AI API (2019) algorithm provided a strong fit with our study.

Our measurements of vocal valence and vocal arousal were created by isolating the audio from each pitch within the human hearing range (20–20,000 Hz). This range of frequencies was sampled every 10 thousandths of a second. These samples were aggregated into overlapping 10-second segments, with each segment overlapping the previous by 5 seconds to preserve contextual continuity. Segments were screened for speech presence using a 0.7 confidence threshold commonly used in content analysis (Krippendorff, 2004). Segments below this threshold (e.g., music, silence, multiple voices) were excluded.

4.2.3. Verbal valence and verbal arousal: computer-aided text analysis

We measured the valence and arousal of entrepreneurs' verbal expressions in each funding pitch using quantified affective norms associated with each spoken word (Bradley and Lang, 1999). This approach mirrors our vocal analysis by leveraging large-scale human ratings of affect. Prior studies have developed valence and arousal ratings for thousands of common words (e.g., Bradley and Lang, 1999; Warriner et al., 2013; Westbury et al., 2015). We used the most recent and comprehensive affective norms dataset, which includes continuous valence and arousal ratings for 23,211 words (Westbury et al., 2015). These ratings were developed by Westbury et al. (2015) using a co-occurrence model that calculates semantic similarity between each word and a set of emotion labels. The resulting similarity scores were used to predict valence and arousal ratings, based on a large dataset of human ratings of valence and arousal, culminating in valence and arousal measures for each word (Westbury, 2014). We applied these measures to quantify the valence and arousal of the spoken words in each pitch video. To do so, we transcribed each pitch video using IBM Watson Speech to Text, which utilizes deep-learning artificial intelligence to convert spoken audio into text (IBM, 2023). We then calculated the overall valence and arousal of the verbal expressions (spoken words) in each funding pitch by taking the average of the valence ratings and the average of the arousal ratings for the words in each pitch transcript. These measures were then normalized for comparability with vocal affect measures, as described in the following section.

4.2.4. Normalized measure scales and cross-channel affective consistency of expressions

To ensure comparability across the vocal and verbal measures, we normalized all four affective variables—vocal valence, vocal

³ Subsequent to our study, Beyond Verbal was acquired and the Emotion AI API made non-public. OpenSMILE (https://www.audeering.com/research/opensmile/) and/or HuBERT (https://arxiv.org/pdf/2203.07378) are similar packages which provide similar functionality, although these packages have less extant evidence of validity.

arousal, verbal valence, and verbal arousal—using the min-max method (cf. Becker et al., 2019). This scaled each variable to a range of 0 to 1 ($x - x_{min} / x_{max} - x_{min}$). With all four variables on a common scale, we calculated CCAC as the absolute difference between the vocal and verbal affective values. For Hypothesis 1, CCAC in terms of valence is measured as the absolute value of the difference between the normalized vocal and verbal valence. For Hypothesis 2, CCAC in terms of arousal is measured as the absolute value of the difference between normalized vocal and verbal arousal. We used absolute values because consistency is a non-directional concept: greater differences indicate lower CCAC, regardless of direction. The resulting measures are one-side bounded at zero, representing perfect CCAC.

For Hypothesis 3, which considers joint consistency in terms of valence and arousal, we calculated the Euclidean distance between the vocal and verbal affective coordinates. Following the two-dimensional model of affect (Russell et al., 2003), we represented valence and arousal as Cartesian coordinates, with valence on the X-axis and arousal on the Y-axis (Posner et al., 2005). Each pitch was thus represented by two points: one for vocal affect (vocal valence and arousal) and one for verbal affect (verbal valence and arousal). Because we normalized our variables, the distance between these two points provides a measure of the overall CCAC between the vocal and verbal affect expressed in the funding pitch video. We then quantified the distance between these two points. Euclidean distance has often been used to measure degree of (dis)similarity, or (in)consistency (e.g., Klein et al., 2004; Schaubroeck and Lam, 2002). Thus, to assess CCAC between the valence and arousal of each funding pitch's verbal expression with the valence and arousal of its vocal expression, we calculated Euclidean distance by taking the square root of the summed, squared differences between the normalized values of (1) vocal valence and verbal valence and (2) vocal arousal and verbal arousal, as represented by the following formula:

Euclidean distance (degree of cross-channel affective inconsistency)

$$= \sqrt{(\text{Vocal Valence} - \text{Verbal Valence})^2 + (\text{Vocal Arousal} - \text{Verbal Arousal})^2}$$

To aid interpretation, consider two examples. In both cases, the entrepreneur uses positive and high-arousal words (Verbal Valence = 0.90, Verbal Arousal = 0.75) that might be described as highly enthusiastic. If spoken in a likewise enthusiastic (positive, high-arousal) vocal tone (Vocal Valence = 0.85, Vocal Arousal = 0.80), the Euclidean distance value is relatively low, representing a high degree of CCAC between the words and their vocal intonation:

$$Euclidean \ distance = \sqrt{{{{(0.85 - 0.90)}^2} + {{(0.80 - 0.75)}^2}}} = \sqrt{{0.0025} + 0.0025} = \sqrt{{0.005}} \approx 0.07$$

If these same positive, high-arousal words were instead spoken in a more neutral valence and low-arousal vocal tone (Vocal Valence = 0.50, Vocal Arousal = 0.15), the Euclidean distance value would be higher, representing a lower degree of CCAC:

Euclidean distance =
$$\sqrt{(0.50 - 0.90)^2 + (0.15 - 0.75)^2} = \sqrt{0.16 + 0.36} = \sqrt{0.52} \approx 0.72$$

4.2.5. Mediating mechanisms: perceived authenticity and perceived preparedness

To assess the theorized mediators—perceived authenticity and perceived preparedness—two expert coders were tasked with independently viewing and assessing each video in our sample. Coders used established scales for perceived authenticity (Oo and Allison, 2024; 3 items; example item: "The entrepreneur faked how he/she felt in this video" [reverse coded]; Likert scale from 1 [strongly disagree] to 7 [strongly agree]) and perceived preparedness (Chen et al., 2009; 5 items; example item: "The presentation was coherent and logical"; Likert scale from 1 [strongly disagree] to 5 [strongly agree]) in funding pitches.

Following best practices in crowdfunding research (e.g., Allison et al., 2022b; Pollack et al., 2012; Scheaf et al., 2018), we developed detailed coding procedures and conducted training before formal coding. The first set of 50 pitches was coded by two coders to establish baseline interrater reliability as a means to ensure adequacy of training and coding procedures (average Krippendorff's α = 0.92). After completing this initial phase, the coders met to discuss the process and resolve all discrepancies, ultimately achieving consensus (cf. Allison et al., 2022b). The next 458 pitches were then split between the coders. Finally, the last 50 pitches were coded by both coders to again check for interrater reliability prior to working toward reconciliation (average Krippendorff's α = 0.95). Scale reliability was acceptable for both perceived authenticity (α = 0.94) and perceived preparedness (α = 0.90).

4.2.6. Control variables

We included a range of control variables to account for alternative explanations suggested by prior research. These included the campaign year and product category/industry, each captured by a set of dummy variables. We also controlled for characteristics of the pitch and campaign that could influence funding outcomes: the funding goal set by the campaign, pitch length (in minutes), number of words spoken in the pitch, the gender of the self-identified or apparent lead entrepreneur (0 = woman, 1 = man), the number of team members in the pitch, and whether the campaign was a featured project on the crowdfunding platform. Although our primary focus is on the pitch video, we also accounted for broader campaign-level factors that might shape funders perceptions or serve as quality signals. These included the number of images and videos in the crowdfunding campaign, the word count on the campaign webpage, the presence of music in the pitch video, and whether the rewards offered to funders were tangible in nature. To account for the potential influence of other nonverbal channels, we further controlled for body language in terms of the entrepreneur's expansiveness (coded from 1 = taking up very little space to 5 = taking up a lot of space; Tiedens and Fragale, 2003) and facial expressions of happiness, anger, fear, and sadness. Following previous research, measures for entrepreneurs' facial expressions of these basic emotions were captured via computer-aided facial expression analysis using the Emotient FACET algorithm (iMotions, 2018; see Warnick et al., 2021 for an extensive overview of use and validation). For each frame of a pitch video, the algorithm generated evidence scores for each

emotion, which indicate the log-odds of an expressed emotion being present (iMotions A/S, 2018). An evidence score of 1 indicates that an expression is 10 times more likely than not to be categorized by an expert human coder. Thus, each of the four basic emotions are captured from -1 (absence of an emotion) to 1 (presence of an emotion), relative to neutral (0).

4.3. Analysis and results: main effects

Table 1 reports descriptive statistics and correlations. Table 2 presents maximum likelihood regression estimates predicting the log of funds pledged, with robust standard errors clustered by crowdfunding category. Given the strong influence of category-level factors, we anticipated correlated error terms among campaigns within the same category. Violating the assumption of independent errors can lead to downwardly biased standard error estimates (Schüler et al., 2024). To address this, and in line with our strategy for controlling for alternative explanations, we applied robust standard errors clustered at the crowdfunding category level (e.g., Allison et al., 2017). This approach not only mitigates bias but also aligns with our conceptual model, which recognizes the influence of category-specific norms, practices, and backer expectations on funding performance.

Model 1 includes only control variables. Model 2 introduces our key predictors: the degree of cross-channel affective consistency (CCAC) between verbal and vocal expressions in terms of *valence* and *arousal*. The first variable captures the degree to which the pitch video deviates from CCAC in the valence dimension of affect. The second captures the same for the arousal dimension of affect. Because these variables represent the difference between affect expressed verbally (words) and vocally (intonation), smaller values indicate greater CCAC. Accordingly, a *negative* coefficient estimate is expected if the data support our hypotheses.

Results show that cross-channel affective consistency (CCAC) between vocal and verbal expressions in terms of arousal (B=-0.50, p=.04) had a significant effect on funding performance in the expected negative direction. At the means, a one standard deviation increase in the consistency of arousal expressed across channels yields a predicted 8.46 % increase in funds raised. For example, if a campaign was predicted to raise USD 1500, this one standard deviation change would yield a predicted additional USD 126.90. Relative to prior studies of language use in online funding pitches, this is a similar magnitude of influence: Moss et al. (2015) report "for every incremental use of the word 'autonomy' (for every 100 words in the narrative), there is a 3% increase in the likelihood of receiving funding" (p. 46).

In contrast, cross-channel affective consistency (CCAC) in terms of valence was not significantly related to funding performance (B = -0.81, p = .13). Thus, we find support for Hypothesis 2 (arousal) but not Hypothesis 1 (valence).

Model 3 tests Hypothesis 3, our omnibus hypothesis, which considers cross-channel affective consistency (CCAC) across vocal and verbal expressions in terms of valence and arousal jointly. As with the preceding measures, zero indicates full CCAC, and increasing values indicate less consistency. Thus, we again expected a negative coefficient estimate. Supporting Hypothesis 3, we found a significant negative effect: greater CCAC across both dimensions (valence and arousal) jointly was associated with improved funding performance (B = -0.83, p = .04). At the means, a one standard deviation increase in CCAC yielded a 16.22 % increase in funds pledged. For a campaign that would otherwise be predicted to raise USD 1500, this would represent a USD 243.30 increase in predicted funds raised.

4.4. Analysis and results: mediators (perceived preparedness and perceived authenticity)

We next analyzed the effects of cross-channel affective consistency (CCAC) on our theorized mediators—perceived authenticity and perceived preparedness—and their relationship with funding performance. To test these mediation effects, we analyzed the direct effect of CCAC on each mediator, the direct effect of each mediator on funding performance, and the indirect effect of CCAC on funding through each mediator (see Figs. 1 and 2 for a visual overview of all direct and indirect effects). Table 3 presents the direct effects of CCAC on the mediators. Predicting perceived authenticity, CCAC was significant in terms of arousal (B = -0.33, p = .04), not significant in terms of valence (p = .85), and significant when jointly assessing consistency in terms of valence and arousal (B = -0.39, p = .01). Predicting perceived preparedness, the effect of CCAC was significant in terms of valence (B = -0.32, D = .01), arousal (D = -0.80), D = .001), and when jointly assessing consistency in terms of valence and arousal (D = -0.32). These results offer broad support for our hypotheses that CCAC predicts both perceived authenticity and perceived preparedness.

Turning to the mediators' effects on funding performance, perceived preparedness significantly predicted funding performance in models assessing cross-channel affective consistency (CCAC) in terms of valence and arousal separately (Table 2, Model 4; B = 0.61, p = .003) and jointly (Table 2, Model 5; B = 0.60, p = .002). However, perceived authenticity did not significantly predict funding performance in either model (p > .10).

Finally, we tested indirect effects using path analysis via the *sem* command in Stata, applying the same model specifications, dependent variable, controls, and cross-channel affective consistency (CCAC) measures as in the main analysis. Consistent with our main effects analyses, one model assessed CCAC in terms of valence and arousal separately (Fig. 1), and another assessed CCAC in terms of valence and arousal jointly (Fig. 2). The indirect effect of CCAC on funding performance through perceived preparedness was significant when CCAC was assessed in terms of arousal (-0.49, p = .009, 95 % CI [-0.85, -0.12]) and in terms of valence and arousal jointly (-0.44, p = .007, 95 % CI [-0.77, -0.12]). The indirect effect was marginally significant when considering CCAC in terms of valence (-0.19, p = .08, 95 % CI [-0.41, 0.02]). In contrast, no indirect effect through perceived authenticity was significant across any specification of CCAC (p > .10). These results support Hypothesis 5 (indirect effect of CCAC through perceived preparedness) but not Hypothesis 4 (indirect effect of CCAC through perceived authenticity).

Table 1Descriptive statistics and correlations (Study 1).

| Variables | M | SD | 1 | 2 | 3 | 4 | 2 | 9 | 7 | ∞ | 6 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|--|-----------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| Varia | | | | | | | | | | | | | | | | | | | | | | | |
| Funding performance (log) | 7.36 | 2.65 | | | | | | | | | | | | | | | | | | | | | |
| 2. Funding goal | 16,290.19 | 37,505.91 | 0.13 | | | | | | | | | | | | | | | | | | | | |
| 3. Pitch length, minutes | 2.67 | 1.27 | 0.12 | 0.21 | | | | | | | | | | | | | | | | | | | |
| 4. Pitch word count | 417.79 | 272.41 | 0.05 | 0.21 | 0.74 | | | | | | | | | | | | | | | | | | |
| 5. Webpage word count | 595.92 | 520.53 | 0.32 | 0.28 | 0.17 | 0.13 | | | | | | | | | | | | | | | | | |
| 6. Gender (male) | 0.54 | 0.50 | -0.20 | -0.08 | -0.01 | 0.06 | -0.09 | | | | | | | | | | | | | | | | |
| 7. Team size | 1.79 | 1.80 | 0.18 | 0.11 | 0.25 | 0.20 | 0.06 | -0.16 | | | | | | | | | | | | | | | |
| 8. Platform featured project | 0.14 | 0.35 | 0.30 | 0.08 | -0.04 | -0.09 | 0.10 | -0.14 | 0.01 | | | | | | | | | | | | | | |
| 9. Tangible reward | 0.84 | 0.37 | 0.08 | 0.02 | -0.05 | -0.05 | 0.07 | 0.05 | -0.15 | -0.05 | | | | | | | | | | | | | |
| 10. Number of images | 4.53 | 10.86 | 0.32 | 0.16 | 0.08 | 0.00 | 0.41 | -0.14 | -0.04 | 0.10 | 0.12 | | | | | | | | | | | | |
| 11. Number of videos | 1.10 | 0.47 | 0.13 | 0.09 | 0.02 | -0.01 | 0.13 | -0.05 | 0.03 | 0.00 | 0.08 | 0.31 | | | | | | | | | | | |
| 12. Music in pitch video | 0.66 | 0.47 | 0.25 | 0.06 | 0.15 | -0.04 | 0.13 | -0.08 | 0.12 | 0.10 | 0.02 | 0.17 | 0.02 | | | | | | | | | | |
| 13. Body expansiveness | 3.06 | 0.65 | 0.04 | 0.04 | 0.06 | 0.00 | -0.04 | 0.01 | 0.00 | -0.04 | 0.08 | 0.06 | 0.11 | 0.11 | | | | | | | | | |
| 14. Facial expression: Happiness | -1.20 | 1.38 | 0.14 | 0.03 | 0.02 | -0.04 | 0.04 | -0.20 | 0.01 | -0.01 | 0.02 | 0.05 | 0.02 | 0.06 | 0.02 | | | | | | | | |
| 15. Facial expression: Anger | -1.74 | 1.05 | -0.05 | -0.02 | -0.03 | -0.07 | -0.01 | 0.05 | -0.13 | 0.00 | 0.03 | -0.02 | -0.06 | 0.05 | -0.08 | -0.28 | | | | | | | |
| 16. Facial expression: Fear | -1.27 | 0.81 | -0.01 | 0.00 | -0.02 | -0.05 | 0.02 | -0.01 | -0.06 | 0.01 | -0.03 | 0.05 | 0.00 | -0.05 | -0.02 | 0.11 | 0.02 | | | | | | |
| 17. Facial expression: Sadness | -1.43 | 0.96 | -0.11 | -0.02 | -0.04 | -0.05 | -0.02 | 0.16 | -0.10 | 0.04 | -0.03 | 0.01 | -0.03 | -0.07 | -0.08 | -0.39 | 0.43 | 0.43 | | | | | |
| 18. Perceived authenticity | 4.18 | 1.21 | 0.01 | -0.05 | 0.12 | 0.14 | -0.05 | -0.02 | 0.19 | 0.08 | -0.13 | -0.12 | -0.03 | -0.04 | -0.07 | -0.04 | -0.06 | 0.01 | 0.04 | | | | |
| 19. Perceived preparedness | 2.37 | 0.72 | 0.26 | 0.16 | 0.21 | 0.08 | 0.19 | -0.16 | 0.05 | 0.07 | 0.04 | 0.37 | 0.21 | 0.21 | 0.06 | 0.04 | -0.06 | 0.00 | -0.09 | -0.05 | | | |
| 20. CCAC: Valence | 0.26 | 0.16 | -0.10 | 0.01 | -0.26 | -0.30 | -0.05 | -0.07 | -0.11 | -0.03 | 0.07 | 0.02 | -0.01 | 0.05 | -0.02 | 0.03 | 0.10 | 0.02 | 0.03 | -0.10 | -0.09 | | |
| 21. CCAC: Arousal | 0.20 | 0.16 | -0.08 | -0.01 | 0.00 | -0.04 | -0.09 | 0.12 | -0.05 | 0.04 | -0.01 | -0.13 | -0.11 | -0.04 | -0.01 | -0.05 | 0.07 | -0.04 | 0.04 | -0.03 | -0.26 | 0.04 | |
| 22. CCAC: Valence & Arousal (Euclidean distance) | 0.36 | 0.18 | -0.12 | 0.00 | -0.19 | -0.24 | -0.10 | 0.02 | -0.11 | 0.01 | 0.04 | -0.08 | -0.07 | 0.02 | -0.03 | -0.01 | 0.10 | 0.00 | 0.04 | -0.11 | -0.24 | 0.73 | 0.68 |

Note. N = 558; correlations with an absolute value greater than 0.08 are significant at p < .05. Variable 22 (Euclidean distance) is derived from variables 20 and 21 to provide an omnibus measure of cross-channel affective consistency (CCAC), jointly accounting for CCAC in terms of valence and arousal; accordingly, large correlations with its constituent measures are expected.

Table 2 Prediction of funding performance (Study 1).

| Variables | Model 1 | | Model 2 | | Model 3 | | Model 4 | | Model 5 | | |
|------------------------------------|-------------------------|------------|-------------------|--------|-------------------|--------|-------------------|--------|-------------------|--------|--|
| | В | SE | В | SE | В | SE | В | SE | В | SE | |
| Control variables | | | | | | | | | | | |
| Constant | 5.56*** | (0.44) | 5.94*** | (0.51) | 5.92*** | (0.54) | 4.27*** | (0.57) | 4.26*** | (0.59) | |
| Funding goal | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | |
| Pitch length, minutes | 0.12 | (0.14) | 0.12 | (0.14) | 0.12 | (0.14) | 0.05 | (0.14) | 0.06 | (0.13) | |
| Pitch word count | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | |
| Webpage word count | 9.26E-04*** | (0.00) | 9.03E-04*** | (0.00) | 9.05E-04*** | (0.00) | 9.28E-04*** | (0.00) | 9.36E-04*** | (0.00) | |
| Gender (male) | -0.33^{\dagger} | (0.19) | -0.34^{\dagger} | (0.20) | -0.33^{\dagger} | (0.19) | -0.29^{\dagger} | (0.17) | -0.27^{\dagger} | (0.16) | |
| Pitch team size | 0.14* | (0.06) | 0.14* | (0.06) | 0.14* | (0.06) | 0.14* | (0.05) | 0.14* | (0.05) | |
| Platform featured project | 1.66*** | (0.24) | 1.64*** | (0.23) | 1.65*** | (0.24) | 1.58*** | (0.25) | 1.60*** | (0.26) | |
| Tangible reward | 0.75* | (0.30) | 0.75* | (0.31) | 0.75* | (0.31) | 0.72* | (0.33) | 0.72* | (0.32) | |
| Year | Included | | Included | | Included | | Included | | Included | | |
| Product category | Included | | Included | | Included | | Included | | Included | | |
| Number of images | 0.05** | (0.02) | 0.05** | (0.02) | 0.05** | (0.02) | 0.05** | (0.02) | 0.05** | (0.02) | |
| Number of videos | 0.35** | (0.13) | 0.34** | (0.13) | 0.34** | (0.13) | 0.32* | (0.13) | 0.32* | (0.13) | |
| Music in pitch video | 0.67* | (0.30) | 0.68* | (0.28) | 0.68* | (0.29) | 0.56* | (0.27) | 0.55* | (0.28) | |
| Body expansiveness | -0.04 | (0.19) | -0.04 | (0.19) | -0.04 | (0.19) | -0.04 | (0.20) | -0.04 | (0.20) | |
| Facial expression: Happiness | 0.15* | (0.08) | 0.15* | (0.07) | 0.15* | (0.07) | 0.17* | (0.08) | 0.17* | (0.08) | |
| Facial expression: Anger | 0.03 | (0.10) | 0.04 | (0.10) | 0.04 | (0.10) | 0.06 | (0.10) | 0.06 | (0.10) | |
| Facial expression: Fear | 0.13 | (0.12) | 0.13 | (0.12) | 0.13 | (0.12) | 0.10 | (0.12) | 0.11 | (0.11) | |
| Facial expression: Sadness | -0.17 | (0.12) | -0.17 | (0.12) | -0.17 | (0.12) | -0.15 | (0.12) | -0.15 | (0.11) | |
| Independent variables (CCAC betw | een verbal and vocal ex | oressions) | | | | | | | | | |
| CCAC: Valence | | | -0.81 | (0.54) | | | -0.61 | (0.46) | | | |
| CCAC: Arousal | | | -0.50* | (0.25) | | | 0.002 | (0.32) | | | |
| CCAC: Valence & Arousal | | | | | -0.83* | (0.41) | | , | -0.36 | (0.34) | |
| Mediators (perceptions of entrepre | neur) | | | | | | | | | | |
| Perceived authenticity | , | | | | | | 0.05 | (0.05) | 0.05 | (0.05) | |
| Perceived preparedness | | | | | | | 0.61** | (0.20) | 0.60** | (0.19) | |

Note. N = 558; Maximum likelihood, cluster-robust standard errors by product category; dependent variable is logged US dollars (USD). Product category [15 levels, 14 dummies] and year [8 years, 7 dummies] controls included in each model. Coefficient estimates for industry and year variables omitted for reasons of space.

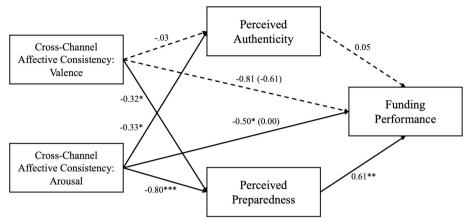
[†] p < .10.

† p < .05.

* p < .05.

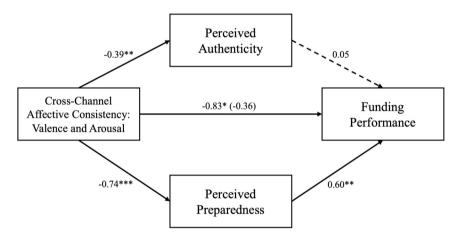
** p < .01.

** p < .01.



Indirect effect of valence consistency \rightarrow perceived preparedness \rightarrow funding performance: -0.19, p = .08, 95% CI [-0.41, 0.02] Indirect effect of arousal consistency \rightarrow perceived preparedness \rightarrow funding performance: -0.49, p = .009, 95% CI [-0.85, -0.12]

Fig. 1. Mediation results: Cross-channel affective consistency of valence and arousal (Study 1). Note. N = 558. Unstandardized path coefficients; smaller values indicate greater cross-channel affective consistency such that a negative coefficient estimate for consistency supports our hypotheses. Direct effects when controlling for mediators shown in parentheses. Effects of all control variables are included but not shown. Dotted lines indicate a non-significant effect. Significant indirect effects described below model. *p < .05, **p < .01, ***p < .001.



Indirect effect of consistency → perceived preparedness → funding performance: -0.44, p = .007, 95% CI [-0.77, -0.12]

Fig. 2. Mediation results: Cross-channel affective consistency of joint valence and arousal (Study 1). Note. N = 558. Unstandardized path coefficients; smaller values indicate greater cross-channel affective consistency such that a negative coefficient estimate for consistency supports our hypotheses. Direct effect when controlling for mediators shown in parentheses. Effects of all control variables are included but not shown. Dotted lines indicate a non-significant effect. Significant indirect effect is described below model. *p < .05, **p < .01, ***p < .001.

4.5. Post-hoc analyses

We conducted a focused set of post-hoc analyses to aid interpretation and assess the rigor of our findings. First, we examined the relationship between our dependent variable, funding performance (i.e., in terms of the amount of funding pledged) and funding success, whether the campaign met its funding goal and thus received the pledged funds. The all-or-nothing nature of rewards-based crowdfunding means that funding success is a direct function of funding performance relative to the funding goal (Escudero et al., 2025). We therefore complement the focus of our main analysis on funding performance by examining how this in turn drives funding success. Specifically, we used logistic regression with the same variables and cluster-robust standard errors by product category as our main analysis to assess the relationship between funding performance (i.e., amount of pledged funds) and funding success (0 = 0.89, 0 < 0.001).

Second, we explored potential product category differences in the effect of cross-channel affective consistency (CCAC) on funding performance. Relative to art as a reference category, lower CCAC (i.e., greater inconsistency) was negatively associated with funding

Table 3 Prediction of perceived authenticity and perceived preparedness (Study 1).

| Variables | DV: Perceived a | uthenticity | | | | DV: Perceived preparedness | | | | | | |
|---------------------------------------|-----------------------|-------------|-------------|--------|-------------|----------------------------|-----------------------|--------|-------------------|--------|----------|--------|
| | Model 6 | | Model 7 | | Model 8 | | Model 9 | | Model 10 | | Model 11 | |
| | В | SE | В | SE | В | SE | В | SE | В | SE | В | SE |
| Control variables | | | | | | | | | | | | |
| Constant | 4.03*** | (0.52) | 4.13*** | (0.48) | 4.20*** | (0.48) | 2.09*** | (0.21) | 2.40*** | (0.17) | 2.41*** | (0.16) |
| Funding goal | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | $-5.93E-07^{\dagger}$ | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) |
| Pitch length, minutes | -0.01 | (0.06) | -0.01 | (0.06) | -0.01 | (0.06) | 0.11*** | (0.03) | 0.12*** | (0.03) | 0.11*** | (0.03) |
| Pitch word count | 6.41E-04*** | (0.00) | 5.99E-04*** | (0.00) | 5.70E-04*** | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) |
| Webpage word count | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) | 0.00 | (0.00) |
| Gender (male) | -0.02 | (0.07) | -0.01 | (0.07) | -0.02 | (0.07) | -0.10* | (0.04) | -0.09^{\dagger} | (0.05) | -0.10* | (0.04) |
| Pitch team size | 0.11*** | (0.03) | 0.11*** | (0.03) | 0.11*** | (0.03) | -1.76E-03 | (0.02) | -0.01 | (0.02) | -0.01 | (0.02) |
| Platform featured project | 0.43*** | (0.12) | 0.43*** | (0.12) | 0.43*** | (0.12) | 0.06 | (0.08) | 0.06 | (0.07) | 0.05 | (0.07) |
| Tangible reward | -0.15 | (0.12) | -0.15 | (0.12) | -0.15 | (0.12) | 0.06 | (0.11) | 0.07 | (0.09) | 0.07 | (0.09) |
| Year dummy variables | Included | | Included | | Included | | Included | | Included | | Included | |
| Product category dummy variables | Included | | Included | | Included | | Included | | Included | | Included | |
| Number of images | -0.01 | (0.01) | -0.01 | (0.01) | -0.01 | (0.01) | 0.01*** | (0.00) | 0.01*** | (0.00) | 0.01*** | (0.00) |
| Number of videos | 0.13 | (0.12) | 0.13 | (0.12) | 0.13 | (0.12) | 0.04* | (0.02) | 0.02 | (0.02) | 0.03 | (0.02) |
| Music in pitch video | -0.08 | (0.09) | -0.09 | (0.09) | -0.08 | (0.09) | 0.20*** | (0.06) | 0.20*** | (0.05) | 0.21*** | (0.05) |
| Body expansiveness | -0.06 | (0.10) | -0.06 | (0.10) | -0.06 | (0.10) | 0.01 | (0.03) | 0.00 | (0.02) | 0.01 | (0.03) |
| Facial expression: Happiness | -0.02 | (0.04) | -0.02 | (0.04) | -0.02 | (0.04) | -0.03 | (0.02) | -0.03 | (0.02) | -0.03 | (0.02) |
| Facial expression: Anger | -0.05 | (0.03) | -0.05 | (0.03) | -0.04 | (0.03) | -0.04 | (0.03) | -0.03 | (0.03) | -0.03 | (0.03) |
| Facial expression: Fear | -0.04 | (0.04) | -0.04 | (0.04) | -0.04 | (0.04) | 0.04 | (0.03) | 0.04 | (0.03) | 0.04 | (0.03) |
| Facial expression: Sadness | 0.10 | (0.06) | 0.09 | (0.06) | 0.10† | (0.06) | -0.05 | (0.03) | -0.05 | (0.03) | -0.05 | (0.04) |
| Independent variables (CCAC between v | erbal and vocal expre | essions) | | | | | | | | | | |
| CCAC: Valence | T | | -0.03 | (0.18) | | | | | -0.32* | (0.13) | | |
| CCAC: Arousal | | | -0.33* | (0.16) | | | | | -0.80*** | (0.14) | | |
| CCAC: Valence & Arousal | | | | () | -0.39** | (0.15) | | | | , | -0.74*** | (0.13) |

Note. N = 558. Maximum likelihood, cluster-robust standard errors by product category. Product category [15 levels, 14 dummies] and year [8 years, 7 dummies] controls included in each model. Coefficient estimates for industry and year variables omitted for reasons of space.

 $^{^{\}dagger}~p<.10.$

^{*} p < .05.

p < .01. p < .001.

performance in the categories of comics, fashion, games, music, photography, journalism, and technology (p < .05 for each). However, crafts and theater categories posed exceptions where, relative to art, lower CCAC was less detrimental (p < .01 for each). This may reflect a small number of campaigns that performed well despite exhibiting a lower degree of CCAC, or unique characteristics of pitches in these categories. Further analysis revealed that these category differences were primarily driven by the degree of CCAC, with category-arousal interactions closely mirroring the overall category-CCAC interactions. Examining the valence interactions showed that lower CCAC in terms of valence was less detrimental for projects in comics, fashion, and food compared to those in the art category. These findings inform Study 2, which further investigates when and why lower CCAC may still yield strong performance.

Third, we tested whether the effects of cross-channel affective consistency (CCAC) varied by valence or arousal levels. For instance, some pitches might be consistently positive and high-arousal, while others might be consistently negative and low-arousal, despite exhibiting similar degrees of CCAC. We found no significant differences in the effects of CCAC based on the levels of verbal or vocal valence and arousal when examined separately. However, when assessing CCAC in terms of valence and arousal jointly, we found a significant interaction of CCAC with vocal arousal (B=-1.09, p=.006), indicating that negative impact of lower CCAC on funding performance is amplified at higher levels of vocal arousal. Put differently, CCAC is especially important the higher the vocal arousal used in pitch delivery. This aligns with prior research showing that arousal directs and maintains the attention of message receivers (Zsidó, 2024), suggesting that higher arousal may draw more attention to the voice, making the degree of CCAC more salient. We also tested for valence and arousal differences in predicting perceived authenticity and perceived preparedness. The only significant difference was between CCAC and vocal arousal in predicting perceived authenticity (B=-0.59, p<.001), suggesting that lower CCAC has a stronger negative effect on perceived authenticity the higher the vocal arousal used in pitch delivery. These results together provide evidence that, beyond its overall benefits, a high degree of CCAC is particularly important for high vocal arousal pitches to engender perceived authenticity and raise funds.

Finally, we investigated why perceived authenticity did not significantly predict funding performance. We reviewed pitches with high perceived authenticity but low funding performance and pitches with low perceived authenticity but high funding performance. In the former, entrepreneurs often spoke directly to the camera with seemingly minimal preparation or pitch features that would enrich their delivery. These pitches typically lacked details or visuals to effectively present their proposed offering. In doing so, they effectively conveyed a sense of authenticity as individuals but not in a manner that was persuasive in garnering support. Conversely, pitches with low perceived authenticity but high funding performance often emphasized the product while limiting emphasis on the entrepreneur(s) behind the project. Instead of providing information about the entrepreneurs themselves, these pitch videos managed to be successful by highlighting the offering, its features, and progress, often including a variety of images and video to demonstrate the project. This was at times done via voiceover with little or no visual depiction of the entrepreneurs. This provides evidence that, despite past findings supporting a link between perceived authenticity and funding (Oo and Allison, 2024), exceptions exist, suggesting that authenticity is not always necessary or sufficient for pitch success.

4.6. Study 1 discussion

Study 1 offers robust evidence for the persuasive benefits of cross-channel affective consistency (CCAC) in entrepreneurial funding pitches. Specifically, consistency between the arousal levels of entrepreneurs' vocal and verbal expressions significantly predicted funding performance, while consistency in valence alone did not exhibit a significant direct effect. One plausible explanation for the seemingly dominant nature of arousal, further supported in our post-hoc analyses, may lie in the nature of the crowdfunding context. Arousal is known to convey urgency (Storbeck and Clore, 2008), a quality that has been shown to drive contributions in rewards-based crowdfunding by engendering perceived passion (Allison et al., 2022b). Moreover, when valence and arousal were considered jointly, CCAC significantly predicted funding performance, underscoring the importance of capturing affect holistically across different channels of expression.

Our mediation analysis further revealed that cross-channel affective consistency (CCAC) shapes funder perceptions of pitching entrepreneurs. While CCAC enhanced perceptions of both authenticity and preparedness, only the latter significantly predicted funding performance. This suggests that affective consistency across vocal and verbal expressions contributes to message coherence in ways that signal competence and readiness to execute (i.e., preparedness), rather than merely sincerity or emotional genuineness (i.e., authenticity). These findings diverge from previous research emphasizing the role of perceived authenticity in funding performance (e. g., Oo and Allison, 2024; Radoynovska and King, 2019), instead suggesting that perceived preparedness is a particularly salient mechanism through which CCAC promotes funding.

5. Study 2: Inductive analysis of vocal-verbal cross-channel affective (in)consistency

5.1. Methods

While Study 1 established that cross-channel affective consistency (CCAC) plays a significant role in shaping funder perceptions and driving crowdfunding performance, its quantitative methodology left open the question of how CCAC actually manifests in entrepreneurial pitches. To address this, we complement our quantitative findings with an inductive, qualitative study aimed at uncovering the ways in which high and low CCAC are expressed. Following best practices in qualitative research, we identified extreme cases to illuminate novel insights (Eisenhardt et al., 2016). Specifically, we selected the 50 pitches with the highest CCAC ratings and the 50 pitches with the lowest CCAC ratings from our Study 1 sample, which we analyzed independently to better understand the manifestation of high and low CCAC, respectively. These CCAC ratings were based on the quantified valence and arousal metrics for both

verbal and vocal expressions in our Study 1 analysis. We then focused our qualitative analysis on these pitches by viewing and analyzing each pitch, with an emphasis on the 10-s segments that our Study 1 analysis quantified as exhibiting particularly high CCAC (10 % highest CCAC segments in our dataset) or low CCAC (10 % lowest CCAC segments in our dataset).

Using an iterative open coding approach (Corbin and Strauss, 2015; Locke, 2001), we began with first-order coding, where we interpreted the spoken words and their vocal delivery in each 10-s segment. We watched each video in its entirety, then transcribed and interpreted the high CCAC segments of the 50 high CCAC pitches and the low CCAC segments of the 50 low CCAC pitches, respectively. Specifically, we noted the valence and arousal of the verbal expressions (words) used in each segment and assigned codes that described the affective nature of these expressions (e.g., warm, enthusiastic, serious; cf. Bliss-Moreau et al., 2020; Yik et al., 2011) and their subject (e.g., describing product/service, funding needs, importance of a problem, expressing appreciation). We likewise

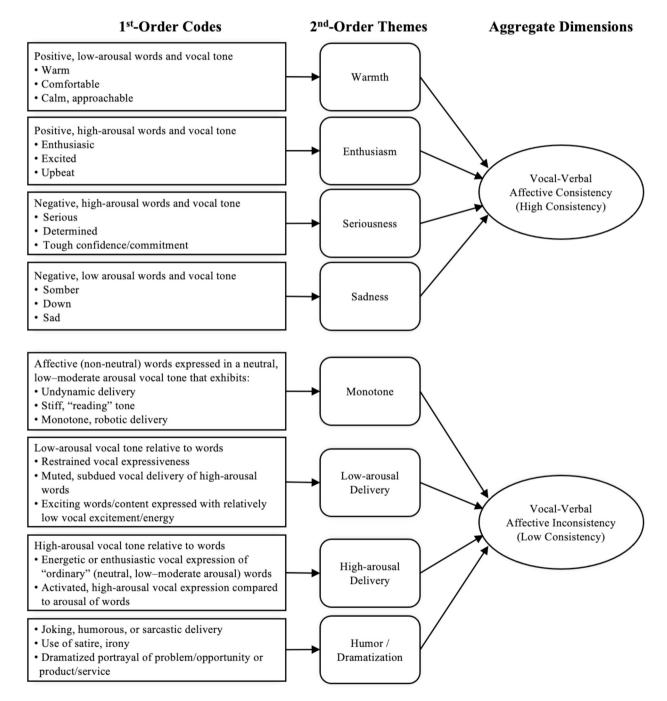


Fig. 3. Data structure: Inductive analysis of cross-channel affective consistency across verbal and vocal expressions (Study 2).

noted the valence and arousal with which these words were expressed vocally and assigned codes to describe their affective nature (e. g., excited, subdued, monotone, serious). This coding of the verbal and vocal expressions in each segment played an intermediary role in helping us interpret the nature of their (in)consistency (high or low CCAC) and assign first-order codes, accordingly. For example, some high CCAC pitch segments conveyed positive, high-arousal expressions of excitement or enthusiasm in both words and vocal intonation (i.e., "enthusiasm"), whereas some low CCAC pitch segments expressed high-arousal words in a relatively muted, low-arousal vocal tone (i.e., "low-arousal delivery"). We documented these first-order codes in a spreadsheet (cf. Williams and Shepherd, 2016), with a grouping of rows for the low/high CCAC segments within a given pitch, and columns detailing each first-order code.

Next, we engaged in axial coding, where we aggregated similar first-order codes as indicative of separate second-order themes (Corbin and Strauss, 2015; Gioia et al., 2013; Locke, 2001). To aid this process, we arranged similar first-order codes next to each other in our spreadsheet. Following a process of constant comparison (Lincoln and Guba, 1985), we combined labels for similar codes where they appeared equivalent, ensuring that each first-order code was distinct. Like the first-order coding, our axial coding was iterative, constantly comparing each code against others, reanalyzing and updating first-order codes and second-order themes as new insights emerged (Corbin and Strauss, 2015; Glaser and Strauss, 1967). For example, some high CCAC pitch segments were expressed in a positive and low–moderate-arousal manner across words and vocal intonation (e.g., warm, comfortable, calm), which we grouped as representing a high CCAC theme of "warmth." Our second-order themes represent different manifestations of two aggregate dimensions: high vocal-verbal CCAC and low vocal-verbal CCAC. Fig. 3 provides a visual representation of the final data structure (consistent with Gioia et al., 2013), demonstrating each first-order code and their grouping into second-order themes that represent different manifestations of high vocal-verbal CCAC and low vocal-verbal CCAC.

5.2. Findings: vocal-verbal cross-channel affective consistency

High vocal-verbal CCAC was communicated in different ways. These posed different manifestations of high CCAC between the words used in a pitch (verbal expressions) and their vocal intonation (vocal expressions) in expressions conveying warmth, enthusiasm, seriousness, or sadness (see Fig. 4 for exemplar plots of each).

5.2.1. Warmth

Some high vocal-verbal CCAC pitches involved positive, low-arousal words (e.g., "grateful," "appreciate," "hope") delivered in a correspondingly warm, comfortable, and calm vocal tone (i.e., positive, low-arousal). For example, this warmth type of high vocal-verbal CCAC was evident in a film director's pitch, where he described positive aspects of his inspiration for his upcoming film and appreciation for backers in a positive, warm tone: "I am a music video director and I'm here to discuss with you [our] project ... so you have a much better sense of what we're trying to achieve. ... Whether you can give a little or a lot, every bit really helps and takes us one step closer to completing this project. Thank you so much for your consideration and time." Another pitch similarly described the team's positive feelings about their project and that they "want the opportunity to share it with the world. Thank you for this opportunity and thank you for your pledge." An art mural project likewise exhibited warmth in describing their progress and intended impact in a corresponding vocal tone: "This mural project is about celebrating those artists. The murals are really special. ... We've already completed one and we hope to have your help to complete another."

5.2.2. Enthusiasm

Other pitches exhibited high vocal-verbal CCAC by expressing positive, high-arousal words (e.g., "passion," "excited," "amazing," "thrilled") in a likewise excited, enthusiastic vocal tone (i.e., positive, high-arousal). For example, a theater company seeking to expand an apprentice program used an enthusiastic tone while explaining its positive trajectory and impact: "The program has grown exponentially. ... This campaign is your chance to become part of the magic, to bolster a vital artistic mission, champion young artists on the voyage of discovery, and cultivate a program that is changing lives. ... The program itself is a remarkable achievement." This enthusiasm across verbal and vocal channels of expression continued in their "inviting [backers] to be part of the growth and education of these amazing young artists of tomorrow." As another example, a filmmaker expressed enthusiasm for his proposed documentary about the Burning Man festival and its "life-changing" impact in an enthusiastic vocal tone: "It is the ultimate in creative expression. ... 50,000 people gather in the Black Rock Desert to build their version of the greatest city on earth. ... With you, we can make this happen."

5.2.3. Seriousness

A third type of high vocal-verbal CCAC took the form of *seriousness* in pitch words and vocal expression. In pitches displaying this type of consistency, negative, high-arousal words (e.g., "serious," "critical," "difficult") were expressed in a similarly serious, determined vocal tone (i.e., negative, high-arousal). For example, some pitches emphasized a problem that entrepreneurs sought to address and the importance of addressing it. When pitching a television show idea, the writer/director conveyed its themes surrounding an important social problem in a serious vocal tone, noting that it tackles "a very serious argument, which is immigrant discourse ... I don't want to just entertain people, I also want to educate them."

Seriousness was also evident in pitches highlighting costs and financial needs. A pitch for an independent art show spoke in a serious, determined vocal tone when detailing a variety of costs they need covered for the show to proceed: "We need your help ... Your donations are going to help cover our rental fee, postage for all of the catalogs, and our printing costs." A pitch for a video game similarly communicated the negative setting of the game surrounding "death and decay" amid a zombie apocalypse using a serious,

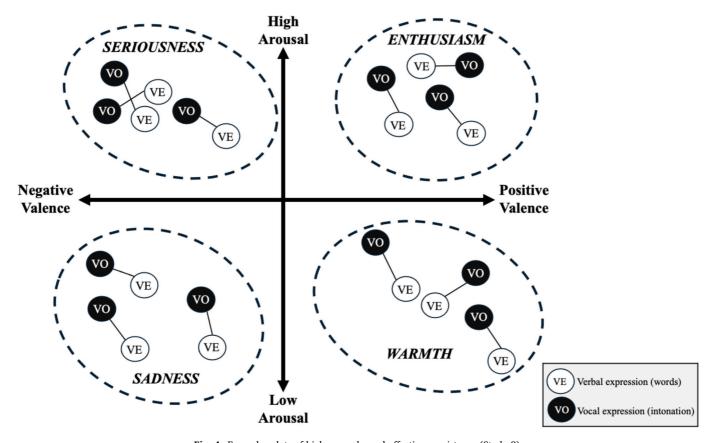


Fig. 4. Exemplar plots of high cross-channel affective consistency (Study 2).

negative vocal tone. He continued with this tone when explaining importance of crowdfunder contributions to distribute the game: "The game is finished and ready for print. But we can only do this with your help."

5.2.4. Sadness

Finally, high vocal-verbal CCAC manifested in the form of negative, low-arousal ("sad") words (e.g., "difficult," "unfortunately," "disappointed") spoken in a similarly sad, somber vocal tone (i.e., negative, low-arousal). Unlike the other high vocal-verbal CCAC themes, this "sadness" theme relatively rare and linked to poorer outcomes: of the 50 pitches with the highest CCAC, only three included segments exhibiting sadness and none were successful in reaching their funding goal. Illustrating this theme, one pitch discussed disheartening aspects surrounding declining attendance at classical music concerts in a sad vocal tone: "I don't really like going to classical music concerts. ... I don't like the experience. I don't like the way it's put on. I don't like that the music happens on stage and that the performers don't get to interact with audience. I don't like how formal it is. I don't like how cold it can be. And I'm not alone in that. Classical music—the industry is in really bad shape right now. I think a lot of the reason is the experience that they're selling isn't one that people are interested in anymore." Similarly illustrating this sadness theme in a pitch for a book and public speaking tour about "the rippling effects of suicide," the author explained this topic and his personal connection to it in a sad vocal tone: "It's hard to see that people can't find beauty [in life]. ... This book I'm working on is not so much a prevention of suicide but the effects that it has on family members. I have seen shells of people that I once knew who used to be so full of life."

5.3. Findings: Vocal-verbal cross-channel affective inconsistency

Our inductive inquiry into the pitches with the lowest degree of vocal-verbal CCAC surfaced four themes relating to this inconsistency: monotone, humor/dramatization, low-arousal delivery, and high-arousal delivery (see Fig. 5 for exemplar plots of each).

5.3.1. Monotone

Some low vocal-verbal CCAC (inconsistency) pitches were delivered with a relatively monotone vocal expression that was stiff and undynamic, thus failing to vocally convey the affective content of the words in the pitch. For example, an entrepreneur used a monotone (i.e., neutral valence, low-to-moderate-arousal) voice throughout their pitch, including when delivering positive language, such as the benefits of their app, which "provides an easy and accessible way to meet people ... [making] new connections easy and spontaneous, while keeping you in control." Similarly, an entrepreneur communicated a vision for "putting together a very special newspaper" and thanked potential backers for their "support and allowing [the team] to make [their] goal a reality" but delivered this positive message in a monotone voice. Another entrepreneur used a monotone voice despite the overall negativity and seriousness of the words in the pitch, explaining her dedication to helping women escape negative life circumstances by employing them in her social venture: "My eyes were opened to the cycle of poverty and its devastating effects. ... I hope you join me on this journey, because nobody asks for a broken life" (negative, moderate—high-arousal words; neutral, low-arousal vocal tone).

5.3.2. Low-arousal delivery

Low vocal-verbal CCAC (inconsistency) also manifested in *low-arousal delivery*, where high-arousal words were spoken in relatively low-arousal vocal tone that was subdued and comparatively lacking in energy. As an example of low-arousal delivery, one entrepreneur described his excitement about a video game he developed: "I really love playing the game split-screen with my friends and I am excited to bring it to the community. ... [Making this game] is a dream that I have had for a very long time." However, his vocal tone was low-arousal and thus inconsistent with the excitement (positive, high-arousal) of his words. An artist likewise used a low-arousal vocal tone when describing her enjoyment and enthusiasm about an adult coloring book she made with her original art, stating, "I have always enjoyed sharing my artwork with friends and family and now I want it to share it with you ... to inspire fun," and that "it would mean the world" if pitch recipients bought her book (positive, high-arousal words; positive, low-arousal vocal tone). A movie writer/director likewise exhibited low-arousal delivery when describing the societal importance of its key themes: "The message behind [the movie] is so powerful. Bullying is such a huge problem we are dealing with. ... It means a lot that we get to make a movie with such a strong message, one that we can use to bring awareness to bullying and abuse" (negative, high-arousal words; moderately positive, low-arousal vocal tone).

5.3.3. High-arousal delivery

Conversely, other entrepreneurs used a high-arousal vocal tone, even when expressing relatively low-arousal words. Whereas the other forms of low vocal-verbal CCAC (inconsistency) were generally related to poor funding outcomes, this *high-arousal delivery* was often associated with funding success. Illustrating this, a high-arousal vocal tone was prevalent in a pitch seeking funding to build a skate park. This pitch used an excited (positive, high-arousal) vocal tone not only in segments with excited language about "making this dream happen" (positive, high-arousal), but also in segments with lower-arousal, more "ordinary" language (neutral, low-moderate-arousal words) about the team's efforts rallying support by going "door to door with the kids for the whole summer ... and having fundraisers," and when explaining setbacks working with local municipal government: "The city said they weren't in the market for a skate park ... So what are [we] going to do, quit?" (slightly negative, moderate-arousal words spoken in a positive, high-arousal vocal tone, suggesting their continued motivation). Similarly, artists pitching an art festival used an enthusiastic, high-arousal vocal tone not only when explaining that the festival will be a "really exciting experience" and describing the "inspiring" artists involved (positive, high-arousal words), but also when discussing relatively mundane minutiae (neutral, low-moderate-arousal words) about the team's experience (e.g., "over the last several years we have worked together on various projects and performances"), the event

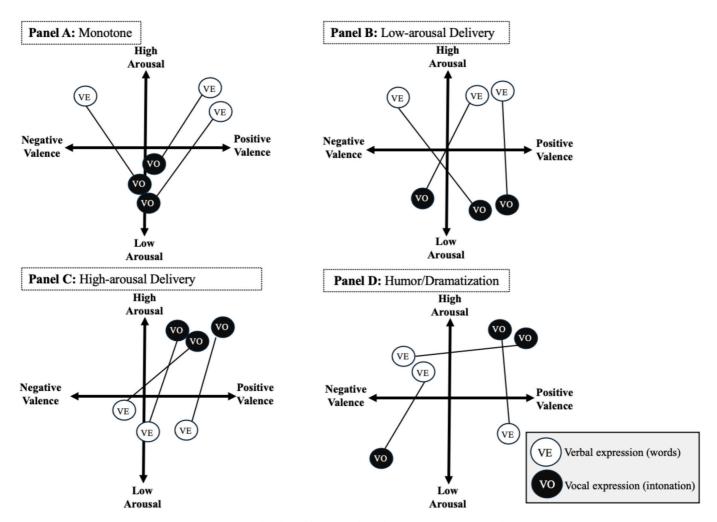


Fig. 5. Exemplar plots of low cross-channel affective consistency (Study 2).

location, planned exhibits (e.g., "we will be converting this space into an art studio"), and when detailing resource requirements to justify their need for funding, which together comprised the bulk of the pitch.

5.3.4. Humor/dramatization

Finally, low vocal-verbal CCAC (inconsistency) also manifested in humorous or otherwise dramatized vocal expressions, in which the tone of voice deviated from the affective content of the words spoken. Unlike the other themes, humor/dramatization did not follow a distinct pattern of valence and arousal differences (see Fig. 5). This variability aligns with prior communication research, which shows that humor and dramatization often involve intentional mismatches between verbal content and nonverbal expressions/cues (e.g., Jacob et al., 2016).

The *humor/dramatization* theme manifested in jokes or sarcastic expressions when introducing the project team or asking for money, as well as dramatic portrayals of a scenario to illustrate a problem or demonstrate the product or service. Exhibiting this, one pitch playfully acted out how backers might enthusiastically share and back the project: "Let's take a look at these awesome rewards. ... A limited-edition t-shirt, how cool is that? I have no choice but to support it now!" (positive, moderate–high-arousal words; positive, extremely high-arousal vocal tone). A pitch for a music album likewise demonstrated humor/dramatization through its frequent use of jokes, including when the musician introduced himself, "I'm just now waking up. This is my room. I know, Mom! It's a mess!" and sarcastically describing his need for money: "Apparently making a record costs money. Who knew? ... These bills keep adding up. I don't remember using electricity, but apparently, I did!" (negative, moderate-arousal words; positive, high-arousal vocal tone). An author similarly exhibited humor/dramatization when pitching his self-help book in a deadpan, self-deprecating style. Reflecting this, he spoke in a negative, low-arousal vocal tone throughout his pitch, including when describing the book and his need for funding: "Do you feel like nobody likes you, or cares about you, or wants you around? Well, I have good news. I am writing a [self-help] book. ... There is a problem with the book, it's that it's not written yet. Writing takes time, and time is money, and I don't have any of that" (negative, moderate-arousal words; negative, low-arousal vocal tone). Although most pitches featuring humor/dramatization typically raised only nominal amounts and were thus unsuccessful, there were some exceptions, suggesting that astute or well-placed use of this form of low vocal-verbal CCAC (inconsistency) can, in some instances, contribute to a compelling pitch.

5.4. Study 2 discussion

While Study 1 supports the benefits of high vocal-verbal CCAC and the detriments of low vocal-verbal CCAC (inconsistency) in crowdfunding pitches, Study 2 complements this by identifying how they manifest in practice. In surfacing these forms of high and low CCAC, we show that the words in a pitch may influence funders differently depending on their vocal expression. This is noteworthy, considering a wealth of entrepreneurial pitch research that has scrutinized the words used in pitches but fails to jointly capture differences in how these words are expressed vocally (e.g., Anglin et al., 2018a, 2018b; Parhankangas and Renko, 2017).

Our inductive inquiry surfaced four types of high vocal-verbal CCAC and four types of low vocal-verbal CCAC (inconsistency). Affective consistency manifested in different combinations of valence and arousal, the two dimensions of affect (Russell et al., 2003). These included consistency across verbal and vocal expressions that were positive and low-moderate-arousal (warmth), positive and high-arousal (enthusiasm), negative and high-arousal (seriousness), and negative and low-arousal (sadness). While various combinations of valence and arousal in emotional expressions within a funding pitch can prove successful in raising funds, we found that consistency in expressing sadness across verbal and vocal expressions was associated with low crowdfunding performance. This aligns with crowdfunding research demonstrating that frequent facial (Warnick et al., 2021) or vocal (Allison et al., 2022b) expressions of sadness are negatively related to funding.

The inconsistency themes we identified represent different forms of affective misalignment between the affect of words spoken and their vocal expression. One way this manifested was in humor or dramatization. Whereas some entrepreneurship research has begun to uncover some benefits of humor in promoting performance in entrepreneurial teams by reducing stress (Gopalkrishnan, 2017) and helping them cope with environmental uncertainty (Hmieleski and Cole, 2022), our findings suggest that frequent use of humor/dramatization can detract from funding success as a form of low CCAC (inconsistency). The monotone and low-arousal delivery inconsistency themes were likewise associated with low funding performance, underscoring the importance of employing a dynamic vocal tone when pitching and, for pitches with enthusiastic content, ensuring that this enthusiasm is expressed not only in one's words but also one's vocal intonation. In contrast with the other forms of inconsistency, the high-arousal delivery theme illustrates a positive form of inconsistency wherein using high-arousal vocal expressions (e.g., energetic, passionate, activated expressions) appears largely beneficial, even when speaking relatively mundane or ordinary words. Comparing this with the negative outcomes associated with low-arousal delivery further underscores the benefits of vocal arousal, though prior research suggests that taking this to an extreme via overly passionate expressions might prove detrimental beyond a certain point (Allison et al., 2022b; Warnick et al., 2021).

6. Discussion

6.1. Contributions

6.1.1. Cross-channel affective consistency: A multidimensional, multichannel framework of verbal and nonverbal expression

Our theorizing and findings contribute meaningfully to both entrepreneurship research and practice by advancing a multidimensional and multichannel framework for understanding affective communication. First, we extend cross-channel consistency theory by introducing an affective lens grounded in the two-dimensional model of affect, which posits that all expressions are characterized

and processed in terms of valence and arousal (Russell and Barrett, 1999; Russell et al., 2003). This integration offers a generalizable model for studying cross-channel consistency across various settings, bridging previously siloed streams of entrepreneurship research that have typically studied verbal and nonverbal expressions in isolation. While emerging research has begun to investigate how images (Barberá-Tomás et al., 2019) or body gestures (Clarke et al., 2019) complement verbal content in entrepreneurial pitches, these efforts have lacked a unified theoretical basis for comparing consistency across channels. While we focus on verbal and vocal channels due to their intrinsic linkage in speech, our development of cross-channel affective consistency (CCAC) provides a theoretically grounded and broadly applicable framework across various expression channels.

Moreover, by examining both valence and arousal, we offer a more holistic view of affective expression, moving beyond the field's tendency to focus only on valence or specific emotions. Prior research has studied a range of discrete emotions in entrepreneurial pitches, including passion (Allison et al., 2022b; Chen et al., 2009; Davis et al., 2017; Jachimowicz et al., 2019; Shane et al., 2020; Warnick et al., 2018), happiness/joy (Jiang et al., 2019), fear (Stroe et al., 2020), anger (Warnick et al., 2021), and sadness (Davis et al., 2021). While these studies offer important insights, many affective expressions do not directly reflect any individual emotion. Accordingly, our approach complements this work by offering more holistic, granular perspective that captures affect as both multidimensional (i.e., valence and arousal) and multichannel (i.e., verbal and vocal expressions).

6.1.2. Perceived preparedness and perceived authenticity

Second, we deepen understanding of how cross-channel affective consistency (CCAC) influences funding performance by examining its impact on funders' perceptions of entrepreneurial preparedness and authenticity. While prior research in entrepreneurship and other fields has established the value of consistency in communication, less is known about the mechanisms underlying its positive effects. Our findings show that CCAC enhances perceived preparedness, a critical factor in funding decisions, and that preparedness mediates the relationship between CCAC and funding performance. This extends prior research that has separately examined pitch content (Chen et al., 2009; Pollack et al., 2012) and vocal expression (Allison et al., 2022b) as independent predictors of perceived preparedness. We demonstrate that perceived preparedness is not only shaped by what entrepreneurs say or how they say it, but also by the affective consistency between their verbal and vocal expressions.

We also theorized and found that cross-channel affective consistency (CCAC) enhances perceived authenticity, consistent with research linking cross-channel inconsistencies to perceptions of emotional dissonance or inauthenticity (Gillis and Nilsen, 2017; ten Brinke and Weisbuch, 2020). However, perceived authenticity did not significantly predict funding performance in our study. This contrasts with prior findings that link authenticity to positive funding outcomes (Oo and Allison, 2024; Radoynovska and King, 2019), suggesting that perceived preparedness may represent a more salient determinant of funding.

6.1.3. Manifestations and boundary conditions of cross-channel affective consistency

Third, we identified nuanced manifestations and boundary conditions of cross-channel affective consistency (CCAC). While our findings generally support the positive impact of high CCAC and the detrimental effects of low CCAC, our inductive analysis reveals noteworthy exceptions. For instance, consistent expressions of sadness—a form of low-arousal negative affect—were associated with lower funding performance, indicating that some affective expressions, though consistent, may prove detrimental. Conversely, low CCAC characterized by high-arousal vocal tones paired with relatively neutral or mundane verbal content (low–moderate arousal) tended to enhance funding performance.

These findings refine our understanding of arousal inconsistency, suggesting that while low vocal arousal relative to verbal content tends to diminish performance, high vocal arousal can amplify it. This aligns with the nonverbal dominance hypothesis, which holds that nonverbal cues carry disproportionate influence when channels conflict (Burgoon et al., 2021; Mehrabian and Wiener, 1967; Mehrabian, 1972). We also complement research showing that high-arousal expressions, which are indicative of an entrepreneur's passion, typically encourage funding (e.g., Allison et al., 2022b; Cardon et al., 2017; Jachimowicz et al., 2019; Li et al., 2017; Warnick et al., 2018). Our findings build upon this by suggesting that expressing passion through high-arousal vocal expressions, rather than in one's words alone, may be especially persuasive.

6.2. Practical implications

Our theorizing and findings yield insights for entrepreneurs, mentors, educators, and funders. At the heart of our paper is the concept of CCAC, examining the alignment of affective (i.e., emotional) expression across different channels of communication. While CCAC can encompass consistency across different verbal and nonverbal (e.g., vocal, visual, and bodily expressions), we specifically focused on consistency between verbal content and vocal tone in entrepreneurial pitches given their intrinsic linkage in speech and centrality in pitch delivery. Most notably, our findings highlight the importance of ensuring consistency between verbal content and vocal delivery to enhance perceptions of authenticity and preparedness, which in turn can significantly influence funding outcomes. For entrepreneurs, CCAC may yield long-term benefits beyond a single pitch. By aligning vocal tone with verbal messaging, entrepreneurs can foster perceptions of authenticity as a means to build trust with new and existing stakeholders. Moreover, because consistency can be applied across various types of communication, entrepreneurs may develop a broadly applicable habit of conveying preparedness and authenticity through CCAC when preparing for all forms of communication, such as investor meetings, team leadership, and customer engagement.

These findings and insights also carry implications for entrepreneurship educators and mentors. We recommend incorporating CCAC into pitch training programs, utilizing tools such as video playback to help entrepreneurs recognize and refine their delivery. Emphasizing affective consistency can complement existing training on pitch structure and content, offering a more holistic approach

to persuasive communication. For investors and accelerators, awareness of these dynamics may sharpen evaluation criteria. Subtle affective cues, such as mismatches between vocal tone and message content, can shape judgments of entrepreneurs. Recognizing these dynamics may improve decision-making and reduce bias in pitch evaluations.

Our findings underscore the importance of taking stock of pitch content and delivering it in an affectively consistent manner. For example, when delivering a pitch with enthusiastic, exciting language, entrepreneurs should speak with a correspondingly enthusiastic vocal tone. Similarly, serious or otherwise negative content should be delivered with a corresponding tone that effectively conveys this seriousness. Taking a deeper dive, our analysis also provided some noteworthy exceptions to the general benefits of consistency between words and vocal intonation. While such consistency in expressing warmth, enthusiasm, or seriousness was generally beneficial—highlighting that there are various ways to deliver a compelling pitch—entrepreneurs should avoid consistent sadness across their words and vocal intonation, which was linked with lower funding performance. Importantly, inconsistency between words and vocal intonation should generally be avoided. For example, speaking with a monotone or low-arousal voice while conveying emotionally charged content can undermine the message, harming an entrepreneur's funding prospects. Likewise, excessive use of humor, sarcasm, or dramatization may detract from pitch effectiveness. That said, our findings reveal one exception: using an energetic (i.e., high-arousal) vocal tone while communicating relatively ordinary (i.e., neutral, low-moderate arousal) content can enhance funding performance. This suggests that vocal energy may amplify the impact of otherwise ordinary messages, potentially signaling passion or urgency, thereby rallying support.

Finally, our results emphasize the central role of preparedness in driving funding success. While perceptions of preparedness are shaped by an array of factors, including information quality, pitch structure, body language, facial expressions, and vocal intonation (Allison et al., 2022b; Chen et al., 2009; Pollack et al., 2012), our findings suggest that ensuring consistency across communication channels is a valuable tactic that should be integrated with other elements of effective pitch delivery.

6.3. Limitations and future research opportunities

Our contributions should be considered in light of certain limitations, some of which also point to promising avenues for future research. First, while we developed and focused on the construct of CCAC, there are other possibilities for conceptualizing and measuring consistency. We chose to operationalize CCAC in terms of valence and arousal, drawing on the two-dimensional model of affect for its theoretical coherence and applicability across diverse expression channels. This dimensional approach enables a continuous and generalizable framework for studying communication through an affective lens. That said, future research might explore cross-channel consistency in terms of discrete emotions, which despite sharing similar affective dimensions, may exert distinct and context-dependent effects. As a notable example, fear and anger both involve negative valence and high arousal, yet they exert differential effects in social discourse (Lerner and Keltner, 2001; Russell, 2009).

Second, our investigation focused specifically on verbal and vocal expressions in entrepreneurial funding pitches. This allowed for depth and precision in examining affective alignment in speech, but often other nonverbal channels, such as facial expressions (Warnick et al., 2021), gestures (Clarke et al., 2019), and images (Carradini and Fleischmann, 2023), play an important role in pitch delivery and rhetoric more broadly. Recognizing this, we encourage future research to consider how consistency across such channels might shape how funders or other stakeholders perceive and respond to an entrepreneur. In addition, our study was conducted at the campaign level, which aligns with our outcome of interest—funding performance—and with prior pitch research. To maximize validity, we included only audio segments with classification confidence above the widely accepted threshold in content analysis research (0.70), which constrained our ability to probe beyond the pitch level. Omitting low-confidence audio segments introduces temporal discontinuities in our vocal channel data. Recognizing this, we note that examining parts of pitches (e.g., beginning, middle, end) may reveal expression patterns that explain outcomes beyond the pitch-level relationships we studied. Future research might use laboratory experiments to provide the controls necessary to probe such within-pitch patterns.

Next, our focus on campaign-level outcomes does not account for individual differences among funders that might affect their response to cross-channel affective consistency (CCAC). Future research could examine how funder characteristics (e.g., experience, gender, goals, etc.), context (e.g., reward structure, venture stage, resources sought), and characteristics of the entrepreneur (e.g., gender, race, age, experience, appearance, etc.) might influence responses to CCAC. Extending this work to other pitch contexts and audiences, such as venture capital, angel investment, etc., would enhance generalizability. Likewise, it is important to note that the influence of CCAC is observable directly upon funds pledged, but only indirectly upon whether the campaign goal is met (via funds pledged). While we ascribe this to the loss of variance between a continuous and dichotomous variable, controlled conditions may be necessary to determine whether CCAC has a meaningful effect on a campaign reaching its funding goal.

Finally, while we uncover manifestations of high and low cross-channel affective consistency (CCAC), we did not investigate why some entrepreneurs demonstrate a greater degree of CCAC than others. Possible explanations include differences in impression management, pitch preparation, the entrepreneur's affective state (e.g., nervousness, anxiety, ambivalence), or individual differences in emotional expressiveness, charisma, or personality. These remain important questions for future research.

7. Conclusion

Entrepreneurial pitches are not merely vehicles for conveying information, they are rhetorical performances that shape perceptions and mobilize support. In this paper, we introduced the construct of cross-channel affective consistency (CCAC), offering a theoretically grounded and empirically robust framework for understanding how affective alignment across channels of expression influences funder perceptions and funding outcomes. By integrating cross-channel consistency theory with the two-dimensional model of affect,

we show that CCAC across verbal and vocal expressions enhances perceptions of entrepreneurs' authenticity and preparedness and improves funding performance. Our findings reveal that CCAC manifests in a variety of ways and is not uniformly beneficial. While consistency in expressions of enthusiasm, warmth, and seriousness generally improve funding outcomes, consistent expressions of sadness may hinder performance. Moreover, strategic use of cross-channel inconsistency—such as high-arousal vocal delivery of otherwise neutral or subdued, mundane content—can amplify impact.

Taken together, this research advances a more nuanced understanding of entrepreneurial rhetoric, highlighting the importance of aligning what is said with how it is said. In doing so, we offer a generalizable framework for multimodal affective communication, contribute to theory on entrepreneurial rhetoric, and provide actionable insights for entrepreneurs, educators, and funding pitch evaluators. As research on entrepreneurs' expressions and multimodal analytics continue to evolve, future research can build on this foundation to explore the role of cross-channel affective consistency across broader communication channels, contexts, and audiences in shaping entrepreneurial success.

CRediT authorship contribution statement

Benjamin J. Warnick: Conceptualization, Data curation, Qualitative and quantitative methodology and analysis, Writing – original draft, Writing – review and editing, Visualization. **Thomas H. Allison:** Conceptualization, Data curation, Quantitative methodology and analysis, Software, Writing – review and editing. **Blakley C. Davis:** Conceptualization, Data curation, Qualitative methodology and analysis, Data curation, Writing – original draft, Writing – review and editing.

Data availability

Data is unsuitable to post as they are publicly accessible crowdfunding pitches whose copyright is the property of the creator entrepreneurs.

References

Aldrich, H.E., Fiol, C.M., 1994. Fools rush in? The institutional context of industry creation. Acad. Manag. Rev. 19 (4), 645-670.

Allison, T.H., McKenny, A.F., Short, J.C., 2013. The effect of entrepreneurial rhetoric on microlending investment: an examination of the warm-glow effect. J. Bus. Ventur. 28 (6), 690–707.

Allison, T.H., Davis, B.C., Webb, J.W., Short, J.C., 2017. Persuasion in crowdfunding: an elaboration likelihood model of crowdfunding performance. J. Bus. Ventur. 32, 707–725.

Allison, T.H., Anglin, A.H., Davis, B.C., Oo, P., Seyb, S.K., Short, J.C., Wolfe, M.T., 2022a. Standing out in a crowd of victim entrepreneurs: how entrepreneurs' language-based cues of personality traits affect public support. J. Small Bus. Manag. 1–40.

Allison, T.H., Warnick, B.J., Davis, B.C., Cardon, M.S., 2022b. Can you hear me now? Engendering passion and preparedness perceptions with vocal expressions in crowdfunding pitches. J. Bus. Ventur. 37 (3), 106193.

André, E., Bevacqua, E., Heylen, D., Niewiadomski, R., Pelachaud, C., Peters, C., Poggi, I., Rehm, M., 2011. Non-verbal persuasion and communication in an affective agent. In: Petra, P., Pelachaud, C., Cowie, R. (Eds.), Emotion-oriented Systems. Springer, London, pp. 585–608.

Anglin, A.H., Pidduck, R.J., 2022. Choose your words carefully: harnessing the language of crowdfunding for success. Bus. Horiz. 65 (1), 43-58.

Anglin, A.H., Allison, T.H., McKenny, A.F., Busenitz, L.W., 2014. The role of charismatic rhetoric in crowdfunding: an examination with computer-aided text analysis. In: Social Entrepreneurship and Research Methods, vol. 9. Emerald Group Publishing Ltd, pp. 19–48.

Anglin, A.H., Short, J.C., Drover, W., Stevenson, R.M., McKenny, A.F., Allison, T.H., 2018a. The power of positivity? The influence of positive psychological capital language on crowdfunding performance. J. Bus. Ventur. 33 (4), 470–492.

Anglin, A.H., Wolfe, M.T., Short, J.C., McKenny, A.F., Pidduck, R.J., 2018b. Narcissistic rhetoric and crowdfunding performance: a social role theory perspective. J. Bus. Ventur. 33 (6), 780–812.

Anglin, A.H., Reid, S.W., Short, J.C., 2023. More than one way to tell a story: a configurational approach to storytelling in crowdfunding. Entrep. Theory Pract. 47 (2), 461–494.

Appel, M., Lugrin, B., Kühle, M., Heindl, C., 2021. The emotional robotic storyteller: on the influence of affect congruency on narrative transportation, robot perception, and persuasion. Comput. Hum. Behav. 120, 106749.

Arana, J.M., Gordillo, F., Darias, J., Mestas, L., 2020. Analysis of the efficacy and reliability of the Moodies app for detecting emotions through speech: Does it actually work? Comp. Human Behav. 104, 106156.

Bailey, E.R., Levy, A., 2022. Are you for real? Perceptions of authenticity are systematically biased and not accurate. Psychol. Sci. 33 (5), 798-815.

Banse, R., Scherer, K.R., 1996. Acoustic profiles in vocal emotion expression. J. Person. Soc. Psych. 70 (3), 614-636.

Barberá-Tomás, D., Castelló, I., De Bakker, F.G., Zietsma, C., 2019. Energizing through visuals: how social entrepreneurs use emotion-symbolic work for social change. Acad. Manag. J. 62 (6), 1789–1817.

Barrett, L.F., Mesquita, B., Gendron, M., 2011. Context in emotion perception. Curr. Dir. Psychol. Sci. 20 (5), 286-290.

Becker, T.E., Robertson, M.M., Vandenberg, R.J., 2019. Nonlinear transformations in organizational research: possible problems and potential solutions. Org. Res. Methods 22 (4), 831–866.

Beyond Verbal, 2019. Guide to moods and attitudes: understanding Beyond Verbal's engine emotional definitions. Retrieved from. http://developers.beyondverbal.com/pdf/APIv5dosc/Output Definitions V5.pdf.

Bliss-Moreau, E., Williams, L.A., Santistevan, A.C., 2020. The immutability of valence and arousal in the foundation of emotion. Emotion 20 (6), 993-1004.

Bradley, M.M., Lang, P.J., 1999. Affective Norms for English Words (ANEW): Instruction Manual and Affective Ratings. Technical Report C-1. Center for Research in Psychophysiology, Univ. of Florida.

Burgoon, J.K., Manusov, V., Guerrero, L.K., 2021. Nonverbal Communication. Routledge.

Cappa, F., Pinelli, M., Maiolini, R., Leone, M.I., 2021. "Pledge" me your ears! The role of narratives and narrator experience in explaining crowdfunding success. Small Bus. Econ. 57 (2), 953–973.

Cardon, M.S., Mitteness, C., Sudek, R., 2017. Motivational cues and angel investing: interactions among enthusiasm, preparedness, and commitment. Entrep. Theory Pract. 41 (6), 1057–1085.

Carradini, S., Fleischmann, C., 2023. The effects of multimodal elements on success in Kickstarter crowdfunding campaigns. J. Bus. Tech. Commun. 37 (1), 1–27. Chan, C.R., Park, H.D., 2015. How images and color in business plans influence venture investment screening decisions. J. Bus. Ventur. 30 (5), 732–748.

Chandler, J.A., Wolfe, M.T., Oo, P.P., 2025. Striking a balance: the effect of capability and character reputation claims on crowdfunding performance. Entrep. Theory Pract. 49, 461–501.

Chen, X.P., Yao, X., Kotha, S., 2009. Entrepreneur passion and preparedness in business plan presentations: a persuasion analysis of venture capitalists' funding decisions. Acad. Manag. J. 52 (1), 199–214.

Cheshin, A., Rafaeli, A., Bos, N., 2011. Anger and happiness in virtual teams: emotional influences of text and behavior on others' affect in the absence of non-verbal cues. Organ. Behav. Hum. Decis. Process. 116 (1), 2–16.

Chu, M., Hagoort, P., 2014. Synchronization of speech and gesture: evidence for interaction in action. J. Exp. Psychol. Gen. 143 (4), 1726.

Clarke, J., 2011. Revitalizing entrepreneurship: how visual symbols are used in entrepreneurial performances. J. Manag. Stud. 48 (6), 1365-1391.

Clarke, J.S., Cornelissen, J.P., Healey, M., 2019. Actions speak louder than words: how figurative language and gesturing in entrepreneurial pitches influences investment judgments. Acad. Manag. J. 62, 335–360.

Corbin, J., Strauss, A., 2015. Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 4th ed. Sage Publications, Thousand Oaks, CA

Cornelissen, J.P., Clarke, J.S., 2010. Imagining and rationalizing opportunities: inductive reasoning and the creation and justification of new ventures. Acad. Manag. Rev. 35 (4), 539–557.

Cornelissen, J.P., Clarke, J.S., Cienki, A., 2012. Sensegiving in entrepreneurial contexts: the use of metaphors in speech and gesture to gain and sustain support for novel business ventures. Int. Small Bus. J. 30 (3), 213–241.

Davis, B.C., Hmieleski, K.M., Webb, J.W., Coombs, J.E., 2017. Funders' positive affective reactions to entrepreneurs' crowdfunding pitches: the influence of perceived product creativity and entrepreneurial passion. J. Bus. Ventur. 32 (1), 90–106.

Davis, B.C., Warnick, B.J., Anglin, A.H., Allison, T.H., 2021. Gender and counterstereotypical facial expressions of emotion in crowdfunded microlending. Entrep. Theory Pract. 45 (6), 1339–1365.

De Houwer, J., 2003. The extrinsic affective Simon task. Exp. Psychol. 50 (2), 77.

Eisenhardt, K.M., Graebner, M.E., Sonenshein, S., 2016. Grand challenges and inductive methods: rigor without rigor mortis. Acad. Manag. J. 59 (4), 1113–1123. Eisenstein, J., Christoudias, C.M., 2004. A salience-based approach to gesture-speech alignment. In: Proceedings of the Human Language Technology Conference of the North American Chapter of the Association for Computational Linguistics: HLT-NAACL 2004, pp. 25–32.

Escudero, S.B., Anglin, A.H., Allison, T.H., Wolfe, M.T., 2025. Crowdfunding: a theory-centered review and roadmap of the multidisciplinary literature. J. Manag. https://doi.org/10.1177/01492063251328267 (Advance online publication).

Foo, M.D., Uy, M.A., Murnieks, C., 2015. Beyond affective valence: untangling valence and activation influences on opportunity identification. Entrep. Theory Pract. 39 (2), 407–431.

Gabriel, A.S., Diefendorff, J.M., 2015. Emotional labor dynamics: a momentary approach. Acad. Manag. J. 58 (6), 1804-1825.

Gafni, H., Marom, D., Sade, O., 2019. Are the life and death of an early-stage venture indeed in the power of the tongue? Lessons from online crowdfunding pitches. Strateg. Entrep. J. 13 (1), 3–23.

Galbraith, C.S., McKinney, B.C., DeNoble, A.F., Ehrlich, S.B., 2014. The impact of presentation form, entrepreneurial passion, and perceived preparedness on obtaining grant funding, J. Bus. Tech. Comm. 28 (2), 222–248.

Garcia-Garcia, J.M., Penichet, V.M., Lozano, M.D., 2017. Emotion detection: a technology review. In: Proceedings of the XVIII International Conference on Human Computer Interaction (article 8).

Garud, R., Schildt, H.A., Lant, T.K., 2014. Entrepreneurial storytelling, future expectations, and the paradox of legitimacy. Organ. Sci. 25 (5), 1479-1492.

Gillis, R.L., Nilsen, E.S., 2017. Consistency between verbal and non-verbal affective cues: a clue to speaker credibility. Cognit. Emot. 31 (4), 645-656.

Gioia, D.A., Corley, K.G., Hamilton, A.L., 2013. Seeking qualitative rigor in inductive research: notes on the Gioia methodology. Organ. Res. Methods 16 (1), 15–31. Glaser, B.G., Strauss, A.L., 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. Routledge.

Gopalkrishnan, S.S., 2017. The role of humor in startup success: the mediating role of team performance. J. Organ. Psychol. 17 (3), 9-23.

Grandey, A.A., Fisk, G.M., Mattila, A.S., Jansen, K.J., Sideman, L.A., 2005. Is "service with a smile" enough? Authenticity of positive displays during service encounters. Organ. Behav. Hum. Decis. Process. 96 (1), 38–55.

Grebelsky-Lichtman, T., 2015. Parental response to child's incongruence: verbal versus nonverbal primacy in parent–child interactions. Commun. Monogr. 82 (4), 484–509.

Grebelsky-Lichtman, T., Avnimelech, G., 2018. Immediacy communication and success in crowdfunding campaigns: a multimodal communication approach. Int. J. Commun. 12, 4178–4204.

Groth, M., Hennig-Thurau, T., Walsh, G., 2009. Customer reactions to emotional labor: the roles of employee acting strategies and customer detection accuracy. Acad. Manag. J. 52 (5), 958–974.

Hall, J.A., Horgan, T.G., Murphy, N.A., 2019. Nonverbal communication. Annu. Rev. Psychol. 70, 271–294.

Hmieleski, K.M., Cole, M.S., 2022. Laughing all the way to the bank: the joint roles of shared coping humor and entrepreneurial team-efficacy in new venture performance. Entrep. Theory Pract. 46 (6), 1782–1811.

IBM, 2023, https://cloud.ibm.com/docs/speech-to-text?topic=speech-to-text-about #about (May 2).

iMotions A/S, 2018. FACET FAQ. Retrieved from. https://help.imotions.com/hc/en-us/articles/205256321-FACET-FAQ.

iMotions Biometric Research Platform 7.1, 2018. iMotions A/S, Copenhagen, Denmark.

Jachimowicz, J.M., To, C., Agasi, S., Côté, S., Galinsky, A.D., 2019. The gravitational pull of expressing passion: when and how expressing passion elicits status conferral and support from others. Organ. Behav. Hum. Decis. Process. 153, 41–62.

Jacob, H., Kreifelts, B., Nizielski, S., Schütz, A., Wildgruber, D., 2016. Effects of emotional intelligence on the impression of irony created by the mismatch between verbal and nonverbal cues. PLoS One 11 (10), e0163211.

Jiang, L., Yin, D., Liu, D., 2019. Can joy buy you money? The impact of the strength, duration, and phases of an entrepreneur's peak displayed joy on funding performance. Acad. Manag. J. 62 (6), 1848–1871.

Johnstone, T., Scherer, K.R., 2000. Vocal communication of emotion. In: Lewis, M., Haviland, J. (Eds.), Handbook of Emotions. Guilford, New York, pp. 220–235. Keltner, D., Ellsworth, P.C., Edwards, K., 1993. Beyond simple pessimism: effects of sadness and anger on social perception. J. Pers. Soc. Psychol. 64 (5), 740–752. Kensinger, E.A., Schacter, D.L., 2006. Processing emotional pictures and words: effects of valence and arousal. Cogn. Affect. Behav. Neurosci. 6 (2), 110–126.

Kim, P.H., Buffart, M., Croidieu, G., 2016. TMI: signaling credible claims in crowdfunding campaign narratives. Group Org. Manag. 41 (6), 717–750.

Klein, K., Lim, B., Saltz, J., Mayer, D., 2004. How do they get there? An examination of the antecedents of centrality in team networks. Acad. Manag. J. 47, 952–963. Knapp, M.L., Hall, J.A., Horgan, T.G., 2014. Nonverbal Communication in Human Interaction, 8th ed. Wadsworth, Boston, MA.

Krauss, R.M., Apple, W., Morency, N., Wenzel, C., Winton, W., 1981. Verbal, vocal, and visible factors in judgments of another's affect. J. Pers. Soc. Psychol. 40 (2), 312–320.

Krippendorff, K., 2004. Reliability in content analysis: some common misconceptions and recommendations. Hum. Commun. Res. 30, 411–433.

Lehman, D.W., O'Connor, K., Kovács, B., Newman, G.E., 2019. Authenticity. Acad. Manag. Ann. 13 (1), 1-42.

Lerner, J.S., Keltner, D., 2001. Fear, anger, and risk. J. Pers. Soc. Psychol. 81, 146-159.

Lewis, P.A., Critchley, H.D., Rotshtein, P., Dolan, R.J., 2007. Neural correlates of processing valence and arousal in affective words. Cereb. Cortex 17 (3), 742–748. Li, J.J., Chen, X.P., Kotha, S., Fisher, G., 2017. Catching fire and spreading it: a glimpse into displayed entrepreneurial passion in crowdfunding campaigns. J. Appl. Psychol. 102, 1075–1090.

Lincoln, Y.S., Guba, E.G., 1985. Naturalistic Inquiry. Sage.

Locke, K.D., 2001. Grounded Theory in Management Research. Sage Publications, Thousand Oaks, CA.

Luo, X., Jia, N., Ouyang, E., Fang, Z., 2024. Introducing machine-learning-based data fusion methods for analyzing multimodal data: an application of measuring trustworthiness of microenterprises. Strateg. Manag. J. 45 (8), 1597–1629.

Mack, Heather. 2017, June 22. Beyond Verbal launches API to enable voice-based emotion detection byvirtual private assistants. MobiHealthNews. Retrieved from https://www.mobihealthnews.com/content/beyond-verbal-launches-api-enable-voice-based-emotion-detection-virtual-private-assistants.

Manning, S., Bejarano, T.A., 2017. Convincing the crowd: entrepreneurial storytelling in crowdfunding campaigns. Strateg. Organ. 15 (2), 194–219.

Maor, E., Sara, J.D., Orbelo, D.M., Lerman, L.O., Levanon, Y., Lerman, A., 2018. Voice signal characteristics are independently associated with coronary artery disease. Mayo Clin. Proc. 93, 840–847.

Martens, M.L., Jennings, J.E., Jennings, P.D., 2007. Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. Acad. Manag. J. 50, 1107–1132.

McSweeney, J.J., McSweeney, K.T., Webb, J.W., Devers, C.E., 2022. The right touch of pitch assertiveness: examining entrepreneurs' gender and project category fit in crowdfunding. J. Bus. J. Bus. Ventur. 37 (4), 106223.

McSweeney, J.J., McSweeney, K.T., Allison, T.H., Anglin, A.H., 2025. The entrepreneurial pitching process: a systematic review using topic modeling and future research agenda. J. Bus. Ventur. 40 (5), 106519. https://doi.org/10.1016/j.jbusvent.2025.106519.

Mehrabian, A., 1972. Nonverbal Communication. Routledge, London.

Mehrabian, A., Wiener, M., 1967. Decoding of inconsistent communications. J. Pers. Soc. Psychol. 6 (1), 109.

Metzger, M.J., Flanagin, A.J., Eyal, K., Lemus, D.R., McCann, R.M., 2003. Credibility for the 21st century: integrating perspectives on source, message, and media credibility in the contemporary media environment. Ann. Int. Commun. Assoc. 27 (1), 293–335.

Mizroch, A. 2014, March 10. App tells you how you feel. The Wall Street Journal. Retrieved from https://www.wsj.com/articles/ SB10001424052702303824204579421242295627138

Mongrain, M., Vettese, L.C., 2003. Conflict over emotional expression: implications for interpersonal communication. Pers. Soc. Psychol. Bull. 29 (4), 545–555. Morioka, S., Osumi, M., Shiotani, M., Nobusako, S., Maeoka, H., Okada, Y., Hiyamizu, M., Matsuo, A., 2016. Incongruence between verbal and non-verbal information enhances the late positive potential. PLoS One 11 (10), e0164633.

Moss, T.W., Neubaum, D.O., Meyskens, M., 2015. The effect of virtuous and entrepreneurial orientations on microfinance lending and repayment: a signaling theory perspective. Entrep. Theory Pract. 39 (1), 27–52.

Moss, T.W., Renko, M., Block, E., Meyskens, M., 2018. Funding the story of hybrid ventures: crowdfunder lending preferences and linguistic hybridity. J. Bus. Ventur. 33 (5), 643–659.

Newcombe, M.J., Ashkanasy, N.M., 2002. The role of affect and affective congruence in perceptions of leaders: an experimental study. Leadersh. Q. 13 (5), 601–614. Niebuhr, O., Brem, A., Tegtmeier, S., 2017. Advancing research and practice in entrepreneurship through speech analysis–from descriptive rhetorical terms to phonetically informed acoustic charisma profiles. J. Speech Sci. 6 (1), 3–26.

Nielen, M.M.A., Heslenfeld, D.J., Heinen, K., Van Strien, J.W., Witter, M.P., Jonker, C., Veltman, D.J., 2009. Distinct brain systems underlie the processing of valence and arousal of affective pictures. Brain Cogn. 71 (3), 387–396.

Oo, P.P., Allison, T.H., 2024. Pitching with your heart (on your sleeve): getting to the heart of how display authenticity matters in crowdfunding. J. Small Bus. Manag. 62 (3), 1148–1186.

Oo, P.P., Állison, T.H., Sahaym, A., Juasrikul, S., 2019. User entrepreneurs' multiple identities and crowdfunding performance: effects through product innovativeness, perceived passion, and need similarity. J. Bus. Ventur. 34 (5), 105895.

Parhankangas, A., Renko, M., 2017. Linguistic style and crowdfunding success among social and commercial entrepreneurs. J. Bus. Ventur. 32 (2), 215–236. Pollack, J.M., Rutherford, M.W., Nagy, B.G., 2012. Preparedness and cognitive legitimacy as antecedents of new venture funding in televised business pitches. Entrep. Theory Pract. 36, 915–939.

Posner, J., Russell, J.A., Peterson, B.S., 2005. The circumplex model of affect: an integrative approach to affective neuroscience, cognitive development, and psychopathology. Dev. Psychopathol. 17 (3), 715–734.

Quaschning, S., Pandelaere, M., Vermeir, I., 2015. When consistency matters: the effect of valence consistency on review helpfulness. J. Comput. Mediated Commun. 20 (2), 136–152.

Radoynovska, N., King, B.G., 2019. To whom are you true? Audience perceptions of authenticity in nascent crowdfunding ventures. Organ. Sci. 30 (4), 781–802. Robinson, M.D., Storbeck, J., Meier, B.P., Kirkeby, B.S., 2004. Watch out! That could be dangerous: valence-arousal interactions in evaluative processing. Pers. Soc. Psychol. Bull. 30, 1472–1484.

Rotenberg, K.J., Simourd, L., Moore, D., 1989. Children's use of a verbal-nonverbal consistency principle to infer truth and lying. Child Dev. 60 (2), 309–322. Russell, J.A., 2009. Emotion, core affect, and psychological construction. Cognit. Emot. 23, 1259–1283.

Russell, J.A., Barrett, L.F., 1999. Core affect, prototypical emotional episodes, and other things called emotion: dissecting the elephant. J. Pers. Soc. Psychol. 76 (5),

Russell, J.A., Bachorowski, J.A., Fernández-Dols, J.M., 2003. Facial and vocal expressions of emotion. Annu. Rev. Psychol. 54, 329-349.

Sandstrom, G.M., Russo, F.A., 2010. Music hath charms: the effects of valence and arousal on recovery following an acute stressor. Music Med. 2 (3), 137–143.

Sauter, D.A., Eisner, F., Calder, A.J., Scott, S.K., 2010. Perceptual cues in nonverbal vocal expressions of emotion. Q. J. Exp. Psychol. 63 (11), 2251–2272. Schaubroeck, J., Lam, S.S., 2002. How similarity to peers and supervisor influences organizational advancement in different cultures. Acad. Manag. J. 45, 1120–1136.

Scheaf, D.J., Davis, B.C., Webb, J.W., Coombs, J.E., Borns, J., Holloway, G., 2018. Signals' flexibility and interaction with visual cues: insights from crowdfunding. J. Bus. Ventur. 33, 720–741.

Scherer, K.R., 2003. Vocal communication of emotion: a review of research paradigms. Speech Comm. 40, 227–256.

Schüler, J., Anderson, B.S.Y., Murnieks, C., Baum, M., Küsshauer, A., 2024. Test-retest reliability in metric conjoint experiments: a new workflow to evaluate confidence in model results. Entrep. Theory Pract. 48 (2), 742–757.

Shane, S., Drover, W., Clingingsmith, D., Cerf, M., 2020. Founder passion, neural engagement and informal investor interest in startup pitches: an fMRI study. J. Bus. Ventur. 35 (4), 105949.

Short, J.C., Anglin, A.H., 2019. Is leadership language 'rewarded' in crowdfunding? Replicating social entrepreneurship research in a rewards-based context. J. Bus. Ventur. Insights 11, e00121.

Siegert, I., Böck, R., Wendemuth, A., 2014. Inter-rater reliability for emotion annotation in human–computer interaction: comparison and methodological improvements. J. Multimodal User Interfaces 8, 17–28.

Soublière, J.F., Gehman, J., 2020. The legitimacy threshold revisited: how prior successes and failures spill over to other endeavors on Kickstarter. Acad. Manag. J. 63 (2), 472–502.

Storbeck, J., Clore, G.L., 2008. Affective arousal as information: how affective arousal influences judgments, learning, and memory. Soc. Personal. Psychol. Compass 2 (5), 1824–1843.

Stouten, J., De Cremer, D., 2010. "Seeing is believing": the effects of facial expressions of emotion and verbal communication in social dilemmas. J. Behav. Decis. Mak. 23 (3), 271–287.

Stroe, S., Sirén, C., Shepherd, D., Wincent, J., 2020. The dualistic regulatory effect of passion on the relationship between fear of failure and negative affect: Insights from facial expression analysis. J. Bus. Ventur. 35 (4), 105948.

Su, L., Sengupta, J., Li, Y., Chen, F., 2024. "Want" versus "need": how linguistic framing influences responses to crowdfunding appeals. J. Consum. Res. 50 (5), 923–944.

Suddaby, R., Israelsen, T., Robert Mitchell, J., Lim, D.S., 2023. Entrepreneurial visions as rhetorical history: a diegetic narrative model of stakeholder enrollment. Acad. Manag. Rev. 48 (2), 220–243.

ten Brinke, L., Weisbuch, M., 2020. How verbal-nonverbal consistency shapes the truth. J. Exp. Soc. Psychol. 89, 103978.

Tiedens, L.Z., Fragale, A.R., 2003. Power moves: complementarity in dominant and submissive nonverbal behavior. J. Pers. Soc. Psychol. 84 (3), 558.

Topolinski, S., Likowski, K.U., Weyers, P., Strack, F., 2009. The face of fluency: semantic coherence automatically elicits a specific pattern of facial muscle reactions. Cognit. Emot. 23 (2), 260–271.

Tsay, C.J., 2021. Visuals dominate investor decisions about entrepreneurial pitches. Acad. Manag. Discov. 7 (3), 343-366.

Van Zant, A.B., Berger, J., 2020. How the voice persuades. J. Pers. Soc. Psychol. 118 (4), 661-682.

Viney, R., Clarke, J., Cornelissen, J.P., 2018. Making meaning from multimodality: embodied communication in a business pitch setting. In: Cassell, C., Cunliffe, A.L., Grandy, G. (Eds.), The SAGE Handbook of Qualitative Business and Management Research Methods: Methods and Challenges. SAGE Publications Ltd, np. 298–311

Wang, Z., Singh, S.N., Li, Y.J., Mishra, S., Ambrose, M., Biernat, M., 2017. Effects of employees' positive affective displays on customer loyalty intentions: an emotions-as-social-information perspective. Acad. Manag. J. 60 (1), 109–129.

Wang, X., Lu, S., Li, X.I., Khamitov, M., Bendle, N., 2021. Audio mining: the role of vocal tone in persuasion. J. Consum. Res. 48 (2), 189-211.

Warnick, B.J., Murnieks, C.Y., McMullen, J.S., Brooks, W.T., 2018. Passion for entrepreneurship or passion for the product? A conjoint analysis of angel and VC decision-making. J. Bus. Ventur. 33 (3), 315–332.

Warnick, B.J., Davis, B.C., Allison, T.H., Anglin, A.H., 2021. Express yourself: facial expression of happiness, anger, fear, and sadness in funding pitches. J. Bus. Ventur. 36 (4), 106109.

Warriner, A.B., Kuperman, V., Brysbaert, M., 2013. Norms of valence, arousal, and dominance for 13,915 English lemmas. Behav. Res. Methods 45, 1191–1207. Weisbuch, M., Ambady, N., Clarke, A.L., Achor, S., Weele, J.V.V., 2010. On being consistent: the role of verbal–nonverbal consistency in first impressions. Basic Appl. Soc. Psychol. 32 (3), 261–268.

Westbury, C., 2014. Retrieved from. http://www.psych.ualberta.ca/~westburylab/downloads/Affect Estimates.download.htmlwest.

Westbury, C., Keith, J., Briesemeister, B.B., Hofmann, M.J., Jacobs, A.M., 2015. Avoid violence, rioting, and outrage; approach celebration, delight, and strength: using large text corpora to compute valence, arousal, and the basic emotions. Q. J. Exp. Psychol. 68, 1599–1622.

Williams, T.A., Shepherd, D.A., 2016. Building resilience or providing sustenance: different paths of emergent ventures in the aftermath of the Haiti earthquake. Acad. Manag. J. 59 (6), 2069–2102.

Winkielman, P., Nowak, A., 2022. Beyond the features: the role of consistency in impressions of trust. Soc. Psychol. Bull. 17, 1-20.

Yik, M., Russell, J.A., Steiger, J.H., 2011. A 12-point circumplex structure of core affect. Emotion 11, 705-731.

Zamparini, A., Lurati, F., 2017. Being different and being the same: multimodal image projection strategies for a legitimate distinctive identity. Strateg. Organ. 15 (1), 6–39.

Zhang, H., Chen, W., 2019. Backer motivation in crowdfunding new product ideas: is it about you or is it about me? J. Prod. Innov. Manag. 36 (2), 241–262. Ziegler, R., Diehl, M., Ruther, A., 2002. Multiple source characteristics and persuasion: source inconsistency as a determinant of message scrutiny. Personal. Soc. Psychol. Bull. 28 (4), 496–508.

Zsidó, A.N., 2024. The effect of emotional arousal on visual attentional performance: a systematic review. Psychol. Res. 88 (1), 1–24.

Zuckerman, M., Amidon, M.D., Bishop, S.E., Pomerantz, S.D., 1982. Face and tone of voice in the communication of deception. J. Pers. Soc. Psychol. 43 (2), 347–357.