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Yuanqing Li

Dominican University

Sibin Wu

The University of Texas Rio Grande Valley, sibin.wu@utrgv.edu

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Chapter 8

The Power of Words in Crowdfunding

Yuanqing Li

Dominican University, USA

Sibin Wu

 <https://orcid.org/0000-0001-7761-5132>
University of Texas Rio Grande Valley, USA

ABSTRACT

In this chapter, the authors first provide an overview of the crowdfunding phenomenon. Through the literature review of crowdfunding success factors in the four models, the authors then summarize that the current entrepreneurial research focused on success factors has failed to sufficiently examine how the power of words would affect crowdfunding. Therefore, the authors propose that non-verbal and verbal cues are crucial to entrepreneurial financing success. Based on the insufficient research related with those cues, especially the non-verbal ones, the authors open an area of study on non-verbal and verbal cues in the entrepreneurial financing process by conducting and writing this chapter.

INTRODUCTION

Crowdfunding has emerged in recent years as an alternative platform to traditional financing sources and it has caught the attention of many researchers (Mollick, 2014). So far, current crowdfunding literature has examined the phenomenon from two aspects. First, it has shown the key factors that may affect crowdfunding investment decisions. They include rewards (Gerber et al. 2012; Lee et al. 2015; Ryu

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& Kim, 2016), financial incentives (Cholakova & Clarysse, 2015), philanthropic and support causes (Amara et al. 2014; Gerber et al. 2012; Pearson et al. 2016), altruism (Gerber et al. 2012; Bretschneider et al. 2014; Steigenberger, 2017), interpersonal relationship (Amara et al. 2014; Vedantam, 2015), involvement (Steigenberger, 2017) in the community (Gerber et al. 2012), social media (Amara et al. 2014), fun (Bretschneider et al. 2014; Ryu & Kim, 2016), enjoyment (Lee et al. 2015; Pearson et al. 2016), curiosity (Bretschneider et al. 2014; Vedantam, 2015), recognition (Ryu & Kim, 2016) or identification with the team (Bretschneider et al. 2014) as well as familiarity (Lee et al. 2015).

Second, crowdfunding research has attempted to understand why certain projects are successful. Research has demonstrated that crowdfunding success is found to be related with number of backers and percent of early target capital pledged (Colombo et al. 2015), intellectual capital (Ahlers et al. 2015), individual social capital (Giudici et al. 2012; Colombo et al. 2015), entrepreneur's social network ties (Zheng et al. 2014), amount of highest bid (Wu et al. 2015), funding goal and project duration (Cordova et al. 2015), intrinsic motivation (Cholakova & Clarysse, 2015), national culture (Zheng et al. 2014), and founder investment and firm size (Eddleston et al. 2015). The authors intend to extend the success research stream by examining the impact of words and expressions (especially non-verbal and verbal communication) on crowdfunding success.

Non-verbal cues, which account for more than 60% of communication in interpersonal interaction, are particularly effective in evoking the perception of social presence in computer-mediated communication (Short et al. 1976). Language and message (Hosman, 2002) is a necessary factor in persuasion, and thus affects crowdfunding success (Allison, et al., 2015; Ciuchta & O'Toole, 2016). Entrepreneurs could potentially increase their crowdfunding performance and effectiveness by emphasizing several factors such as non-verbal or verbal cues, which impact their overall project attractiveness. Therefore, it is very important to conduct a study on the power of words in crowdfunding. In this chapter, the authors will do just that. The chapter is structured like the following. The authors first give an overview of the crowdfunding phenomenon. It is then followed by a literature review of crowdfunding success factors in the four models. Then the effect of verbal and non-verbal cues on crowdfunding is explored and summarized. Lastly, the chapter is concluded by discussions and future research directions.

BACKGROUND

Crowdfunding has seen a tremendous growth over the past decade (Mollick, 2014). According to the crowdfunding industry statistics, the total amount of financial

support increased about 50 folds in 5 years (from 1.5 billion in 2011 to 73.9 billion in 2016). The crowdfunding industry is predicted to reach the total volume of over \$300 billion by 2025 (CFX Alternative Investing Crowdfunding Statistics, 2016). It is therefore not surprising that many researchers have started to study the phenomenon. Nonetheless, crowdfunding research is still at its infancy stage, and so research has still been evolving. The earliest definition about crowdfunding could be traced back to an online article in 2006. Howe (2006) defines the phenomenon as “crowdsourcing” by illustrating an image-sharing project---Istockphoto. Belleflamme, Schwienbacher and Larralde (2010, P.7) believe the concept of crowdfunding is embedded in crowdsourcing, and could be defined as involving “an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights.”

More recently, Mollick (2014, P.2) defines crowdfunding as “the efforts by entrepreneurial individuals and groups (cultural, social and for-profit) to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the Internet, without standard financial intermediaries”. The authors adopt this dominant definition in the chapter.

Some researchers study crowdfunding by its processes. Crowdfunding may be categorized by the three parties that are involved in the process: investors who make monetary contributions on crowdfunding, intermediaries that provide crowdfunding platforms like kickstarter.com, and entrepreneurs who seek financing through crowdfunding (Valanciene & Jegeleviciute, 2013). Macht and Weatherston (2015) argue that crowdfunding undergoes two phases in the process: pre-investment and post-investment. Haas, Blohm and Leimeister (2014) regard crowdfunding as a two-side market, which links the investors and entrepreneurs through the crowdfunding intermediary. And they further describe the crowdfunding process as exchanges between capital givers (funders) and project initiators (founders). They state that through the intermediates of crowdfunding platforms, funders and founders seek mutual returns.

In addition, crowdfunding also is categorized by models based on the types of rewards or returns that are distributed to the crowd. Lambert and Schwienbacher (2010) regard crowdfunding investment as either pure-donations (22%), passive investments (60%), or active investments (32%). Hemer (2011) lists five categories of crowdfunding forms: crowd donation, crowd sponsoring, crowd pre-selling, crowd lending and crowd equity. From a legal perspective, Bradford (2012) categorizes crowdfunding platforms into five types: donation, rewards, pre-ordering, lending, and equity. Based on Bradford (2012)’s classification, Massolution (2013) offers a four types of crowdfunding platforms: crowd supporting, crowd lending, crowd investing and crowd donating. Haas et al. (2014) identify three types of crowdfunding— hedonism, altruistic and for profit. Based on the above analyses,

the authors conclude that there are four models of crowdfunding: donation-based, equity-based, lending-based and reward-based. Next the authors summarize the success factors for each of those four models:

Donation-based Crowdfunding Success Factors

Donation based crowdfunding is similar to charity funding and has emerged as a new way for individuals and nonprofit organizations to raise funds. Various theories and frameworks have been applied under this model to explain why people donate. Such theories include social comparison theory (Tan, Lu and Tan, 2016), unified theory of acceptance and use of technology research model (Li et al. 2018), self-system theory (Zhong and Lin, 2018) and stimulus-organism-response framework (Liu, Suh and Wagner, 2018).

Tan, Lu and Tan (2016) investigate how the reputation incentive design, peer effects, and popularity effects impact fundraising performance. They find that peer effects have positive impact while higher visibility of donors' contributions may have negative impact on fundraising. They also suggest to put more fundraising efforts on the crowding-out group to reduce the popularity effect and alleviate the rich-get-richer problem. Project description, pictures and founders' credibility significantly impact the likelihood of donation-based project success (Qian & Lin, 2017). Through the analysis of 109 nonprofit campaigns on Tencent Philanthropy, Zhou and Ye (2018) find that organization's legal status does not affect the crowdfunding outcome much. Demonstrated organizational competence, concrete personal stories, and low-risk solutions (such as in-kind assistance and direct cash) are key factors determining the crowdfunding outcomes. Collecting 1,389 green crowdfunding projects from Tencent Lejuan, Yang, Liu and Yin (2019) find a non-linear effect of goal setting and project duration on project success. That is, a higher goal is positively related with the project success while the impact of lower and moderate goals is not always significant. Long duration of the project is likely to have a positive impact on project success while the influence of short and moderate duration is not always significant.

Equity-based Crowdfunding Success Factors

The rapid development of equity crowd-funding plays an important role in solving the difficulties of financing in innovative companies and small or micro enterprises. Based on a total of 649 completed online questionnaires collected from Angelcrunch and Zhongchou, Kang et al. (2016) identify the investing behavior from funder's perspective. They propose that trust (calculus and relationship) mediates the positive relationships of fundraiser-related (social interaction ties), project-related (network externality and perceived informativeness) and platform-related (perceived

accreditation and third-party seal) factors and funder's willingness to invest. Li et al. (2016) find that the quality of entrepreneurial team information (such as the ratio of full-time staff, staff number and enterprise business age), entrepreneurs' behaviors (like posting project updates and video), lead investor information (credibility, percentage of investment, identity certification, investment experience and comments for projects) are all influencing factors of crowdfunding project performance. With a sample of 499 backers under a German equity crowdfunding platform, Hornuf and Neuenkirch (2017) find that campaign characteristics, funding progress, investor sophistication, herding behavior, and stock market volatility increase the backers' willingness of investment while the distance between backer and start-up, learning effects, and sniping don't have significant effect on funding performance. Financing objectives, assignment of shares, and the number of inquiries are found to be positively related with the investors' funding intention (Li, Cao and Zhao, 2018). Specifically, the number of inquiries and the minimum initial investment amount will impact the financing efficiency, which in turn influences the successful financing of projects. Li, Cao and Zhao (2018) further mention that the herding effect influences the equity crowdfunding outcomes by affecting the decision-making behavior of later investors through the early investments. Tan and Han (2017) confirm that the ratio of leading investment amount (strongest among all the factors), ratio of the transfer of shares, the number of favorite projects, founder education level and investors number (weakest) are the determining factors which significantly impact the financing efficiency of private equity financing. Zheng et al. (2015) state that project updates, valuation, numbers of staff and stakeholder are significantly influencers of the equity crowdfunding success.

Lending-based Crowdfunding Success Factors

Lending-based crowdfunding has developed rapidly over the last decade as a complementary and flexible financing alternative to the banking industry. Herding behavior and creditworthiness of borrowers have been found to be related with lending success (e.g., Herzenstein, Dholakia, & Andrews, 2011; Zhang & Liu, 2012). The empirical results of Li et al. (2011)'s study reveal that borrowers' decisions such as loan amount, interest rate will determine the lending success. Based on 3,148 lending transactions from Renrendai, Chen and Ning (2013) find that the basic information of the borrower's loan deal has a significant effect on the lending success of the borrower. Cai et al. (2016) discover that the borrowing amount and borrower's lending history (successful borrowing requests) are positively and significantly related to the likelihood of successful funding, but this relationship varies from the first-time borrowing and repeated borrowing model. Han, Xiao and Su (2019) conduct a nationally representative survey and find that financing knowledge and risk

attitude are two key factors influencing the consumer behavior of P2P borrowing. Mi and Zhu (2017) find that the self-initiated financial innovation improves the credit availability using the Difference-In-Differences (DID) approach and the loan transaction data collected from a Peer-to-Peer (P2P) platform. Chen, Huang and Ye (2018) find that the usage of punctuation, which affects the readability of the text and borrowers' trust, will negatively impact the borrowing rate and funding probability. Li et al. (2015) demonstrate significant impact of multidimensional (structural, relational and cognitive) friendship networks on P2P lending outcomes. They find that quantity and quality of friendship ties will affect the borrower's likelihood of being funded and interest rates. Feng, Fan and Yoon (2015) examine the impact of funding success, number of bids, and funding time on lenders' bidding strategies. They find that borrowers who have more expertise tend to propose a loan at a lower cost and that a larger loan amount and good interest rate could increase the probability of funding and attract more lenders.

Reward-based Crowdfunding Success Factors

Crowdfunding research has seen an upper trend in exploring the drivers of successfully crowdfunded projects, especially under reward-based crowdfunding platforms (Kuppuswamy & Bayus, 2015). Mollick (2013) hypothesizes the past successful crowdfunding experiences, third party endorsements and preparedness are positively related to the crowdfunding success, with the moderating effect of geographical location and gender. Extracted 2,101 crowdfunded projects from Kickstarter, he finds that the evidence of past success, external endorsements and a prepared demonstration affect project success. However, crowdfunding seems less subject to gender and geographic biases than venture capital.

Mollick (2014) conducts a study on exploring the current situations of crowdfunding: what factors make the success or failure of a crowdfunding project. Drawing the data collected from more than 48,500 projects, he concluded that personal networks (measured by the numbers of facebook friends of founders), project quality (measured by pitch video, updates within three days of launch and spelling errors in descriptions) as well as geographic factors (examined by Nearstat and Geocode) influence the success of crowdfunding. He also collects the information of post-investment behaviors of the crowdfunding project, and finds that majority of the crowdfunded projects delay in delivering the promised goods.

Cumming, Leboeuf and Schvienbacher (2014) compare the two models in Reward-based crowdfunding campaigns----Keep it all (Indiegogo) and All-or-Nothing (Kickstarter). They propose that All-or-Nothing model has to take more risk but higher chance of success, while Keep it all model has lower chance of success with lower risk. In order to test their propositions, Cumming and associates (2014)

collect 22,850 projects from the Indiegogo platform from 2011-2013. Their results show that Keep it all model fits the projects that are small and scalable, while All-or-Nothing model are suitable for projects that are large and non-scalable. Overall, Keep it all models are less successful than All-or-Nothing campaigns in achieving their funding goals. Therefore, crowdfunding models affect the funding success, with the moderation of funding goals and project size.

Kuppuswamy and Bayus (2015) find that backers support crowdfunding projects that follow a U-shaped pattern, compared with the herding patterns in equity and lending-based crowdfunding (Herzenstein, et al. 2011; Zhang & Liu, 2012) and crowding-out patterns in donation-based crowdfunding (Burtch, et al. 2013). They suggest that social information plays an important role in crowdfunding success. Project creators tend to increase their project updates towards the deadline in order to reach their funding goal. Based on two years (May 2009-February 2012) of daily data of 25,058 projects from kickstarter website, they conclude the reason for U-shaped pattern as the reduced diffusion of responsibility and positive influence of project updates towards the final stages of funding, especially for projects that have already reached their funding goals.

Colombo, Franzoni and Rossi-Lamastra (2015) conduct an empirical study through 669 Kickstarter projects to test the existence of the self-reinforcing pattern. They find that the number of early backers and the percent of target capital pledged early in the crowdfunding campaign are positively related with the crowdfunding success. Internal social capital is important for campaign success, but this relationship is moderate in the early days of the campaign.

Drawing 78,061 projects from Kickstarter.com created prior to March 2013, Zvilichovsky, Inbar and Barzilay (2015) discover that project creator's backing history could increase the crowdfunding success. Applying network exchange theory, they believe that if the entrepreneurs have previously supported others, they are going to have higher success rates, and attract more backers and hence funds. They further explain that this results from the direct (backing received from the project founders that they supported) and indirect reciprocity (backing received from the online community) forces in the context of crowdfunding.

Analyzing 762 projects from Kickstarter.com crowdfunding platform, Koch and Siering (2015) examine the factors that influence the success of crowdfunding projects. Based on media richness theory and the concept of reciprocity, they propose that project-specific factors such as depth of project description, the utilization of images, the provision of video material, project updates, small pledging goals, as well as founder-specific factors such as project creating experience and reciprocity in funding are positively related with the success of funding, with the control of funding period, number of Facebook friends and project categories. Their results show that description, images and videos on the project and founder's previous backing

experience influence their funding success. However, the previous project creating experience of the entrepreneur has no significant influence on the funding result.

Cordova, Dolci and Gianfrate (2015) explore the success factors of crowdfunding through 1,127 technology projects posted on four different reward-based crowdfunding platforms: 97 successful projects on Ulule; 9 projects on Eppela; 597 successful projects on Kickstarter and 424 projects on Indiegogo. Consistent with the reinforcement model, they find that project funding goal is negatively related with the funding success, that is, the higher the funding goal, the lower probability and extent of project success. They measure the success and the overfunding of the projects as dependent variables. Their results show that project duration and the dollar amount contributed per day are positively related with project success. Therefore, the target value, project duration and contribution frequency will affect the crowdfunding success. The conclusion is that contribution breeds more contributions.

Applying the signaling theory, Wu, Wang and Li (2015) study the success factors of crowdfunding under the Chinese context. They collect data from a sample of 192 projects collected from demohour.com, a Chinese crowdfunding platform. They find that frequency of announcements and the amount of the highest bid are positively related to the crowdfunding success. And this relationship is moderated by the industry effect. In details, highest bid and frequency of announcements affect more on high-tech industry than on movie/music industries.

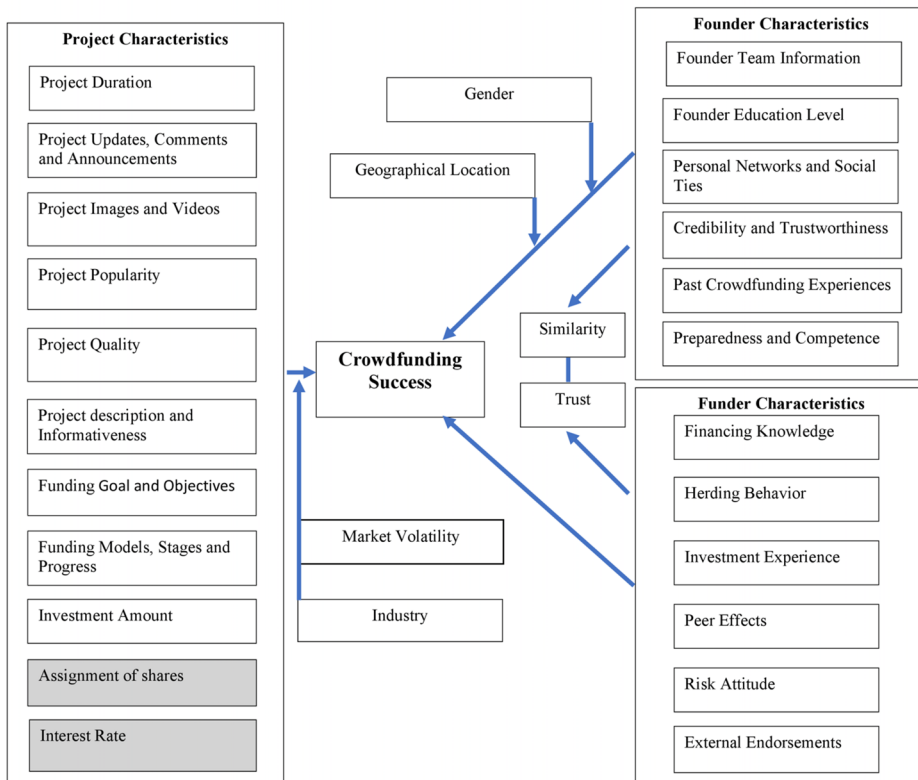
Greenberg and Mollick (2017) develop the concept of activist choice homophily from theories of choice homophily, based on the comparison of interpersonal choice homophily and induced homophily. Then they explore how the interpersonal choice homophily and activist choice homophily relate to gender in crowdfunding. They propose that individuals are more likely to support people who are similar with them, and this relationship is influenced by gender and industry. This paper argues that like attracts like, which likes could be generated from race, age, education, and occupation of the person. First, they conduct an experiment of 399 students to test the similarity and gender effect. Then they collect the real-world data from Kickstarter with 1,250 projects of gaming, technology, film, fashion and children's books five categories. Their results show that female founders prefer to found projects in fashion and publishing than technology and games. Projects created by female have 40% greater success rate than male. Female founders are more likely to succeed in the industries that they are underrepresented and traditionally male-gender-typed, such as technology.

Kuppuswamy and Bayus (2015) compare the effectiveness of the four crowdfunding models and conclude that reward-based crowdfunding grows faster and has a much larger number of platforms than other models of crowdfunding (Masssolution, 2015). Studies show that rewards are one of the most important motivations for participating in crowdfunding (Gerber, et al. 2012). 76.5% of the crowd-funders offer a reward

to their crowd-funders (Lambert & Schwienbacher, 2010). According to Mollick (2014)'s study, research on reward-based crowdfunding is very rare, especially in the perspective of social information effect (Kuppuswamy & Bayus, 2015). In addition, reward-based crowdfunding facilitates entrepreneurial organizational legitimacy construction and exchange resources needed for a start-up (Frydrych et al. 2014). It usually requires at least a product prototype type ready when posting their crowdfunding projects and pre-sells the product or service as tangible rewards (Belleflamme et al., 2014), which stimulate the idea of entrepreneurship.

Thus far, the authors have reviewed the major success factors that appear in recent crowdfunding literature into three categories----Project Characteristics, Founder Characteristics and Funder Characteristics. And they list the success factors filling each category into Figure 1 below:

Figure 1.



As stated earlier, studies that directly explore the impact of words and expressions on crowdfunding performance are rare. Therefore, the current chapter proposes a relationship between founders' behaviors (especially non-verbal and verbal cues) with the crowdfunding success. The authors propose that non-verbal and verbal behaviors of entrepreneurs may positively influence the crowdfunding outcome. In the following, the authors explore the current research on the roles of non-verbal and verbal behaviors in crowdfunding.

NON-VERBAL COMMUNICATION

Non-verbal communication has been defined as behaviors other than words that create meaning in interaction (Hale, 2003). This may include expressions, gesture or symbolic behavior that conveys meaning (Burleson, 2003), intentional behavior that conveys an idea symbolically (Canary, 2003) and actions to which meaning may be attached such as a wink, a wave of hand, facial expression, dress and so on (Adejimola, 2008). Most interpersonal information is communicated by non-verbal communication (Mehrabian & Ferris, 1967).

Non-verbal communication exerts its influence through six key characteristics. It pervades every communicative act (omnipresent); can be part of every communication purpose (multifunctional); may be used and understood by world over such as smiling, crying, etc. (universal); is the first form of communication in the history between species (phylogenetic primacy), in the early lifespan of individuals (ontogenetic primacy) and in the opening minutes of human interactions (interaction primacy) (Burgoon, Guerrero, & Floyd, 2016).

Gabbott and Hogg (2001) point out that non-verbal communication transcends the written or spoken word. Non-verbal communication expresses what verbal communication cannot. Whenever there is a contradiction between non-verbal and verbal cues, people tend to believe what's communicated non-verbally rather than the verbal message (Burgoon, Guerrero, & Floyd, 2016). Non-verbal and verbal cues may conjunct with each other during the communication process. Audiences often elaborate on the non-verbal cues before comprehending the verbal message (Sundaram, & Webster, 2000). Affections are communicated faster through non-verbal communication (Noller, 1985). Grahe and Bernieri (1999) conclude that non-verbal behavior would be more important than verbal behavior when expressing a spontaneous affect or rapport and viewing brief slices of an interaction.

Two-thirds of the meaning of interactions is derived from non-verbal cues (Philpott, 1983). Non-verbal cues largely contribute to the success of communication (Burgoon, Guerrero, & Floyd, 2016). Cook (1971) divides the non-verbal cues into two broad categories: static non-verbal cues, which are related to face, physique,

physical appearance, clothes, makeup and so on and dynamic non-verbal cues, which are related to gestures, facial expressions, gaze direction, space, distance, tone of voice, and the amount and fluency of speech. Sundaram and Webster (2000) specify non-verbal cues as kinesics (facial and body movements), paralanguages (vocal pitch, loudness, pauses, fluency), proxemics (distance and touch), and physical appearance. Gabbott and Hogg (2001) further categorize non-verbal cues into four broad areas: proxemics (the use of personal space and distance); kinesics (body postures and movement); oculistics (the communicative aspects of eye behavior such as gaze and movement) and vocalics (para-language such as vocal tone and intonation). DeGroot and Gooty (2009) classify three categories towards non-verbal cues: dynamic cues (facial and body movements), static cues (demographic and physical characteristics) and paralinguistic cues (speech rate and volume, vocal tone, pausing).

NON-VERBAL COMMUNICATION AND CROWDFUNDING

Previous literature on non-verbal communication mainly appears in sociology, psychology and communication fields (Sundaram & Webster, 2000). Most of the studies argue non-verbal cues influence people's first impression and thus persuasion (Webster, 1965). Non-verbal cues have been found to influence the patients' satisfaction of a physician (Mast, 2007); interviewer's perception of applicants' qualifications (Parsons & Liden, 1984), trust and likability (DeGroot & Motowidlo, 1999); customers' rapport (Lin et al. 2017) and perceptions of friendliness, credibility, trustworthiness and competence towards the service employees (Sundaram & Webster, 2000); and student engagement in an online course (Dixson et al. 2017). Cade, Koonce and Ikuta (2017) find that non-verbal cues in the video disclosure associated with investor's judgment of uncertainty. They further suggest that the choice of disclosure medium affects investors' judgment. Specifically, investors react more negatively towards the uncertainty that they perceive through video than through written text.

Videos posted on crowdfunding platforms, as the medium of entrepreneurs' non-verbal behavior disclosure, affect their crowdfunding success. Strickler (2009) suggests that crowdfunding video is a demonstration of effort from the entrepreneurs and a good predictor of success. Compared with the projects without videos (39%), crowdfunding projects with videos have a much higher success rate (54%) (Byrom, 2017). The use of video or image signals the preparedness of the entrepreneurs. Therefore, it mitigates information asymmetry between entrepreneurs and funders, as well as increases investors' perception of project quality and founder credibility in crowdfunding (Courtney, Dutta, & Li, 2017). Mollick (2014) emphasized the importance of using a video as the criteria to evaluate the crowdfunding project

quality. Project presentation on the crowdfunding platform is positively related to the crowdfunding success (Beier & Wagner, 2015). A video within the project presentation can increase investors' funding motivation and funding success of a crowdfunding project (Kuppuswamy & Bayus 2013).

However, little research has examined how non-verbal cues in the video affect crowdfunding success. Here are the few exceptions. Pope and Sydnor (2011) find that race impacts the lending performance. Using data from Prosper.com, they find that African Americans' chance of receiving a loan reduces by 25-35% compared to whites with similar credit backgrounds. They further explain that the loan postings without pictures or with pictures but contain the image of black or older borrowers and unhappy emotions will be strongly discriminated. Therefore, the characteristics of borrowers displayed in the pictures and descriptions significantly influence their lending outcome.

Duarte, Siegel and Young (2012) test the relationship between borrowers' appearance and perceived trustworthiness under peer-to-peer lending site. They collect listings of 5,950 loans with 3,291 initial loans photographs, and then they employ Amazon's Mechanical Turk (MTurk) service to rate the trustworthiness and will-pay based on borrowers' photographs. Their result shows that borrowers will have higher probabilities of receiving a loan with lower interests, if their appearances are perceived as more trustworthy.

Ravina (2012) examines whether personal characteristics and presentation of founders affects lenders' decision. Based on data collected from 7,321 borrowers in an online lending market, they find that borrowers' appearance and race affect lenders' preferences and perception. If the borrowers' appearance is above average, their possibility of getting a loan would increase 1.44% with the interest rate decrease by 81 bps. Black borrowers need to pay 139-146 bps more interest rates than White borrowers. They also argue for the existence of similarity effect between borrowers and lenders on their ethnicity, residence, gender, interests and experiences. The results show that lenders prefer borrowers who are similar to them in ethnicity, residence, gender and entrepreneurial experience.

Plummer, Allison and Connelly (2016) explore the effect of entrepreneur's characteristics and actions in pursuing the initial external capital. Borrowing from the sense-making literature, they argue that entrepreneur's characteristics such as managerial experiences, as well as actions such as product introduction and commercial property operation will increase their probability of receiving the external capital. From a sample of 986 startups between 1995 and 2010 in Oklahoma, they find that affiliating with a third party is the most essential success factor for early stage financing. Entrepreneur's characteristics and actions will increase the possibility of receiving external capital, only if they are combined with a third-party affiliation.

Anderson and Saxton (2016) argue that facial expression, especially smiling behavior can influence the lending decisions. They collect 323 funding projects by women entrepreneurs from Asia on the Kiva.org crowdfunding platform. They analyze the smile of borrowers from their photo using the Facial Action Coding System. Compared with the previous research finding that Duchenne smile could increase trustworthiness, this research does not show a statistically significant relationship between Duchenne smile and trust or faster prosocial funding behavior. Therefore, they conclude that genuine enjoyment smile has no impact on increasing of trust.

Concluding the current literature of non-verbal cues in crowdfunding, we find that most of them focus on the entrepreneurs' characteristics such as race and gender (Ravina, 2012; Pope & Sydnor, 2011), dynamic cues such smiles, and physical appearance (e.g., Duarte et al. 2012)'s effect on crowdfunding outcome. In order to better illustrate the impact of non-verbal cues on crowdfunding, here we list examples of crowdfunding project from Kickstarter:

Figure 2.

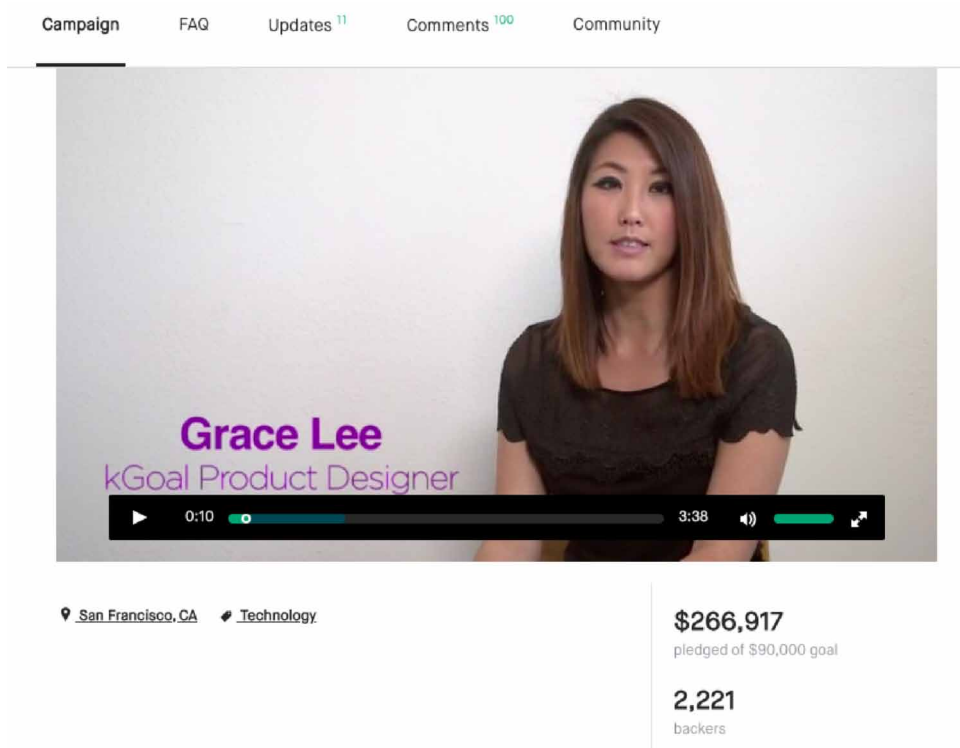
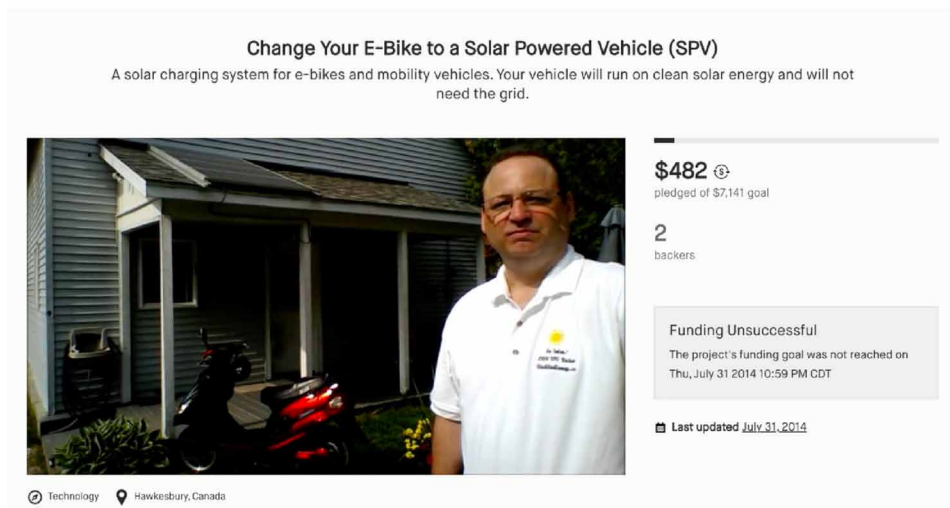


Figure 3.



Figures 2 and 3 show an example of Kickstarter crowdfunding project. Kickstarter is the most cited, analyzed and the largest reward-based crowdfunding community (Kuppuswamy & Bayus, 2014; Kraus, 2016). Usually, a Kickstarter crowdfunding project contains basic information of the entrepreneur and the funding request, which includes the target dollar amount requested, the length of the project, number of backers, the entrepreneur's name, company and location, an image or video of the project, supports and rewards in different categories and a written description of the business idea. On their crowdfunding page, the entrepreneur needs to persuade the backers whom they don't know much or never met before to support their project. Therefore, the written description (verbal) and the photo or video (non-verbal) of the entrepreneur became relatively important for the funders to make a funding decision (Anderson & Saxton, 2016). As can be seen from the two figures, Project 1 attracts much more backers and funding than project 2, due to the entrepreneur is women with a smile appears in the video.

VERBAL COMMUNICATION

Verbal communication has been referred to as speech communication (Adejimola, 2008) or language (Krauss, 2002). Language is very important in social gatherings or business transactions (Adejimola, 2008). It could be used as a resource for creating social causes of verbal power (Ng, & Bradac, 1993). The semanticity, generativity,

and displacement properties of language generate an unlimited number of meaningful novel messages, which facilitate effective and versatile human communication (Krauss, 2002).

Previous research of verbal communication concentrates in the fields of sociology, psychology and communication (Parhankangas & Renko, 2017). Researchers believe that the use of words represents people's mental, social and psychological states (Pennebaker, Mehl, & Niederhoffer, 2003). The use of verbal communication has shown importance in taking care of critically ill patients (Elliott, & Wright, 1999), operating surgical team performance (Dankelman, et al, 2017), motivating students to learn (Downs, Javidi, & Nussbaum, 1988), course performance (Robinson et al., 2013), connecting individual's mood (Zajonc, 2000), appealing to communicator's audience (Parhankangas and Renko, 2017), improving firm performance (Patelli and Pedrini, 2014) and receiving funding from an angel network (Parhankangas and Ehrlich, 2014).

Krauss (2002) categorizes verbal communication as two kinds of signals: signs and symbols. Signs are related to the message we convey by nature. Symbols are the implications of social conventions. He believes that both signs and symbols are involved in the verbal communication process. Hosman (2002) points out the two elements of language: the structural element and the use element. The structural element focuses on the phonology, syntax and lexicon of the texts or narratives. The use element emphasizes the pragmatics, speech style and language varieties across different region or countries. Derived from the LIWC dimensions, Abe (2011) proposes three types of language cues: psychological distancing, cognitive complexity, and positive emotionality. Psychological distancing is associated with the distance of leaving or joining the topic being discussed. Cognitive complexity refers to the precise distinction and integration of words. Positive emotionality relates to the negative and positive emotion words.

Based on previous literature, Toma and D'Angelo (2015) study two categories of linguistic cues: function words (used for binding sentences, content-free parts with not much meaning) and social and psychological concerns (affection, cognitive and sensory process). For example, Parhankangas and Renko (2017) use two kinds of linguistic cues in their research: content words and style words. Content words represent the adjectives, nouns and verbs which contain lots of meaning while the style words concentrate on how the meaning is expressed. Research has found that 55% of the words we frequently apply are style words, even they accounts for only 0.04% of the amount of all words (Pennebaker, 2011).

Keyton et al. (2013) concludes that verbal communication behaviors perform four essential functions in workplace: information sharing, relational maintenance, expressing negative emotion, and organizing communication behaviors. Robbins and Hunsaker (2011) mention that using multiple channels (both verbal and non-

verbal) and making the message complete, specific, responsible, congruent and simple could generate effective verbal communication.

However, a debate exists as to which of the two, non-verbal or verbal communication, is more important. Some argue that verbal communication provides more accurate judgments than non-verbal cues (Archer & Akert, 1977). Berry et al. (1997) contend that verbal content conveys the same amount of information as non-verbal behavior does. It would be beneficial to know how verbal and non-verbal cues interact with each other in conducting the meaning of the words or messages under different circumstances.

VERBAL COMMUNICATION AND CROWDFUNDING

Previous research has demonstrated the important role of verbal communication content and styles in crowdfunding success. Herzenstein, Sonenshein and Dholakia (2011) argue that borrower's narratives influence lender's decision. They collect 1,493 loan listings posted by borrowers on Prosper.com in June 2006 and June 2007 and find six identity claims in their narratives: trustworthy, economic hardship, hardworking, successful, moral, and religious. They find that the more identity claims used in narratives, the more funding will be obtained, but the less pay back will be received from the borrowers. In addition, they find that narratives that emphasize trustworthy or successful identity turn out to be more effective. Therefore, it is important to emphasize several identity claims under uncertain conditions in order to obtain positive funding decisions.

Allison, McKenny and Short (2013) apply warm-glow theory (funding motivation for feeling good) to suggest that use of language influences the speed of funding decision on Kiva. From 6,051 narratives they conclude that narratives with more blame and present rhetoric lead to faster funding while narratives with more accomplishment, tenacity, and variety rhetoric have slower funding. Therefore, the characteristics of rhetoric affect the funding success of lending based crowdfunding.

Drawing from cognitive evaluation theory, Allison et al. (2015) argue that the linguistic cues (intrinsic or extrinsic) have impact on funder's funding motivation. They collect data through a lending based crowdfunding platform. They measure intrinsic language with the rhetorical analysis of human interest language and diversity language, and extrinsic language with the content analysis of profit language and risk taking language. Their results show that funders invest more on the projects that they perceive as an opportunity to help others (using human interest and diversity language) rather than a business opportunity (using more profit and risk taking language).

Gorbatai and Nelson (2015) examine the role of language (linguistic content) on crowdfunding success. More specifically, they believe that the use of vivid language, positive emotion and inclusive (relational) language increases crowdfunding success while money-related language decreases the success. Gender can also affect the use of those languages and thus on funding success. It is found that women apply more vivid language, positive emotion and inclusive (relational) language and less money-related language than men do. Using a sample of 9,943 campaigns in Indiegogo, they explain why women are favored than men in receiving funding and support under crowdfunding context.

With the sample of 729 loan requests from prosper.com, Ciuchta and O'Toole (2016) suggest that non-verbal cue (physical attractiveness) and verbal cue (positive word) interact with each other in establishing “the beauty is good effect” and influencing the funding result. The “beauty is good effect” refers to the situation that attractive people are usually ascribed positive qualities simply because of their good looks (Dion, Berscheid, & Walster, 1972). They also find the use of positive word is more influential on impression formation and resource acquisition.

Siering, Koch and Deokar (2016) suggest that static and dynamic communication is useful in detecting fraudulent behavior on crowdfunding platforms. Using data from 652 projects (326 projects are suspended because of fraud while 326 are not suspended) on Kickstarter.com, they show that content based and linguistic cues extracted from static and dynamic communication are important classifiers in analyzing fraudulent behaviors. They conclude that the linguistic cues based approach is a better way for fraud detection, compared with the machine learning and economic evaluation.

Applying language expectancy theory, Parhankangas and Renko (2017) argue that the content of entrepreneurs' message on the crowdfunding platform matters. The word they choose and the story they tell will affect the crowdfunding result significantly. In details, with the data extracted from 656 crowdfunding campaigns (411 commercial and 245 social) listed on Kickstarter, they find that linguistic styles which are more understandable and relatable have higher success rate, and the relationship is moderated by the types of campaigns. Social campaigns (new ventures) are influenced by the linguistic styles more than the commercial campaigns (established category).

In summary, the current literature of verbal communication in crowdfunding mainly explores the impact of the contents of the language (e.g. money-related or human prosocial, negative or positive) on crowdfunding success. So far, no research has focused on how the expression of its language such as whether the project description is simple or complex, emotional or flat can affect crowdfunding outcome. Here the authors provide two project examples to illustrate the importance of verbal impact.

Figure 4.

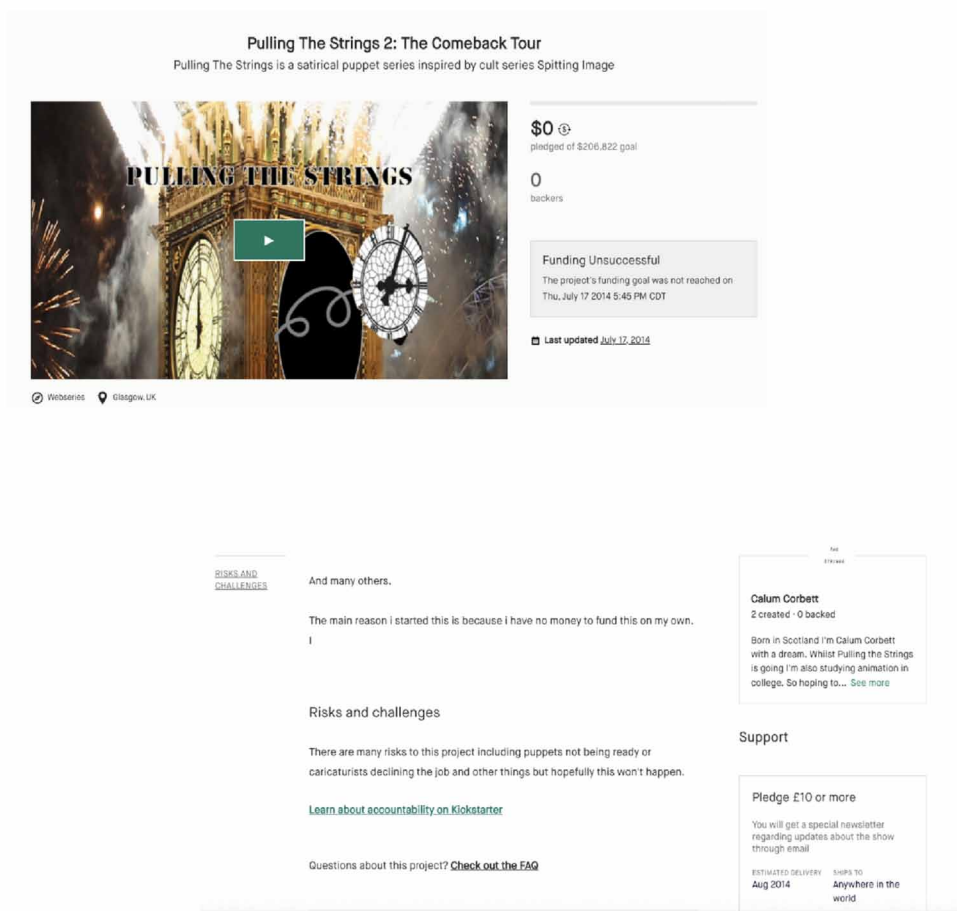



Figure 4 and Figure 5 demonstrate the different funding outcome driven by the text complexity and text readability of its project description (focused on the “risks and challenges”). The authors applied the online text analysis tool---Textalyser to calculate the readability and complexity score. Textalyser is a text analysis software that allows entry of text or a website and displays readability analysis. After entering the content from the crowdfunding website in this software, complexity scores (measured by Lexical density formula) and readability scores (measured by Gunning fog index formula) are yielded.

As shown in Figure 4, it can be seen that Project 3: Pulling The Strings 2: The Comeback Tour has a long sentence in its “risks and challenges” description and an incomplete sentence with one word “I”, turned out to be high in text complexity

Figure 5.

J.A.E.S.A : Next Generation Artificial Intelligence



A true next generation AI with the ability to think, learn, adapt and converse freely. Yours for a price of a cup of coffee!

Created by
Ainova Robotics Inc.

2,253 backers pledged CA\$ 68,515 to help bring this project to life.

Last updated May 19, 2015

STORY

RISKS AND CHALLENGES

Risks and challenges

Voice recognition
Most voice and speech recognition systems require a preset collection of words or phrases that it is able to recognize. An alternative to that is a cloud-based recognition, but it is much slower and requires a stable Internet connection.

Processing
Most of more or less similar systems, such as virtual assistants for both iOS and Android, do not support natural conversation with the user. We have to develop a completely new blend of technologies using neuro-linguistic approach and conditional random fields to create complex cognitive patterns and learning algorithms.

Speech generation
Speech generation or synthesis that will produce a naturally sounding voice requires creation of sophisticated software or purchasing of expensive licenses.

[Learn about accountability on Kickstarter](#)

Support

Pledge CA\$ 10 or more

You'll be one of the few to try J.A.E.S.A first during a closed beta test! And, of course, you're getting all of the above - a full J.A.E.S.A upon release, news, videos, test runs and other details about our ambitious project.

ESTIMATED DELIVERY
Oct 2014

1,367 backers

Pledge CA\$ 75 or more

Become global - you'll get a unique chance to talk to J.A.E.S.A and be one of the first people she'll get to know. After that, all versions of J.A.E.S.A on all devices will always remember you

(scored 100) and moderate in text readability (scored 13.5). Project 4: J.A.E.S.A: Next Generation Artificial Intelligence with a less text complexity (scored 87.1) and more text readability (scored 14.7) is well received by the backers. Compared with Project 4's success (2253 backers supported CA\$ 68,515), Project 3 did not receive any funding from any backer for the project.

DISCUSSION AND FUTURE RESEARCH DIRECTIONS

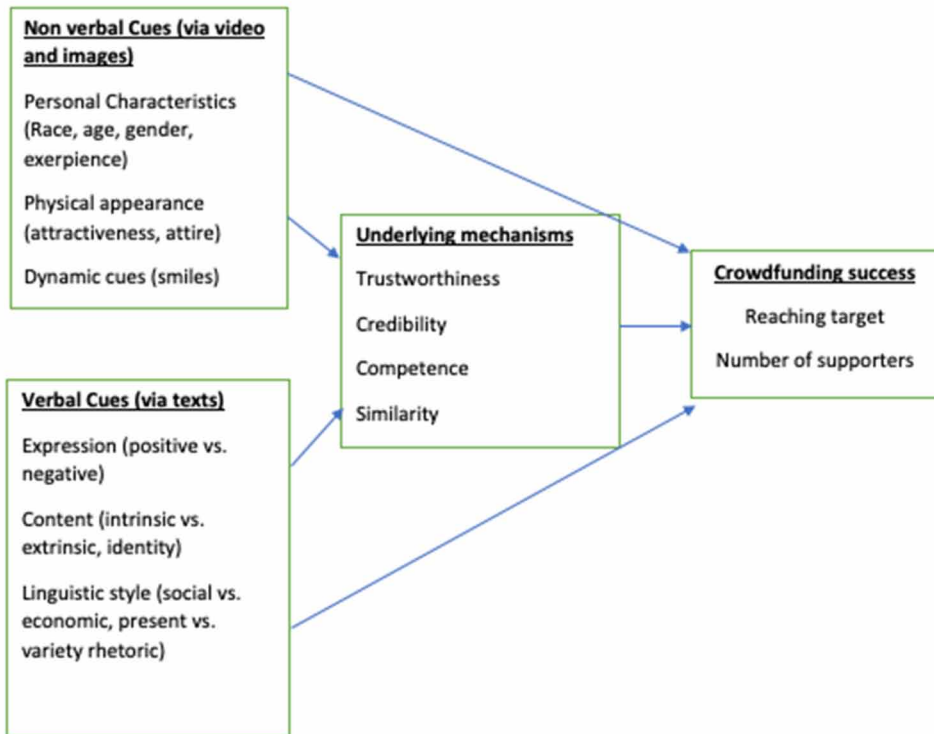
Our literature review of the success factors among the four models of crowdfunding reveals that current research suffers two shortcomings: First, most of them focus on how crowdfunding project characteristics such as project quality (Mollick, 2014), project updates (Kuppuswamy & Bayus, 2015), description, images and videos on the project (Koch & Siering 2015), funding goals (Cumming, Leboeuf & Schwienbacher, 2014; Cordova, Dolci & Gianfrate, 2015), project duration and contribution frequency (Cordova, Dolci & Gianfrate, 2015), frequency of announcements and the amount of the highest bid (Wu, Wang & Li, 2015) effect crowdfunding success. Given the importance of entrepreneur in the entrepreneurial process (Shane & Venkataraman, 2000), researchers need to pay more attention on how entrepreneur's characteristics may affect funding success.

Second, current literature emphasizes the importance of the personal networks (Mollick, 2014), backing experiences (Koch & Siering, 2015; Zvilichovsky, Inbar & Barzilay, 2015) and social capital (Colombo et al. 2015) of the entrepreneurs, rather than the real personality or traits of them. Few researches have examined the actual founders' behavior on crowdfunding success, especially the non-verbal or verbal behaviors of them. Even through Anderson and Saxton (2016) examine the power of non-verbal behaviors on crowdfunding, they are not able to generate significant results on this effect. We also find there is a limit scope of verbal communication research in crowdfunding. Hereby the authors have integrated previous research into Figure 6 where it demonstrates the current research on non-verbal and verbal cues in crowdfunding. The authors further illustrate the findings of literature and future research directions in the following.

The summary of non-verbal-crowdfunding literature reveals the limited scope of current research. As the authors listed above, most of the current literature focus on the impact of the entrepreneur's physical characteristics (especially physical appearance) on crowdfunding outcome. However, physical characteristics are only one part of static non-verbal cues. Non-verbal communication also contains many other cues such as dynamic cues and paralinguistic cues, which has not been tested yet under crowdfunding context. Besides, most of the non-verbal-crowdfunding research is conducted under the lending-based platforms. Due to the limited literature towards the non-verbal cues' effect under crowdfunding context, especially under reward-based platforms, the authors thus call for more studies in exploring the relationship between non-verbal communication and reward-based crowdfunding success.

Compared with the limited literature associated with non-verbal cues and crowdfunding outcome, the studies of verbal cues on crowdfunding are more fruitful and various. It has been studied under both lending based crowdfunding platforms such as Kiva and Prosper, as well as the reward based crowdfunding platforms

Figure 6.



like Kickstarter and Indiegogo. However, the main theme of those researches still narrowly focused on exploring the effect of the contents of the language (e.g. money-related or human prosocial, negative or positive) on crowdfunding success. Since language acts both in terms of content and expression, it would be beneficial to explore some other aspects of verbal communication such as language styles (e.g. simple or complex; emotional, social or psychological) in crowdfunding context for future research.

CONCLUSION

Successful entrepreneurial financing requires entrepreneurs' powerful persuasion ability (Chen, Yao, and Kotha, 2009). Language and the presentation of one's message as well as non-verbal behaviors are believed to be the critical elements of persuasion (Hosman, 2002). The current entrepreneurial research focused on success factors has been fruitful, but has failed to sufficiently examine how the verbal and non-verbal

cues would affect crowdfunding (Allison, et al., 2015). The authors propose non-verbal and verbal cues are crucial to entrepreneurial financing success. Based on the insufficient research related with those cues, especially the non-verbal ones, the authors opened an area of study on non-verbal and verbal cues in the entrepreneurial financing process by conducting and writing this book chapter.

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KEY TERMS AND DEFINITIONS

Crowdfunding: A method of financing by collecting small amounts of contributions from a large crowd of people, usually through the internet.

Donation-Based Crowdfunding: A crowdfunding model that is similar to charity funding, which investors just donate for goodwill and acknowledgement.

Equity-Based Crowdfunding: A crowdfunding model in which funders are treated as equity stakeholders with profit sharing in return of their investments.

Lending-Based Crowdfunding: A crowdfunding model that investors offer funds through small loans and earn the returns through interest payments from the borrowers.

Non-Verbal Cues: Communication among people that do not involve a direct verbal translation. It contains dynamic cues such as body movements and facial expressions, static cues such as demographic and physical characteristics and paralinguistic cues such as speech volume and vocal tone.

Reward-Based Crowdfunding: A crowdfunding model offers funders with pre-ordering product, services, or some incentives as the return of backers' investments.

Success Factor: A management term for an element that is essential and necessary to achieve the crowdfunding project funding goal.

Verbal Cues: Communication delivered through speech and language. It could be divided into content cues which contain lots of meaning and the style cues concentrating on how the meaning is expressed.