Replacing the entrepreneurial spokesperson: Synthetic (AI-generated) vs organic (human) personas in digital oratory pitch videos

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Abstract

Purpose
This study investigates the comparative effectiveness of synthetic AI-generated avatar videos against traditional organic human spokesperson videos in entrepreneurial pitches. It aims to explore whether synthetic avatars can effectively replace human spokespersons in delivering persuasive and brand-positive messages in a crowdfunding context.

Design/Methodology/Approach
A controlled experimental design was employed, comparing identical entrepreneurial pitches for a fictitious plant shop, delivered via both AI-generated avatars and real human actors. Over 500 diverse participants were randomly assigned to view one of these pitch versions. They then evaluated the persuasiveness and overall brand impression of the videos. The study also assessed whether viewers could discern between synthetic and organic spokespersons.

Findings
The findings reveal that synthetic avatars are competitive with human videos in terms of persuasiveness and the ability to create a compelling brand impression. However, when participants recognized the pitch as AI-generated, there was a notable decrease in ratings across various metrics. Despite this, over half of the viewers were unable to identify the synthetic nature of the avatar, highlighting the sophistication of current avatar technology.

Originality
This research contributes novel insights into an emerging strategy in entrepreneurial communication, highlighting a significant shift in the landscape of business presentations and marketing. It challenges the traditional reliance on human spokespersons in entrepreneurial pitches, offering a fresh perspective on the potential of AI-generated avatars in business communication.

Research Limitations/Implications
The study’s scope is limited to a single context and script, and thus may not fully represent the range of potential scenarios in which synthetic avatars are used. Further research could explore different contexts and scripts to deepen the understanding of AI avatars’ effectiveness.

Practical Implications
The study offers practical implications for entrepreneurs, suggesting that AI-generated avatars can be a cost-effective and persuasive alternative to human spokespersons. This could significantly impact strategies for video content creation in crowdfunding and other entrepreneurial endeavors.

**Social Implications**

The increasing viability thus likely increased subsequent use of synthetic avatars in business communication contexts poses important social implications, including the potential reshaping of public perception towards AI-generated content. The increased viability may also have ethical and social impacts, as indicated by the viability demonstrated in this study, from the increased risk of scams to the potential to offset gender inequalities at certain entrepreneurial communication stages.

**Keywords:** pitch video, artificial intelligence, synthetic media, human-centered, crowdfunding, digital oratory

### 1. Introduction and Executive Summary

Synthetic, AI-powered avatars emerge as a cost-effective and scalable solution for entrepreneurs crafting professional pitch videos. The competitive persuasive effectiveness and brand impact of these synthetic avatars, when juxtaposed with traditional organic human spokespersons, however, has not been demonstrated. This research delves into this very comparison, scrutinizing the viability of avatar vs human spokesperson pitch videos through a controlled experimental study.

The study tests identical entrepreneurial pitches for a fictitious plant shop seeking investment. These pitches were crafted using both real actors and state-of-the-art AI-generated avatars from Synthesia. A diverse pool of over 500 participants engaged with one random version of the pitch, after which each respondent evaluated the video’s persuasiveness and the overall impression of the brand it represented.

The findings reveal that synthetic avatars hold their ground against human videos in terms of persuasiveness and the ability to forge a compelling brand impression. This success is driven by the advanced animation programming, allowing the avatars to bypass the risks of the uncanny valley phenomenon. Over half of the viewers were unable to identify their synthetic avatar as synthetic, underscoring the advanced state of current avatar technology.

However, the study also uncovers a critical competitiveness distinction: when participants perceived the pitch as AI-generated, there was a significant decrease in ratings across metrics. This underscores the persisting challenges in avatar technology, particularly in overcoming the uncanny valley effect. Nevertheless, as technology advances, propelled by massive investments and corporate buy-in, it is anticipated that these negative perceptions will gradually diminish.

With continuous enhancements aimed at mitigating the uncanny valley effect, and because of the time and cost savings the avatar platform affords, synthetic avatars, offered by a variety of companies, are on track to offer a formidable challenge to human spokespersons and a potential asset to entrepreneurs seeking pitching advantages. This research thus offers fresh and timely insights into an emerging strategy in entrepreneurial communication, highlighting a significant shift in the landscape of business presentations and marketing, and furthering our understanding of the developing sub-genre of entrepreneurial digital oratory.
2. Literature Background and Hypothesis Development

Video content serves as a medium to convey the creator’s vision, passion, and the essence of the project to potential backers. Using video as a medium for pitching has been found to significantly increase the chances of success for entrepreneurs seeking funding over other static alternatives.

2.1 Video’s ubiquitous power for the entrepreneur

The use of video in crowdfunding campaigns has become an indispensable tool for creators seeking to raise funds for their projects. Carradini and Fleischmann’s (2023) research underscores the significance of multimedia elements in crowdfunding campaigns on platforms like Kickstarter. Their study of over 327,000 campaign pages revealed that successful campaigns frequently featured images, links, and most notably, a project video. The presence of a project video, they demonstrate, has a direct positive impact on the campaign’s success rate. These results are widely supported in the literature, indicating that the use of video to deliver the pitch likely increases the entrepreneur’s chances of funding success by significant margins (Courtney et al., 2017; Johan & Zhang, 2020; X. Li et al., 2016; Mollick, 2014).

This phenomenon is not new. Early in the modern online crowdfunding era, Indiegogo (2011) reported that campaigns with videos are 2.4 times more likely to appear on the homepage and raising 114% more money than those without a video. Kickstarter likewise suggested in 2012 that, “projects with videos succeed at a much higher rate than those without (50% vs. 30%)” (O’Connell & Kurtz, 2012). Just three years later, Yeh (Yeh, 2015) confirmed this new normal with a study showing that online crowdfunding campaigns with video were found to have on average four times the funding earnings total of those projects without video.

2.2 Common traits of effective videos featuring entrepreneurial digital oratory

Business pitches in the form of online video occupy a specific subgenre of “digital oratory,” which as a genre “can be described as thesis-driven, vocal, embodied public address that is housed within (online) new media platforms (and that ideally takes advantage of the developing/flux-laden conventions that the online video context provides)” (Lind, 2012). What those conventions are, however, has required significant recent theoretical explanation (Rossette-Crake, 2022). Entrepreneurial digital oratory forms a subgenre of digital oratory that can be understood as those audio-video productions, housed and disseminated online, featuring a business-minded speaker sharing information with their audience for the purposes of explaining, expanding, or otherwise advancing their entrepreneurial business activities. Common examples include product and service overview videos made by startups seeking investment funding, such as the pitch videos posted to popular crowdfunding sites like Kickstarter and Indiegogo. Understanding and abiding by the emergent conventions of the digital oratory is essential for the entrepreneur hoping to have success within this digital context. As described below, important analytical and experimental studies have thus contributed, in recent years, significant understandings of what conventions do and do not tend to produce success.

Having a spokesperson in the video can critically increase the likelihood of funding. The presence of the spokesperson, however, is a complex feature that help or hurt the video’s chances based on both the editing and the performative delivery. Li et al (2021) find that the spokesperson appearing early in the video increases success. The spokesperson serves as the vehicle for trust and emotional resonance (Jiang et al., 2019). Their vocal delivery is part of that resonance, cultivating a sense of passion and preparedness that can correlate positively with funding success (Allison et al., 2022; Davis et al., 2017; J. (Jason) Li et al., 2017). Even negative facial expressions can amplify the impact of critical proposition data, such as expressing the pain point that the entrepreneurial endeavor solves, thereby increasing funding success potential (Huang et al., 2023).
The spokesperson’s persona must be presented in a strategically advantageous way to positively impact the video. As Korzynski et al. (2021) describe, sharing positive attributes about self, such as experience and appearing hard-wording, can bolster the campaign’s persuasiveness. However, if their persona becomes menacing or wages in intimidation, the pitch becomes less successful. Those findings are consistent with Hou et al.’s (2019) findings that fear imagery is negatively associated with entrepreneurial video success.

Demonstration of a business’s product or service is likewise a unique asset to video pitches, embracing a competitive advantage video has over text. As Courtney et al. (2017), describe, multimedia campaigns allow the entrepreneur to “display a working model, prototype, or beta versions of the product” that demonstrate progress, credibility, and viability to potential backers. As Yang et al. (2020) find, any multimedia integrations must be designed in a way that complements instead of overshadows the argumentative content of the video to be effective.

2.3 Advent of high-fidelity video avatars

Modern video creation underwent a renaissance in the early 2000s when laptop and smartphones became ubiquitous, including native recording and editing tools, supplemented by app store options, allowing novice users readily create polished creative video content. Free access distribution platforms like Vimeo and YouTube, combined with these creation tools, allowed everyone from entrepreneurs to MNC CEOs alike to have a low-cost video presence, even though formal training was not common (Lind, 2020). In the post-COVID era, in which priorities shifted towards artificial intelligence (AI) (McKendrick, 2021) and computing speed acceleration curves sharpened (Henshall, 2023), modern video creation experienced a second renaissance. AI-driven tools dramatically offered to reduce time and energy costs while augmenting the creative skills of video creators (Truly, 2023). Such tools range from automatically cutting dead air out of clips to sophisticated color correction (Mileva, 2023).

The literature, however, has not kept pace with the AI-powered video tools’ development and their impacts on entrepreneurial ventures. Of interest to this article is the rise of humanlike synthetic AI-powered avatars available as video spokespeople, which offers a radical possible shift in the landscape of entrepreneurial digital oratory. Programs like Synthesia (Browne, 2023) and HeyGen (Schwaiger, 2023) are at the forefront of this technology, offering polished avatars to users like entrepreneurial pitch creators at a click of a button. These AI video generators allow the user to create polished videos with professional, synthetic human avatars, from scratch, by simply typing in a script. The script not only gets converted into audio using sophisticated text-to-speech voice modeling, it also animates the mouth and expressions of the spokesperson avatar to make the avatar appear like a real human that you recorded in a studio, performing your script. This is accomplished using real footage of recorded actors/models that have been intricately analyzed using the platforms’ advanced software. When combined with their user-friendly editing features and slick templates, the results are a very low-cost and high-professionalism final video product.

2.4 The uncanny valley effect

While demonstrating complex computing power, avatars and other synthetic life has been plagued with the challenges of the so-called uncanny valley – the feeling of eeriness and wariness interactants experience when confronting a synthetic being that is humanlike but not quite human (Mori et al., 2012). Negative reactions to the pseudo-human range from biological (MacDorman & Entezari, 2015) to metaphysical (MacDorman, 2005; Tondu, 2015), psychological (Gray & Wegner, 2012) to cultural (MacDorman & Ishiguro, 2006). Whether the uncanny valley effect provokes an anthropocentrism that worries over threats to its distinctiveness (Stein & Ohler, 2017) or a concern for psychopathy and malevolence in the machines (Tinwell et al., 2013), the literature across domains consistently demonstrates interactants’ wariness over synthetic pseudohumans when they are recognized as such. One empirical study, for example, tested film animation styles
and found that semirealistic animated films produce higher feelings of eeriness than cartoonish or human films demonstrated that the use of avatars can actually reduce the effectiveness of AI interaction (Kätsyri et al., 2017). Another study found that adding an avatar to chatbot interactions produced higher deleterious uncanny valley sentiments and more intense psychophysiological effects (Ciechanowski et al., 2019). Perhaps most consistent with the aims of this study, and confirming previous research on virtual faces (McDonnell & Breidt, 2010), Weisman and Peña (2021) experimentally found that avatar faces’ evocation of the uncanny valley effect mediates a decrease on affect-based trust, even with somewhat crude faces by comparison even in just the few years’ difference between that study and this present study.

Yet the advancements in AI imaging and animation have advanced considerably since most of the studies investigating the uncanny valley were completed. AI image generators have now evaded detection and won international art contests (Roose, 2022), and a majority of users no longer recognize AI-generated faces when presented to them (Miller et al., 2023). These advancements push back against the conventional anti-AI uncanny valley wisdom and raise new questions for the persuasive potential of the new wave of technology. A sister study, run roughly concurrently with this study presented in this article, tested whether or not the avatars in a program like Synthesia could provide discrete knowledge to users in an onboarding context. While not set in a persuasive context, the results are directly applicable to the project here. In that study, not only did the avatars produce equitable learning outcomes, but over half of the participants did not recognize the AI-generated avatars as being synthetic computer constructs (Redacted Author Citation).

2.5 Research question and hypotheses:

Given the cost, scale, and skill-agnostic benefits, and despite the wariness over an uncanny value risk, or perhaps because the technology has advanced beyond immediate synthetic recognition, corporate America readily adopted the high-fidelity results of these avatar programs, with over half of Fortune 500 companies reporting use of the modern wave of AI-animation-powered synthetic avatars for their communications, such as internal learning and development (Bergen, 2023). The potential of this technology for entrepreneurial use, however, is less clear and is untested in the literature to-date. While the literature is clear on the power of a human spokesperson in an entrepreneurial pitch video, whether a synthetic avatar is a viable option is a question untested and unanswered in the existing literature. A central question thus guides this study: What is the comparative effectiveness of synthetic avatar spokesperson entrepreneurial pitch videos compared to an organic human spokesperson video?

This study offers the following hypotheses to guide the methodology and analysis:

- **H1**: A synthetic avatar pitch will be as persuasively effective a synonymous organic human spokesperson pitch.
- **H2**: A synthetic avatar will produce an equivalent brand impression as a synonymous organic human spokesperson pitch.
- **H3**: Less than half of viewers will be able to correctly identify their synthetic avatar as being AI/computer-generated.

3. Methodology

Video content serves as a medium to convey the creator’s vision, passion, and the essence of the project to potential backers. Using video as a medium for pitching has been found to significantly increase the chances of success for entrepreneurs seeking funding over other static alternatives.
3.1 Video Artifact Production

The study roughly took the form of an 2x2 test of four synonymous videos. The videos were identical save for their spokesperson – male/female and organic/synthetic.

Two of the videos were created using organic, human spokespersons. Two professional actors were hired to pitch an investment opportunity for a fictitious entrepreneur-owned plant store, Plant Haul, seeking to expand beyond its initial location. One actor was male and the other female, but they were otherwise cast to be within the same general demographic categories (age, ethnicity, general bodily ability, and native spoken language). Filming was completed in a professional studio with a neutral backdrop and with the assistance of camera and sound technicians. The actors spoke from a teleprompter with a script written to be generally persuasive but not overwhelmingly so, so as to allow room for the spokesperson to matter. The actors were given wardrobe to match the wardrobe of the Synthesia avatars and were directed to restrict hand gestures, given that the avatars could not do so at the time of filming.

Clips from the actors’ best takes were edited in with B-roll and titles (on-screen text), in line with modern professional video conventions via professional editing software.

Two videos were then created using Synthesia’s synthetic, AI-powered avatar program. The avatars were chosen to match the general demographics (sex, age, general bodily ability, and ethnicity) and American English voices were chosen from those provided in the Synthesia system. The same script that the organic spokespersons used was inputted into system, which generated both the conversational voice performance and animated the mouth and face of the humanlike avatar. The B-roll and text were edited in within Synthesia’s editing platform to be identical to the organic videos.

3.2 Participant Sample

Participants were recruited through an online survey audience portal from a population of working professionals across the U.S. Age and gender were balanced to increase generalizability. A series of quality control questions were included in the survey to ensure that active, engaged participant data was analyzed. For example, the first question instructed “There is a code above your video. Please carefully select that code from the list below.” Survey responses that included an incorrect response were discarded.

The sample totaled 561 participants, once entries that failed quality control were eliminated.

3.3 Survey Procedure and Measures

Participants were randomly assigned to view one of the four videos. Roughly half saw an organic spokesperson and half a synthetic spokesperson (286 organic and 275 synthetic). Participants were not informed that the video may be AI-generated, to avoid biasing impressions and in order to test H3. IRB approval was granted with this understanding, due to the minimal realistic harm such a deception would produce. Instead, participants were asked to give their feedback under the guise that they were viewing a possible pitch video for a business expansion opportunity, without being told that such venture was fictitious. Following the viewing, participants answered a series of survey questions designed to assess various dimensions of the video’s impact, including persuasive effectiveness and brand impression. Answer options were given on a five-point Likert scale in ascending value from Strongly Disagree to Strongly Agree.

Video effectiveness (H1) was measured by the composite average of three questions. While argumentation is complex, three foundational characteristics were drawn from the literature to provide a composite view of how well the video pitch effectively could move the viewer. After viewing the Plant Haul expansion pitch video, participants rated how strongly they agreed that the pitch was understandable (Clark, 2008;
Hoffjann, 2022) and memorable (Duarte, 2012). Participants then directly whether or not they found the proposal convincing.

Brand impression (H2) was likewise measured here as a composite score of three characteristics. Three measures salient in the brand image literature were likewise measured in this study in order to produce a composite brand image (H2) rating. These include how competent (Aaker et al., 2010), trustworthy (Chaudhuri & Holbrook, 2001), and likeable (Nguyen et al., 2013) the brand is perceived to be by respondents. After viewing the video, participants rated how strongly they agreed that the fictitious business, Plant Haul, was competent, trustworthy, and likable.

Participants were then offered the chance to provide open-ended responses on the strengths and weaknesses of the pitch.

After rating the video, participants were asked to note whether the video they viewed was an organic human spokesperson video or an AI-generated avatar video (H3). The survey also collected demographic data, providing an opportunity for a more nuanced analysis of the impact across different viewer segments.

4. Results

4.1 Persuasive Effectiveness

On average, synthetic avatar persuasive pitch videos in this study were equally as persuasively effective as their organic human spokesperson counterparts. Based on a composite average of three effectiveness questions, H1 was confirmed. The p-value was well above the typically required limit for statistical significance (see Table 1), suggesting a strong persuasive viability for use of synthetic avatars when variables beyond the limits of the avatar programs are constrained.

As intended, the persuasive pitch was generally but not overwhelmingly persuasive to the viewer, scoring a 3.6 out of 5.0 in overall persuasiveness. The highest score was achieved in how understandable the video was, nearly a 4 out 5, and the lowest in the direct convincing score, at a 3.4. This suggests that the experimental design did create room for the spokesperson to have an impact.

Table 1. Effectiveness Ratings: Overall effectiveness composite score and individual scores for 1-5 point Likert scale questions rating how strongly the participants agreed that the video was memorable, understandable, and convincing. (* if p-value denotes statistical significance)

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>ORGANIC VIDEO</th>
<th>SYNTHETIC VIDEO</th>
<th>P-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Effectiveness</td>
<td><strong>3.64</strong></td>
<td><strong>3.61</strong></td>
<td><strong>0.723</strong></td>
</tr>
<tr>
<td>— Memorable</td>
<td>3.50</td>
<td>3.44</td>
<td>0.505</td>
</tr>
<tr>
<td>— Understandable</td>
<td>3.95</td>
<td>3.96</td>
<td>0.822</td>
</tr>
<tr>
<td>— Convincing</td>
<td>3.46</td>
<td>3.43</td>
<td>0.706</td>
</tr>
</tbody>
</table>

However, the persuasive effectiveness significantly decreased when respondents perceived their video spokesperson as being AI-generated. Participants were not initially made aware that the spokesperson may be synthetic, and were only cued to the possibility in one of the last questions. When they perceived the spokesperson as being AI-generated, respondents on average found the pitch to be significantly less effective across all categories – memorable, understandable, and convincing, as well as in the composite overall effectiveness average (3.75 vs 3.47), which had a p-value well below the typical threshold (see Table 2). This
complicates the findings on H1 and suggests that in some contexts, such as a small viewership number or a subpar avatar animating program, synthetic avatar videos may be negatively related to the persuasive force of the entrepreneur’s pitch, thus disproving H1.

Table 2. Effectiveness Ratings based on AI Perception: Overall effectiveness composite score and individual scores for 1-5 point Likert scale questions, categorized by whether or not the participant perceived their spokesperson to be organic or synthetic. (* if p-value denotes statistical significance)

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>PERCEIVED ORGANIC</th>
<th>PERCEIVED SYNTHETIC</th>
<th>P-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Effectiveness</td>
<td>3.75</td>
<td>3.47</td>
<td>0.0004*</td>
</tr>
<tr>
<td>— Memorable</td>
<td>3.63</td>
<td>3.27</td>
<td>0.0004*</td>
</tr>
<tr>
<td>— Understandable</td>
<td>4.05</td>
<td>3.88</td>
<td>0.0371*</td>
</tr>
<tr>
<td>— Convincing</td>
<td>3.59</td>
<td>3.25</td>
<td>0.0011*</td>
</tr>
</tbody>
</table>

4.2 Brand Impression

When considering all 561 participants’ feedback, the synthetic avatar videos produced equivalent overall brand impression ratings (see Table 3). The scores in each of the three subcategories had differences that were not statistically significant, with p-values well above the typical significance threshold. Likewise, the composite brand impression score was equivalent (3.80 vs 3.76). Across the brand impression ratings, H2 was proven true.

Table 3. Brand Impression Ratings: Overall brand impression composite score and individual scores for 1-5 point Likert scale questions rating how strongly the participants agreed that the fictitious business, Plant Haul, seemed competent, trustworthy, and likeable. (* if p-value denotes statistical significance)

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>ORGANIC VIDEO</th>
<th>SYNTHETIC VIDEO</th>
<th>P-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Impression</td>
<td>3.80</td>
<td>3.76</td>
<td>0.612</td>
</tr>
<tr>
<td>— Competent</td>
<td>3.78</td>
<td>3.81</td>
<td>0.601</td>
</tr>
<tr>
<td>— Trustworthy</td>
<td>3.75</td>
<td>3.68</td>
<td>0.334</td>
</tr>
<tr>
<td>— Likeable</td>
<td>3.86</td>
<td>3.79</td>
<td>0.366</td>
</tr>
</tbody>
</table>

When segmented by perceived spokesperson type, however, the difference was significant (see Table 4). Participants who perceived their spokesperson to be synthetic also rated the brand impression significantly lower across all subcategories, which also resulted in a significantly lower overall brand impression score. Perception of the spokesperson as synthetic was thus negatively related to overall brand impression, thus disproving H2 in that context.

Table 4. Brand Impression Ratings based on AI Perception: Overall brand impression composite score and individual scores for 1-5 point Likert scale questions, categorized by whether or not the participant perceived their spokesperson to be organic or synthetic. (* if p-value denotes statistical significance)
4.3 Accurate Perception of AI Avatar

The Synthesia avatar program produced highly effective simulacra of human presenters. Half of respondents (50%) incorrectly identified their synthetic avatar as being an organic human spokesperson, with yet another 11 percent unsure. Only 38 percent of respondents correctly identified the avatar as synthetic (see Table 5). H3 was proven true.

While a sizeable number of respondents also either incorrectly identified or were unsure that their human spokesperson was an organic spokesperson, a portion of that mistaken attribution may be attributed to skepticism provoked by the question itself. Participants were not informed that their video may be AI-generated until the question at the end of the survey implicitly suggested it. Some may, at that time, have retroactively been suspicious of their human spokesperson, accounting for some of the incorrectness. That same suspicion may have actually inflated correct answers for synthetic avatar videos, potentially making the effectiveness of the dupe even great.

Table 5. Total number of respondents who correctly perceived their spokesperson to be an actual organic human speaking or a synthetic, AI-generated avatar speaking.

<table>
<thead>
<tr>
<th>VIDEO TYPE</th>
<th>CORRECT PERCEIVED</th>
<th>INCORRECTLY PERCEIVED</th>
<th>UNSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Video</td>
<td>69.23%</td>
<td>14.33%</td>
<td>16.43%</td>
</tr>
<tr>
<td>Synthetic Video</td>
<td>38.18%</td>
<td>50.18%</td>
<td>11.64%</td>
</tr>
</tbody>
</table>

4.4 Open-ended Assessment

Overall analysis revealed consistent feedback, both positive and negative in sentiment, across organic and synthetic video types, including expected critiques centered on both the argumentative rationale for the business proposal and the spokesperson’s delivery, suggesting that viewers were generally impressed and put off by the same overall features and in with generally the same effect across video types. While criticisms ranged from business specific questions to video editing choices, these criticisms were applicable to all videos, given that they were identical in content and form, save for the spokesperson present.

However, another primary theme emerged in textual analysis of the open-ended responses. Isolating the open-ended answers to the weakness questions, partitioned to only those answers from respondents who rated the effectiveness of brand-image below the general average, produced useful unique additional data that identifies spokesperson’s performed, delivered persona as a critical factor in pitch success.

More than 1 in 5 (22%) of respondents with sub-average ratings commented in the open-ended weakness question that the spokesperson was a weakness of the video. Over half of those responses (60%) explicitly mentioned the synthetic nature of the avatar with comments such as “felt like a computer talking” and “She was more like an AI robot” and “It felt robotic or AI in sound and the man seemed very disingenuous.” The other 40 percent commented more broadly on a flat, disengaged delivery with comments like “weird
voice” and “narrator was monotone and boring” and “the announcer was stiff.” The explicit focus on the spokesperson in these sub-average open-ended responses suggests that the synthetic avatar as spokesperson is a mediating variable.

### 4.5 Demographic Variables

While demographics did play a role in reactions to the pitch videos, they did so across both the organic and synthetic categories.

That is to say, the data suggests that demographic categories observed for, including age, household income, and technology adoption style did yield significantly different results across effectiveness and brand impression categories. Different age groups, for example, perceive the effectiveness of the videos differently. Notably, older age groups, particularly those in the 45 to 60 range, tend to give higher effectiveness and brand impression ratings. Similarly, household income significantly affects the overall effectiveness ratings, with a strikingly low p-value of 8.15e-09. Higher income groups tend to rate the videos more favorably in both effectiveness and brand impression categories, possibly due to differences in educational background, exposure to similar content, or even increasing opportunities to consider brand investment potentials as their own income growth has opened more of those opportunities.

The analysis of the impact of technology adoption levels on overall effectiveness ratings reveals a statistically significant difference, as indicated by a p-value of 3.55e-05. This finding suggests that individuals’ attitudes and behaviors towards technology adoption are closely linked to how they perceive and rate the effectiveness of the videos. Those who identify as "Innovators" or "Early Adopters" tend to rate the videos more favorably, reflecting a potential correlation between a propensity for early technology adoption and a positive reception to the content of the videos. There was not a statistical significance across adoption categories relative to brand impression, however. This suggests that the medium of video had little, if nothing, to do with this correlation. Instead, it is conceivable that this reflects a broader correlation amongst the attitudes needed to adopt a new piece of technology before its fully vetted by the public and the attitudes needed to adopt a new business proposal before it has proven fully viable.

In contrast, gender does not show a statistically significant impact on the overall effectiveness ratings, with a p-value of 0.117, but there is a marginal difference in brand impression with a p-value of 0.0460. Male respondents, on average, rated the brand’s competence, trustworthiness, and likeability slightly higher than female respondents.

However, while these findings are informative and may prove useful for future study, the data collected in this study indicates that while these demographic factors play a role in the favorability of the video’s pitch, they do so uniformly across organic and synthetic videos. The same impact by age, income, and technology adoption persists regardless of which spokesperson was seen. While income level increase was correlated with an increased rating, for example, that increase happened for both organic and synthetic spokesperson pitches. This suggests that for synthetic avatars are not uniquely perceived differently based on the participant’s age, gender, income status, or tech adoption tendencies.

The gender of the spokesperson/avatar did not have a statistically significant impact on any of the composite averages or individual questions asked (see Table 6). This was true for the all respondents, for just those viewing synthetic videos, and for just those viewing organic videos. This suggests that future studies may achieve equivalent results with a 1x1 method instead of a 2x2 method.

**Table 6. Average ratings for effectiveness and brand impression scores, based on a 1-5 Likert scale, subdivided by video type and spokesperson gender. (\* if p-value denotes statistical significance)***
5. Discussion

This study contributes a new finding to our understanding of entrepreneurial pitching strategy. That is, this study demonstrates that the current level of AI-generated avatar technology can be a competitively and equitably viable video spokesperson consideration for entrepreneurs. This is a valuable revelation, given the importance of video for entrepreneurial outreach like on crowdfunding platforms (Carradini & Fleischmann, 2023; Courtney et al., 2017; Johan & Zhang, 2020; X. Li et al., 2016; Mollick, 2014). This study also thus adds to our understanding of digital oratory’s evolution, particularly as it relates to the subgenre of entrepreneurial digital oratory.

At a fundamental level, this study confirms the implicitly and explicitly held understanding of digital oratory – that delivery and narrator persona, even in the digital context, matter even beyond the technical or logical argumentative content. As research has indicated prior to this study and then confirmed through this study’s variables, the entrepreneurial spokesperson can absolutely have an impact on the success or failure of a pitch. This study advances our general understanding that in digital oratory, the orator matters, and places and confirming that understanding squarely within a commercial context. The prudent entrepreneur, then, would ensure that the nonverbal delivery in their digital oratory-based proposal is performed in such a way that it serves as a valuable vehicle for gaining engagement, buy-in, and goodwill. What that data here suggests is that AI-generated avatars are now worthy of consideration for the entrepreneur seeking to meet those goals.

Because of the viability of avatars demonstrated here, our understanding of digital oratory as a genre of speaking, for private, public, and commercial purposes, must now include a further complication – awareness that this form of “embodied” communication can now effectively be organic or synthetic. While extensive exploration have confirmed the limitations synthetic characters have due to the uncanny valley phenomenon (Gray & Wegner, 2012; MacDorman & Entezari, 2015; Tinwell et al., 2013; Tondu, 2015), this new era of avatars appear to have moved beyond that limiting feature for the majority of respondents.

The increased effectiveness of synthetic speakers may have been achieved by the type of avatars used in this system, fashioned off from live human video models instead of pure computer-generated animation. That situates the avatar much closer already to the expected narrators in the broader, accepted digital oratory genre. The AI-powered dynamism coded into the avatar’s seemingly authentic delivery style then allows it to be believable for the majority of viewers, especially those unaware of the backend reality. That synthetic delivery prowess is what appears to allow this class of synthetic spokespersons to be equally as persuasively successful. This understanding is consistent with the existing literature on the impact of persona and delivery in entrepreneurial pitch success (Allison et al., 2022; Davis et al., 2017; Jiang et al., 2019; Y. Li et al., 2021).

Of course, the results here to not offer a blanket endorsement of avatars as human spokesperson replacements. Quite the opposite. The very design of the experiment, controlling the setting and gestures of the live actors to match the digital puppets’ limited options, points to the freedom and flexibility that organic human actors provide. However, the time and cost saving, along with the professional aesthetic so easily achieved, will have to factor against those creative freedoms. With the avatar programs also allowing users to upload video

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>SYNTHETIC MALE</th>
<th>SYNTHETIC FEMALE</th>
<th>SYNTHETIC P-VALUE</th>
<th>ORGANIC MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Effectiveness</td>
<td>3.65</td>
<td>3.56</td>
<td>0.358</td>
<td>3.60</td>
</tr>
<tr>
<td>— Memorable</td>
<td>3.55</td>
<td>3.32</td>
<td>0.065</td>
<td>3.45</td>
</tr>
<tr>
<td>— Understandable</td>
<td>3.96</td>
<td>3.97</td>
<td>0.945</td>
<td>3.89</td>
</tr>
<tr>
<td>— Convincing</td>
<td>3.45</td>
<td>3.40</td>
<td>0.700</td>
<td>3.45</td>
</tr>
<tr>
<td>Overall Brand Impression</td>
<td>3.71</td>
<td>3.82</td>
<td>0.271</td>
<td>3.76</td>
</tr>
<tr>
<td>— Competent</td>
<td>3.78</td>
<td>3.85</td>
<td>0.496</td>
<td>3.74</td>
</tr>
<tr>
<td>— Trustworthy</td>
<td>3.63</td>
<td>3.74</td>
<td>0.326</td>
<td>3.73</td>
</tr>
<tr>
<td>— Likeable</td>
<td>3.73</td>
<td>3.87</td>
<td>0.218</td>
<td>3.82</td>
</tr>
</tbody>
</table>
of themselves to create their own bespoke custom avatars, even the positive self-promotion tactics previously found valuable (Korzynski et al., 2021) are an option now in the digital context, further complicating the entrepreneur’s decision calculus.

Entrepreneurs considering an avatar speaking for their endeavor should also carefully weigh the remaining risks of the uncanny valley, even if just caused by poor execution in this evolving technology. When the synthetic nature of the digital spokesperson was identified, the respondent ratings were less positive. In the case where the viewership was expected to be skeptical, when the creator was not familiar with the technology, or when there was a small sample size of viewers, the risks of a diminished score may rise beyond the liking of an entrepreneur.

This is not to say that the risks of avatar-awareness negate the value of the AI avatars. The data here suggests otherwise quite directly as well. Not only is the fake highly effective, with most respondents not identifying the synthetic avatar as such, the overall average was equally as high, regardless of which video type was viewed. Thus, for an entrepreneur or other persuasively minded creator, as more and more viewers see their pitch, the likelihood increases that they too will not have anomalous negative reactions, but instead will also produce the same equivalent results. In the context of crowdfunding, for example, when the viewership can be in the tens of thousands to even millions, the data here suggest that there is no statistical risk in using an AI avatar. Even further, for those wishing to reduce risks caused by ethnic or gender inequalities in entrepreneurship (Chang & Xu, 2023), the synthetic spokesperson of a varying demographic may be an appealing, even if ethically complicated, consideration.

Even further, because the delivery of the avatar is already highly effective at fooling more than half of viewers, and because significant financial investments and user data is being collected in massive quantities, the coding needed to further refine the animation is almost guaranteed to be provided to the companies creating this software, like Synthesia and its competitors. This all but guarantees that the risks directly associated with identifiability in the avatar will continue to decrease.

It should also be noted that this study was also based on a single context and single script. The skilled pitch writer has many other alternative ways of creating value or even additional risk even with a constrained use of the avatars. As the landscape of digital oratory undergoes its current seismic shifts, the conventions of the genre will thus change as new rhetorical and videographic approaches are tested and normed. For example, it may or may not be advantageous to transparently admit that the spokesperson is an AI avatar. Future studies, as well as industry use-case exemplars, will help scholars and practitioners better understand how these new contextual best practices develop.

6. Conclusion

This study reveals the viability of synthetic AI-generated avatars as spokespersons in entrepreneurial digital oratory pitch videos. The findings demonstrate that these avatars can match the persuasive effectiveness and brand impression of human spokespersons, suggesting a paradigm shift in entrepreneurial communication strategies. However, the perception of the avatar’s synthetic nature remains a critical factor, tied to audience reception. As technology improves, reducing the uncanny valley effect, synthetic avatars are poised to become increasingly integral in entrepreneurial ventures. Future research should explore diverse contexts to further understand the evolving dynamics of digital oratory, synthetic and organic, in entrepreneurship. This study’s insights offer a significant contribution to entrepreneurial strategies in the age of advancing AI and digital communication technologies.
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Henshall, W. (2023, August 2). AI has surpassed humans at a number of tasks and the rate at which humans are being surpassed at new tasks is increasing. *Time Magazine*. https://time.com/6300942/ai-progress-charts/


