Possible You: AI-Generated Digital Twins for Future Self-Modeling and Career Exploration

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Abstract

The human capacity to envision possible futures fundamentally shapes identity, motivation, and life trajectories. Yet for many individuals, particularly those with limited access to mentorship or educational resources, imagining concrete career futures remains difficult. We present *Possible You*, an AI digital twin system that supports career exploration through interactive dialogues with personalized possible future selves. By combining AI-generated narratives and portraits, the system transforms abstract career possibilities into vivid and emotionally engaging experiences. In a mixed-methods study ($N = 209$), the perceived authenticity of the AI-generated futures emerged as the strongest and most consistent correlate of participants' future self-continuity and career-related outcomes. Exposure to multiple possible selves was associated with greater future self-continuity, whereas interacting with a single possible self showed a trend toward stronger career commitment. These findings suggest an important trade-off that warrants further investigation: exploring multiple futures may facilitate discovery, while sustained engagement with a single future may foster commitment. Rather than predicting or prescribing individuals' futures, *Possible You* positions generative AI as a reflective medium that helps people imagine, evaluate, and shape their own future trajectories. More broadly, this work demonstrates the potential of AI-generated digital twins to democratize access to career exploration and support more equitable opportunities for future-oriented reflection.

1 Introduction

Human experience is fundamentally shaped by the capacity to imagine possible futures and construct narratives about who we may become. Career decisions are among the most consequential of these acts of imagination. For many people, work represents far more than economic sustenance; it is a central source of identity, purpose, and meaning [12, 10]. Career choices shape well-being, belonging, and self-conception throughout life [6, 26]. Yet envisioning one's future career is challenging, particularly for individuals with limited access to mentors, professional networks, or educational resources [33]. As a result, the ability to vividly imagine and explore possible professional futures remains unequally distributed.

Today, people navigate career decisions through a combination of self-reflection, mentorship, internships, and online resources [15, 5]. Despite the growth of digital platforms, however, career exploration remains an underdeveloped area [11]. Many people—particularly those from under-resourced communities—lack access to effective guidance and opportunities to explore possible

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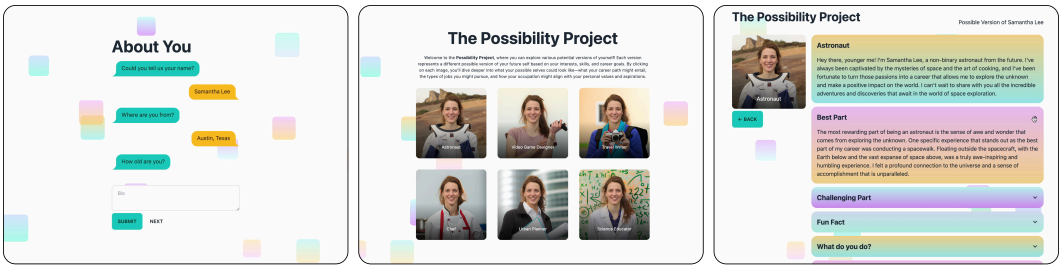

Figure 1: The *Possible You* interface guides users through an AI-mediated self-discovery process and generates visual representations of potential future selves. Three future profiles are derived from users' explicitly expressed career aspirations, while three additional profiles are generated from latent patterns inferred from their responses. Each portrait is paired with a personalized first-person narrative describing the corresponding future career trajectory.

career paths. A 2023 Harvard Project on Workforce report found that career exploration opportunities are inequitably distributed, reinforcing existing educational and socioeconomic disparities [11]. The need for more accessible approaches is increasingly urgent, as one in four young people worldwide is neither in education, employment, nor training, with young women disproportionately affected [34].

Although career counselors and educational institutions help address this need, they are often under-resourced and unable to provide personalized support at scale [16]. At the same time, the labor market is evolving rapidly as generative AI reshapes how people learn, work, and make decisions [1, 9, 2, 19]. These advances create new opportunities for career exploration by integrating individuals' lived experiences [25] with real-time labor market information [8], enabling adaptive, personalized guidance that complements human counselors. Yet this potential remains largely untapped. Most AI-based career tools focus on recommending occupations or answering questions rather than helping people vividly imagine, experience, and reflect on possible future selves.

We present "Possible You," a system that employs generative AI not as oracle or optimizer, but as a mirror, enabling virtual self-modeling through personalized visualizations and narratives of potential futures. Drawing from possible selves theory [24], which reveals how envisioned futures shape present action, our platform generates six AI-mediated reflections of who users might become. This represents a fundamental shift: from AI as predictor of futures to AI as a medium through which humans imagine, explore, and ultimately choose their own becoming.

This paper makes the following contributions:

- A novel system that introduces AI-generated virtual self-modeling as a new paradigm for supporting human becoming through personalized interventions that enable individuals to encounter their possible future selves.
- Empirical evidence that perceived authenticity, rather than technical sophistication, is the strongest and most consistent correlate of positive outcomes in virtual self-modeling, with implications for how AI systems can serve as effective tools for human transformation.
- Empirical evidence suggesting a tension between multiplicity and singularity in virtual self-modeling: seeing many possible selves was associated with expanded future self-continuity, while focusing on one showed an exploratory trend toward deeper commitment.

2 Related Work

Digital career exploration and AI-powered guidance. Platforms such as CareerOneStop and FutureFit AI exemplify a growing ecosystem of digital career navigation aids, yet limited research examines whether these tools help users explore careers meaningfully; they tend to inform but rarely transform [11]. Studies of interface design show that overly complex systems can alienate the users who most need support [35], while streamlined experiences that present multiple contrasting perspectives simultaneously, such as UniCompass, help people navigate possibility with greater confidence [18]. Work on AI advisors further suggests that people sometimes feel more comfortable exploring aspirations with a chatbot than with a human counselor [17, 21].

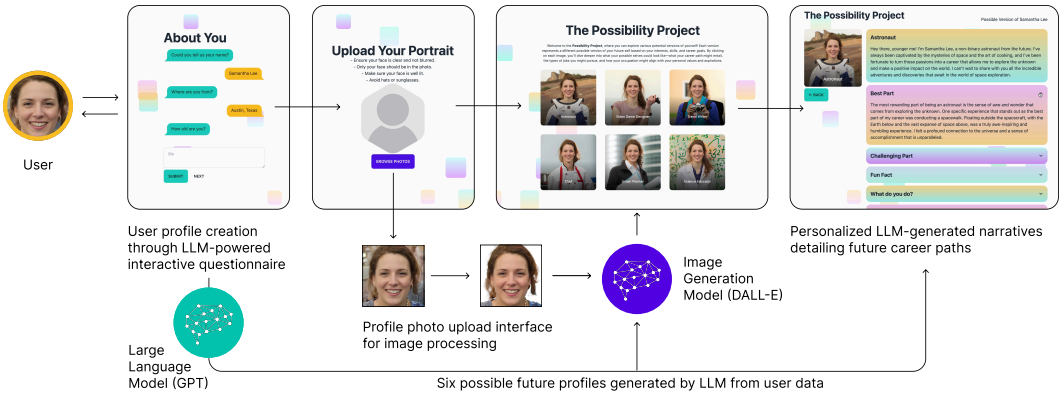

Figure 2: System architecture of *Possible You* showing the three-stage pipeline for virtual self-modeling. Stage 1: conversational assessment using an LLM with recursive prompting to extract narrative identity markers. Stage 2: visual synthesis using a text-to-image model to generate personalized future self representations. Stage 3: narrative generation combining user data with labor market information to create six interactive future self profiles.

Possible selves and future self-continuity. Identity-based motivation theory holds that people act not only from who they are but from who they imagine becoming [24]. Vivid, emotionally resonant renderings of future selves have been shown to increase saving behavior [14, 28], promote healthier choices [30], and improve academic persistence [22]. Interventions are especially effective when future identities feel both aspirational and achievable and are paired with concrete strategies [23]. Future self-continuity, the perceived connection between present and future selves, is a key mechanism linking such visualizations to behavior [13].

Generative AI for future self interventions. Recent work indicates that generative AI can make future self interventions more vivid and personal. Future You showed that a 30-minute conversation with an AI-generated future self reduced anxiety and strengthened future self-continuity [25, 3]. In a workshop setting, high school students iteratively generated images of their dream futures, refining them until the images felt right, demonstrating generative AI's capacity to amplify rather than replace human imagination [4]. *Possible You* extends this line of work from single future selves to the exploration of multiple, career-specific possible selves.

3 Methodology

System Design. We developed *Possible You* as an interactive system that leverages generative AI to facilitate virtual self-modeling: the process through which individuals construct and explore representations of their potential future selves. The system architecture (Figure 2) implements a three-stage pipeline that transforms user narratives into personalized visual and textual representations of possible futures, drawing on psychological theories of identity-based motivation [24] and future self-continuity [13]. The deployed implementation used GPT-3.5 for dialogue and DALL-E for image synthesis; we note that our findings concern design principles for virtual self-modeling rather than the capabilities of any specific model generation, and the pipeline is model-agnostic.

The system employs a conversational interface that conducts structured identity assessment through recursive dialogue patterns. Unlike traditional questionnaire-based approaches, our system implements dynamic prompting that adapts based on response depth and content specificity. The chatbot evaluates responses across three dimensions: information density (specific details versus generic statements), narrative coherence (consistency across identity domains), and autobiographical specificity (presence of personal anecdotes and contextual details). When responses lack sufficient depth, for instance generic statements like "I enjoy helping others," the system triggers recursive prompting: "Describe a specific moment when helping someone felt particularly meaningful to you." This approach draws from narrative identity theory, which posits that individuals construct identity through the stories they tell about themselves [22].

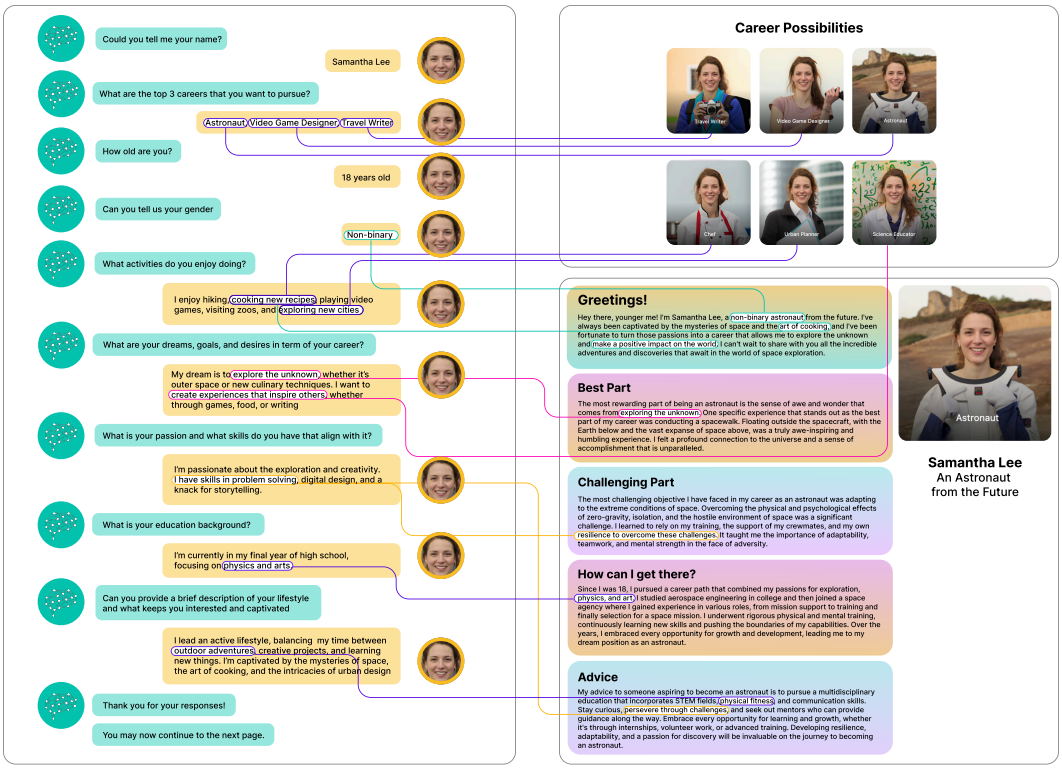

Figure 3: Example user journey illustrating the virtual self-modeling process. User "Samantha Lee" engages with the conversational interface, providing information about interests and aspirations. The system identifies a latent theme (exploration) across domains and generates six future self representations: three based on explicit preferences (Astronaut, Game Designer, Travel Writer) and three derived from pattern analysis (Chef, Urban Planner, Science Educator). Selecting a profile triggers generation of a personalized narrative that integrates user-specific information with career data.

For visual representation, we implement a two-stage image synthesis pipeline. Users upload a photograph, with informed consent for its use, that undergoes facial extraction followed by context generation. The system constructs prompts that preserve facial features while generating profession-specific environments: medical settings for healthcare careers, creative studios for design paths, or research laboratories for scientific trajectories. This approach maintains identity continuity (a recognizable self) while enabling identity transformation (a reimagined context), creating what we term "identity-preserving transformation," which prior work suggests is essential for effective future self visualization [28].

The system generates six distinct future self profiles using a hybrid approach: three profiles derived from explicitly stated preferences and three generated through latent pattern analysis of conversational data. This design decision balances user agency (honoring stated preferences) with system creativity (revealing unconsidered possibilities). Each profile includes a first-person narrative constructed by combining user-specific information with data from authoritative sources such as the U.S. Bureau of Labor Statistics. These narratives follow a structured format that includes temporal progression ("I remember being your age..."), challenge acknowledgment ("The path wasn't always straight-forward..."), and value alignment (connecting career outcomes to initially expressed values). This narrative structure implements findings from possible selves interventions showing that effective future self representations must feel both aspirational and achievable [23].

Experiment. We conducted a between-subjects experiment (N=209, ages 18 to 24) to examine how different implementations of AI-generated virtual self-modeling relate to future self-continuity and career-related outcomes. Participants were recruited through Prolific and randomly assigned to one of five conditions in a 2×2 factorial design plus control. The experimental manipulation varied along

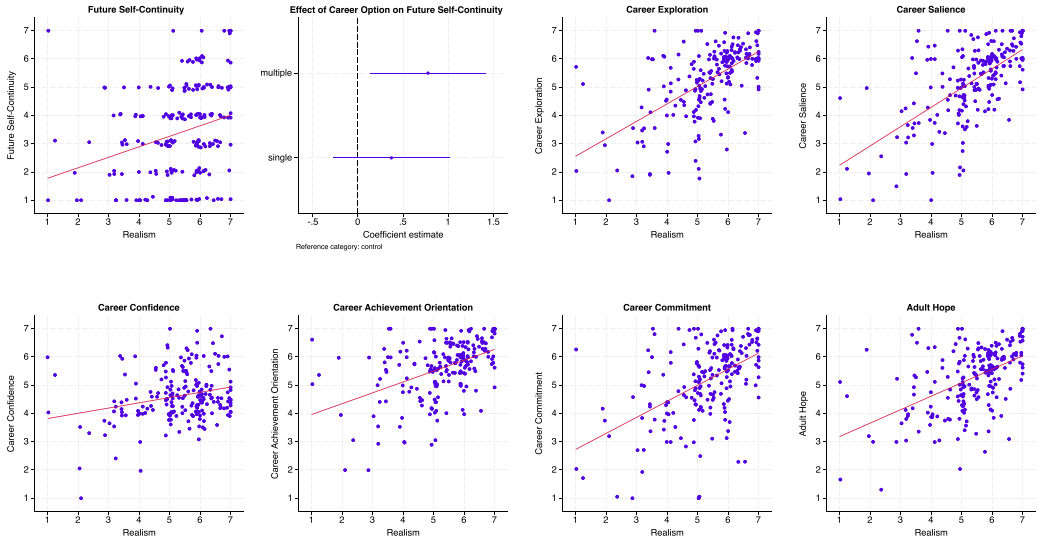

Figure 4: Associations between perceived realism and outcome measures, alongside the estimated effect of multiple versus single future selves on future self-continuity. Scatter plots depict fitted linear relationships, and the coefficient plot shows regression estimates relative to the Control condition. Error bars represent 95% confidence intervals from bootstrapped standard errors.

two dimensions: multiplicity (single versus multiple future selves) and personalization (self-focused versus other-focused framing). The sample was predominantly female (52.15%, n=109), with male participants comprising 43.06% (n=90) and non-binary participants 4.78% (n=10); most participants held a Bachelor's degree (37.80%, n=79) or had completed some college (29.19%, n=61).

Our experimental conditions were designed to isolate key design decisions in virtual self-modeling systems. The *Multiple-Self* condition (n=41) presented six personalized future selves with AI-generated portraits and narratives using first-person language. The *Single-Self* condition (n=44) showed one personalized future self with deeper narrative development. The *Multiple-Others* condition (n=37) presented six career options using third-person framing without personalized imagery. The *Single-Other* condition (n=40) showed one career using impersonal language. The *Control* condition (n=47) directed participants to explore the U.S. Bureau of Labor Statistics website, representing traditional digital career resources.

Analysis. We employed validated psychological measures adapted for our context: the Career Exploration Scale [32] assessing information-seeking behaviors; the Career Salience Scale [20] measuring career centrality to identity; the Career Confidence Scale [27] evaluating self-efficacy beliefs; Career Achievement Orientation [31] capturing goal-directed motivation; the Career Commitment Scale [7] assessing career attachment; the Adult Hope Scale [29] measuring agency and pathways thinking; and the Future Self-Continuity Scale [13] quantifying perceived connection to one's future self. Additionally, we developed a four-item Perceived Realism scale measuring the perceived authenticity of the content participants viewed, as prior research suggests realism moderates the effectiveness of future self interventions [14]. Participants completed baseline assessments before interacting with the assigned system, followed by post-intervention assessments immediately afterward.

Analysis employed multiple linear regression with bootstrapped standard errors (1,000 replications) to ensure robustness. Models included pre-intervention scores as covariates, demographic controls, and experimental condition indicators. Conditions were collapsed into two factors, Career Option (Multiple/Single/Control) and Career Representation (Self/Other/Control), preserving the key theoretical comparisons.

4 Results

Perceived realism. Our analysis revealed that perceived realism was the most consistent correlate of positive outcomes across all measures (Figure 4). This association held after controlling for experimental condition, demographics, and baseline scores. Perceived realism significantly predicted future self-continuity (β=0.39, SE=0.11, p=0.001), consistent with the possibility that authentic-feeling representations strengthen the psychological connection between present and future selves. The association extended to behavioral intentions, with realism predicting career exploration (β=0.26, SE=0.07, p<0.001), career salience (β=0.28, SE=0.06, p<0.001), and career achievement orientation (β=0.18, SE=0.06, p=0.001).

Most notably, perceived realism showed strong associations with career commitment (β=0.56, SE=0.08, p<0.001) and adult hope (β=0.46, SE=0.07, p<0.001), suggesting that authentic virtual self-modeling may relate both to specific career attachment and to general future-oriented optimism. We emphasize that these are correlational relationships; reverse causality (participants already connected to their futures perceiving representations as more real) cannot be ruled out.

Multiple vs. Single Future Selves. The number of AI-generated future selves presented was associated with differential outcomes. Relative to the Control condition, the Multiple condition significantly enhanced future self-continuity ($\beta = 0.78$, $p = 0.025$), whereas the Single condition did not ($\beta = 0.37$, $p = 0.280$), suggesting that exposure to multiple AI-generated possible selves strengthens the perceived connection between current and future selves. The pattern reversed for career commitment: the Single condition showed a positive but non-significant coefficient ($\beta = 0.17$, $p = 0.430$), while the Multiple condition trended negative ($\beta = -0.27$, $p = 0.222$). Although neither commitment effect reached significance, this divergence suggests that multiple options may broaden perceived possibilities, whereas single-self presentations may better foster commitment to a specific career path.

Exploratory Analysis of User Feedback. To complement the quantitative findings, we conducted an exploratory analysis of participants' open-ended feedback across all conditions. Overall, participants described the experience as engaging, informative, and reflective, with many reporting that it helped them better envision potential careers.

Several participants noted that the intervention increased confidence in their career direction (e.g., "It helped me become a little more certain of the career choices I want to make."), while others valued the ability to compare multiple possibilities ("It seems good to have the compiled information all there to compare."). Participants also expressed a desire for richer guidance, requesting "more career options and ways to pursue these careers… with concrete steps of action."

At the same time, feedback highlighted important design limitations. The perceived realism of AI-generated content emerged as a recurring concern, particularly regarding generated portraits ("The AI 'future' picture made me chuckle… it was kinda funny looking.") and the credibility of some profiles ("Some of the career profiles seem fake."). Participants also desired more responsive, conversational interactions, noting that "The AI did not seem to be reading any of my responses and was instead just asking pre-written questions." Together, this feedback suggests that while AI-generated virtual self-modeling can foster engagement and career reflection, its effectiveness depends on realistic representations, interactive personalization, and actionable career guidance, consistent with our quantitative finding that perceived realism was strongly associated with positive outcomes.

5 Discussion

Our findings contribute to emerging research on AI-mediated identity exploration by highlighting a potential trade-off in the design of virtual self-modeling systems. Exposure to multiple future selves was associated with stronger future self-continuity, whereas interacting with a single future self showed a trend toward greater career commitment. Although exploratory, this pattern suggests that different representations may support distinct stages of career exploration: broader exposure may facilitate the exploration of possible futures, while sustained engagement with a single representation may better support commitment to a particular path. Future work should examine whether adaptive systems that transition from broad exploration to more focused reflection produce stronger long-term outcomes.

From a theoretical perspective, our results extend Possible Selves Theory [24] into the context of AI-mediated identity formation. Across multiple outcomes, perceived realism emerged as the strongest and most consistent correlate of future self-continuity and career-related measures, suggesting that the perceived authenticity of AI-generated future selves may be a key mechanism underlying their effectiveness. While these findings are correlational and experimental manipulation of realism is needed to establish causality, they are consistent with the idea that AI-generated future selves can function as psychologically meaningful representations that support identity-related reflection [25, 3]. More broadly, this work contributes to a growing body of HCI research examining how generative AI can augment self-reflection and identity development.

6 Design Implications and Ethical Considerations

Our findings yield several design implications for virtual self-modeling systems. First, design for perceived realism, as the perceived authenticity of AI-generated future selves was the strongest and most consistent correlate of future self-continuity and career-related outcomes. This suggests that designers should prioritize creating representations that users perceive as personally plausible and psychologically authentic, rather than focusing solely on visual fidelity. Second, our experimental findings suggest that the number of future selves presented may support different goals: exposure to multiple future selves was associated with greater future self-continuity, whereas interacting with a single future self showed a trend toward stronger career commitment. This points toward adaptive systems that support broad exploration before transitioning to more focused reflection. Third, leverage personalized first-person narratives that integrate users' backgrounds with realistic career trajectories. Consistent with our user feedback, participants frequently described these narratives as engaging and reflective, suggesting that narrative personalization may be an important component of effective virtual self-modeling.

The use of AI to support identity formation raises important ethical and design considerations. Our findings suggest that AI-generated possible selves can meaningfully influence how people relate to their futures. Consequently, such systems should be designed as tools for possibility exploration rather than prediction. This distinction is particularly important because users may attribute undue authority to AI-generated narratives, increasing the risk that systems inadvertently constrain rather than expand individuals' perceived opportunities.

These systems must also be designed to preserve user agency and minimize manipulation. Personalized narratives should encourage reflection without steering users toward particular careers or reinforcing algorithmic preferences. Because generative models inevitably encode biases from their training data, developers should regularly audit whether certain careers are disproportionately associated with particular genders, races, socioeconomic backgrounds, or other demographic characteristics. Without such safeguards, virtual self-modeling could inadvertently reinforce existing occupational stereotypes rather than broaden users' sense of possibility.

Finally, systems that generate personalized future selves from user photographs require robust privacy protections. Images and derived facial representations should be collected only with informed consent, stored securely, retained only as long as necessary, and never repurposed beyond the intended experience. Together, these considerations suggest that responsible virtual self-modeling requires safeguards for user autonomy, fairness, transparency, and privacy alongside advances in generative AI capabilities.

7 Limitations and Future Work

Several limitations should be acknowledged. Participants were recruited through Prolific and skewed toward higher education levels, and high baseline scores may reflect selection bias toward individuals already possessing strong career orientations; results may not generalize to the under-resourced populations who could benefit most, and future work should engage such communities directly. The study captured immediate post-intervention outcomes only; career development is inherently long-term, and longitudinal designs are needed to establish whether the observed associations translate into sustained changes in exploration or commitment. All outcomes were self-reported and may be subject to social desirability bias; future studies could incorporate behavioral measures of exploration. Finally, because perceived realism was measured rather than manipulated, and the commitment

effect remained exploratory, future work should experimentally manipulate realism and replicate the multiplicity findings in adequately powered studies.

8 Conclusion

This work presents *Possible* You, a digital twin system that demonstrates how generative AI can support virtual self-modeling for career exploration. Our findings suggest that perceived realism is a key correlate of effective future self representations, while the contrast between multiple and single future selves points to different roles in exploration and commitment. Together, these results contribute to research on AI-mediated identity formation and provide design guidance for systems that support reflection, career development, and future-oriented decision-making.

Ultimately, *Possible You* is about using AI to make human possibility more visible. Rather than prescribing a future, AI can help people explore multiple plausible futures, reflect on what resonates, and make more informed choices about who they wish to become. The decision of which future to pursue, however, remains with the individual.

References

[1] Daron Acemoglu. 2025. The simple macroeconomics of AI. *Economic Policy* 40, 121 (2025), 13–58.

[2] Daron Acemoglu, David Autor, and Simon Johnson. 2026. *Building pro-worker artificial intelligence*. Technical Report. National Bureau of Economic Research.

[3] Constanze Albrecht, Chayapatr Archiwaranguprok, Rachel Poonsiriwong, Awu Chen, Monchai Lertsutthiwong, Kavin Winson, Pattie Maes, Hal Hershfield, and Pat Pataranutaporn. 2026. Future you: designing and evaluating multimodal AI-generated digital twins for strengthening future self-continuity. In *Proceedings of the 31st International Conference on Intelligent User Interfaces*. 1901–1916.

[4] Safinah Ali, Prerna Ravi, Randi Williams, Daniella DiPaola, and Cynthia Breazeal. 2024. Constructing Dreams Using Generative AI. *Proceedings of the AAAI Conference on Artificial Intelligence* 38, 21 (Mar. 2024), 23268–23275. doi:10.1609/aaai.v38i21.30374

[5] Monica Anderson and Aaron Smith. 2015. The Internet and Job Seeking. *Pew Research Center* (November 19 2015). https://www.pewresearch.org/internet/2015/11/19/1-the-internet-and-job-seeking/

[6] Ann M. Brewer. 2018. *Encountering, Experiencing and Shaping Careers: Thinking About Careers in the 21st Century* (1 ed.). Springer Cham, Cham, Switzerland. XIX, 226 pages. doi:10.1007/978-3-319-96956-5

[7] Kerry D Carson and Arthur G Bedeian. 1994. Career commitment: Construction of a measure and examination of its psychometric properties. *Journal of vocational Behavior* 44, 3 (1994), 237–262.

[8] Jingyi Duan, Suhan Wu, et al. 2024. Beyond Traditional Pathways: Leveraging Generative AI for Dynamic Career Planning in Vocational Education. *International Journal of New Developments in Education* 6, 2 (2024), 24–31.

[9] Upol Ehsan, Samir Passi, Koustuv Saha, Todd McNutt, Mark O Riedl, and Sara Alcorn. 2026. From Future of Work to Future of Workers: Addressing Asymptomatic AI Harms to Foster Dignified Human-AI Interaction. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems*. 1–21.

[10] Rebecca Fraser-Thill. 2022. *The Missing, Essential Ingredient For Meaningful Work*. Accessed: 2025-04-08. https://www.forbes.com/sites/rebeccafraserthill/2022/12/30/the-missing-essential-ingredient-for-meaningful-work/

[11] Joseph Fuller, Kerry McKittrick, Sherry Seibel, James Wilson, Vasundhara Dash, and Alexandra Epstein. 2023. *Unlocking Economic Prosperity: Career Navigation in a Time of Rapid Change*. Technical Report. Harvard Kennedy School.

[12] Gettysburg College. 2017. *One third of your life is spent at work*. Accessed: 2025-04-08. https://www.gettysburg.edu/news/stories?id=79db7b34-630c-4f49-ad32-4ab9ea48e72b

[13] Hal E Hershfield. 2011. Future self-continuity: How conceptions of the future self transform intertemporal choice. *Annals of the New York Academy of Sciences* 1235, 1 (2011), 30–43.

[14] Hal E Hershfield, Daniel G Goldstein, William F Sharpe, Jesse Fox, Leo Yeykelis, Laura L Carstensen, and Jeremy N Bailenson. 2011. Increasing saving behavior through age-progressed renderings of the future self. *Journal of marketing research* 48, SPL (2011), S23–S37.

[15] Zhou Jiang, Alexander Newman, Huong Le, Alfred Presbitero, and Connie Zheng. 2019. Career exploration: A review and future research agenda. *Journal of Vocational Behavior* 110 (2019), 338–356.

[16] Jean Johnson and Jon Rochkind. 2010. Can I Get a Little Advice Here? How an Overstretched High School Guidance System Is Undermining Students' College Aspirations. *Public Agenda* (02 2010).

[17] Mohammad Amin Kuhail, Haseena Al Katheeri, Joao Negreiros, Ahmed Seffah, and Omar Alfandi. 2023. Engaging students with a chatbot-based academic advising system. *International Journal of Human–Computer Interaction* 39, 10 (2023), 2115–2141.

[18] Liang-Cheng Lin, Yi-Chun Lai, Wei-Chien Chang, Hsin-Lun Chiu, and Tzu-Yu Chen. 2023. UniCompass: Helping High School Students Find the Right College Major. In *Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems*. Association for Computing Machinery, New York, NY, United States, 1–6.

[19] Isabella Loaiza and Roberto Rigobon. 2024. The EPOCH of AI: Human-machine complementarities at work. (2024).

[20] Sharon A Lobel and Lynda St Clair. 1992. Effects of family responsibilities, gender, and career identity salience on performance outcomes. *Academy of management journal* 35, 5 (1992), 1057–1069.

[21] Yi Mou and Kun Xu. 2017. The media inequality: Comparing the initial human-human and human-AI social interactions. *Computers in Human Behavior* 72 (2017), 432–440.

[22] Daphna Oyserman. 2015. *Pathways to Success Through Identity-Based Motivation*. Oxford University Press, Incorporated, New York, NY.

[23] Daphna Oyserman, Deborah Bybee, and Kathy Terry. 2006. Possible Selves and Academic Outcomes: How and When Possible Selves Impel Action. *Journal of Personality and Social Psychology* 91 (2006), 188–204. doi:10.1037/0022-3514.91.1.188

[24] Daphna Oyserman, Deborah Bybee, Kathy Terry, and Tamera Hart-Johnson. 2004. Possible selves as roadmaps. *Journal of Research in personality* 38, 2 (2004), 130–149.

[25] Pat Pataranutaporn, Kavin Winson, Peggy Yin, Auttasak Lapapirojn, Pichayoot Ouppaphan, Monchai Lertsutthiwong, Pattie Maes, and Hal Hershfield. 2024. Future You: A Conversation with an AI-Generated Future Self Reduces Anxiety, Negative Emotions, and Increases Future Self-Continuity. *arXiv preprint arXiv:2405.12514* (2024).

[26] Jingliang Ran, Huiyue Liu, Yue Yuan, Xuan Yu, and Tiantian Dong. 2023. Linking career exploration, self-reflection, career calling, career adaptability and subjective well-being: A self-regulation theory perspective. *Psychology Research and Behavior Management* 16 (2023), 2805–2817.

[27] Matt L Riggs and Patrick A Knight. 1994. The impact of perceived group success-failure on motivational beliefs and attitudes: A causal model. *Journal of Applied psychology* 79, 5 (1994), 755.

[28] Tamara Sims, Sarah Raposo, Jeremy N Bailenson, and Laura L Carstensen. 2020. The future is now: Age-progressed images motivate community college students to prepare for their financial futures. *Journal of Experimental Psychology: Applied* 26, 4 (2020), 593.

[29] Charles R Snyder, Cheri Harris, John R Anderson, Sharon A Holleran, Lori M Irving, Sandra T Sigmon, Lauren Yoshinobu, June Gibb, Charyle Langelle, and Pat Harney. 1991. The will and the ways: development and validation of an individual-differences measure of hope. *Journal of personality and social psychology* 60, 4 (1991), 570.

[30] Shaelyn M Strachan, Meghan ME Marcotte, Tara MT Giller, Jennifer Brunet, and Benjamin JI Schellenberg. 2017. An online intervention to increase physical activity: Self-regulatory possible selves and the moderating role of task self-efficacy. *Psychology of Sport and Exercise* 31 (2017), 158–165.

[31] Karoline Strauss, Mark A Griffin, and Sharon K Parker. 2012. Future work selves: how salient hoped-for identities motivate proactive career behaviors. *Journal of applied psychology* 97, 3 (2012), 580.

[32] Stephen A Stumpf, Stephen M Colarelli, and Karen Hartman. 1983. Development of the career exploration survey (CES). *Journal of vocational behavior* 22, 2 (1983), 191–226.

[33] United Nations. 2016. Transforming our world: the 2030 Agenda for Sustainable Development. `https://www.un.org/sustainabledevelopment/development-agenda-retired/`. Accessed: 2024-09-09. `https://www.un.org/sustainabledevelopment/development-agenda-retired/`

[34] United Nations. 2023. The Sustainable Development Goals Report 2023. `https://unstats.un.org/sdgs/report/2023/`. Accessed: 2024-09-09. `https://unstats.un.org/sdgs/report/2023/`

[35] Patricia Wright, Steve Belt, and Chris John. 2004. Fancy graphics can deter older users: a comparison of two interfaces for exploring healthy lifestyle options. In *People and Computers XVII—Designing for Society: Proceedings of HCI 2003*. Springer, 315–325.