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# EXPLORING VIRTUAL INFLUENCERS' POTENTIAL TO REDUCE INTERETHNIC INTOLERANCE IN ONLINE YOUTH COMMUNICATION

*Research in Progress*

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## Abstract

*The purpose of this research in progress is to explore the potential use of virtual influencers (VIs) for social good. The problem of ethnic relations in society has become one of the most controversial and challenging issues of the 21st century, impacting the lives of almost everyone. Our theoretical framework is grounded in parasocial relations and intergroup contact theory. We use an initial exploratory focus group to get more general feedback about the VIs' potential usefulness and utility in this type of social campaign. Based on preliminary insights, VI appears to be a promising tool for reducing interethnic intolerance in online youth communication, but its success would be highly dependent on the quality and appeal of its content. Our future research endeavors need to improve our understanding and to further clarify how a VI artifact in a particular setting can be utilized for this socially beneficial purpose.*

*Keywords: Virtual influencer, Interethnic intolerance, Parasocial relations, Intergroup contact*

## 1 Introduction

Living today in a world where digital, physical, and biological spheres are increasingly intertwined, and where the difference between real, virtual, and augmented reality is “blurred”, information systems (IS) scholars face challenges in understanding the ultimate consequences of Information Technology (IT) use within a broader society. In order to achieve broader societal legitimacy, IS researchers should approach the relevant societal challenges of the 21st century, but also address issues and cases from developing countries to avoid concomitant neglect of grand challenges associated with these countries (Wolff et al., 2022). One of the most challenging and controversial issues of the 21st century is ethnic relations in society (Mastro, 2015). Interethnic tensions, conflicts, and intolerance globally are reaching troubling levels, fueling further the ongoing ethnic conflicts on every continent all over the globe, and impacting the lives of almost every individual. In the US, a large portion of the population expresses a strong dislike of “others” (Iyengar & Westwood, 2015), while Europe may arguably be at the epicenter of the global resurgence of nationalism for the past several years (Lancaster, 2022). In this study, we aim to contribute to the work of the Information Communication Technology For Development (ICT4D) community that is interested in improving the quality of life and helping communities using technology.

Traditional and institutional settings are perceived as increasingly inaccessible to young people and riddled by adult-dominated dynamics while on the other hand, the digital sphere has opened up new opportunities to facilitate political engagement and expression for young people, who are known to be

more intensive and active Internet users (Bosi et al., 2022). Also, in contexts where it remains difficult and inappropriate to foster face-to-face (FtF) contact such as in situations characterized by high intergroup tension, researchers need to develop and test new contact techniques on the Internet (White et al., 2015). Future research should attempt to employ additional forms of E-contact using Facebook or other similar social networking sites, where individuals have greater access to more personal and disclosing information regarding outgroup members such as images, pictures, and greater information regarding their hobbies and interests (White et al., 2015).

Online intergroup contact or E-contact is defined as “computer-mediated contact involving an engagement of self in the intergroup relationship” (White & Abu-Rayya, 2012). Based on Hofeditz et al., (2022), we define VIs as computer-generated, animated characters controlled by a startup or an agency with its own social media accounts and a large number of followers, intended to substitute for human influencers in social commerce. Based on the ideas about social influence (Kelman, 1958), the term “virtual influence” in our study refers to social influence achieved by VIs when followers are influenced by someone they like and respect (e.g., celebrities) and often shape their beliefs or trigger desired behavior due to their self-identification with the VI. Hence, we intend to explore whether a solid theoretical ground can be established for using VIs as a social intervention that can reduce interethnic prejudices and interethnic anxiety and in the end reduce interethnic intolerance in online youth communication. In countries with interethnic tensions, the outgroup is often viewed as a threat to the ingroup’s values, belief systems, morality, or worldview, often even as a realistic threat, which revolves around harm to the ingroup’s power, resources, or general welfare (Stephan et al., 2002). The more intolerant young people are, the more politically active they are in the digital sphere. Therefore, the digital sphere may become an instrument that young people use for voicing intolerant attitudes and opinions, and it may signal an increasing trend toward polarisation and division in our societies (Bosi et al., 2022). Due to the importance of ethnic intolerance and its negative impact on social development as well as its prevalence among youth in the online space, we see a need to explore the possibility of using VI to reduce interethnic intolerance online among youth.

Research on VI is still in its infancy (Hofeditz et al., 2022). Many fundamental aspects of users’ engagement with this specific type of digital entity remain entirely unexplored (Stein et al., 2022), and research in social media in the near future should focus more on what can be done to reduce polarization on social media (Appel et al., 2020). Although influencers have been used predominantly for marketing purposes and branding in the past, more recently we are witnessing that influencers encourage their followers to engage with social causes which were especially evident during the Black Lives Matter campaign. The audiences are becoming more drawn to influencers with a sense of activism and stances on important issues, and VIs can be beneficial because they are the most controlled way to disseminate content to millennials. Around 35% of VIs used their platforms to show support for #BlackLivesMatter to back up protestors showing solidarity and pledging support for #BlackLivesMatter using their platforms for social good (Travers, 2020). This is a qualitative exploratory study that we intend to expand further in the future by conducting a social experiment in a controlled setting in North Macedonia that is burdened with interethnic tensions, mainly between two ethnic groups (Macedonians and Albanians). Consequently, our current research objective is to test the validity of our theoretical framework in front of the IS community and to establish a solid theoretical and empirical ground for the further development of our work.

## **2 Theoretical Background**

### **2.1 VIs for social good – A myth or promising reality**

In 2016, a relatively new phenomenon known as VI emerged (Conti et al., 2022) which can be described as a person or thing created by software that can influence others, primarily through marketing collaborations or participation in social campaigns, and is solely created and consumed via digital mediums (Moustakas et al., 2020). Although most of the VIs manifest human-like behavior (e.g., Lil

Miquela), their virtual influencer counterparts often portray dollish attributes, cartoon-like characters, or robotic features (e.g., Kizuna AI, Bee, Noonouri [Nisreen, 2022]). Anthropomorphism is the attribution of human-like physical or non-physical features, behavior, emotions, characteristics, and attributes to a non-human agent or to an inanimate object (Epley et al. 2007). Research in the past has shown that anthropomorphism affects human perception and behavior in human-computer interactions by, for example, increasing trust and connectedness or stimulating social response behaviors (Seeger et al., 2021). If the perceived object seems similar to the self or to other human beings, it becomes more likely that the perceiver will activate highly accessible knowledge about humans (i.e., elicited agent knowledge) to assess the object (Epley et al., 2007; Waytz, et al., 2010). Anthropomorphism is considered an antecedent of trust given that it has been identified as important in interactions between people and artificial-intelligence-enabled service devices (Melián-González et al., 2019).

Part of our research effort is to find the proper VI profile (e.g., occupation, education, hobbies etc.) for a social good campaign implemented to reduce interethnic intolerance online. For example, in the Macedonian context, the proper profile of the VI would be highly determined by the preferences of the ethnic groups and their inclination to follow, trust, or recommend a given VI account. Another challenge in the implementation of VI for social good in the Macedonian context is the customization of a VI profile to the characteristics of the targeted groups, taking into account the high diversity of these groups in terms of ethnicity, religion, language, culture, etc. Since we explore the potential of VI to be a mediator for building social trust and to be a space for making intergroup contact, we need to find a proper design that will provide the VI to fulfill its social purpose. With the aim of advancing the discussion on VI's use for social purposes, we analyze the advantages and disadvantages of VI in Table 1. We analyze the potential implications of previously identified advantages and disadvantages of VI in the context of its use for social campaigns.

Advantages	Disadvantages
<b>Flexible</b> (Conti et al., 2022) - Can be placed at any place and any given time (e.g., can be placed easily on events with high interethnic tension where they can promote tolerance by sharing content).	<b>Reliability</b> (Ingham, 2018) - The relationship that followers can develop with VI is very limited because of lack of human touch and not being able to meet them in person. Can they build relational trust with someone that they will never meet in person?
<b>Exclusive</b> (Conti et al., 2022) - Can be created specifically for only one purpose (social good), while human influencers can simultaneously be engaged in many different social media campaigns.	<b>Transparency</b> (Conti et al., 2022) - Who is the creator of the VI who also produces its content? Should followers know who is behind the VI's character and its content and does having that information may put at risk its credibility?
<b>Control and Social Purpose Safety</b> (Conti et al., 2022) - Can be customized to serve the purpose of its creation, avoiding publishing messages that can hurt the social purpose.	<b>Costs</b> (Conti et al., 2022) - Content generation for VI is very expensive, while RI (Real Influencers) can produce a lot of content with minimal effort.
<b>Consistent image</b> (Tan, 2019) - The image can remain consistent, and the risk of indiscretions is minimized as they don't exist offline, so their "behavior" and image can be calibrated in the background.	<b>Problem with authenticity</b> (Ingham, 2018) - Can followers trust someone that personally has not experienced interethnic intolerance?
<b>Mitigating authenticity to an extent</b> (Wills, 2019) - As a virtual influencer is "authentically fake", the user is well aware that they are consuming staged content.	<b>Trustworthiness</b> (Hofeditz et al., 2022) - Can followers trust someone who is not a real human?

Table 1. Potential advantages and disadvantages of VI when it is used for social good.

The analysis of advantages and disadvantages of VI in Table 1 shows that some of the main advantages of VI over human influencers when they are used for social good, is that VI influencers are more

controllable and can be used solely for the purpose of doing social good, such as promoting interethnic tolerance in online communications. Further, it is easier to provide a consistent image of the VI having higher social purpose safety by avoiding publishing messages that can hurt social purpose. That is probably why in a more recent study (da Silva Oliveira & Chimenti, 2021) involving professionals from different niches (e.g., cosmetics, sports, media, children and youth audiences, research, and games), one of the interviewees stated that they would opt more for VIs when the purpose of the campaign is a social good.

## **2.2 Internet intolerance in online communications**

UNESCO (1995) has clarified the meaning of tolerance as “respect, acceptance and appreciation of the rich diversity of our world’s cultures, our forms of expression and ways of being human.” Contrary to this construct, intolerance is associated with disrespect, negative attitudes, and not valuing other cultures, undermining the functionalities of democracies (Hjerm et al., 2020). Evidently, beliefs and views on the world like bigotry, hatred, prejudice, stereotypes, and intolerance are precursory to hate speech based on different ethnic backgrounds (Allport et al., 1954). The Council of Europe describes hate speech as representing “all forms of expression which spread, incite, promote or justify racial hatred, xenophobia, anti-Semitism or other forms of hatred based on intolerance, including intolerance expressed by aggressive nationalism and ethnocentrism, discrimination and hostility towards minorities, migrants and people of immigrant origin” (Council of Europe, 1997, p. 107). Intolerance and intolerance-motivated hate speech are observed in young people’s online presence, too, with findings pointing to the digital sphere as a tool youth use for expressing intolerant thoughts and beliefs (Bosi et al., 2022).

## **2.3 Parasocial Relations, Source Credibility and Intergroup Online Contact**

Parasocial interaction (PSI) theory was developed to explain the tendency of people to develop feelings of having made-up intimate social relations with characters in media (Horton & Wohl, 1956). By repeatedly engaging in PSIs with the same media character, people will further develop so-called parasocial relationships (PSRs)—bonds that span across multiple reception situations and may, to some degree, resemble real-life instances of friendship or even romance (Stein et al., 2022). Although both phenomena have been developed in traditional mass media, they are believed to hold in the context of online interaction as well (Breves et al., 2021). Studies in the past have demonstrated that source credibility plays an important role in determining the strength of the PSR between influencers and followers (Lou & Yuan, 2019; Yuan & Lou, 2020). There are a number of interpretations of source credibility and the factors that influence it. A more recent study that investigated the effect of five antecedents (i.e., content quality, physical attractiveness, social attractiveness, homophily, and anthropomorphism) on trust, found that content quality is the dimension with the greatest effect on trust, followed by homophily and social attractiveness.

Since trust is conceptualized as a relationship trait established through continuous interactions (Kim & Kim, 2021) we believe that establishing PSRs with VI can serve as facilitators to build relational trust in online communication, by expressing certain virtues such as humanity, wisdom, tolerance, transcendence, and temperance. Hence, we further extend this rationale by exploring whether PSRs established with VI can be used to decrease prejudices and social distance between two different ethnic groups often resulting in hate speech or intolerance in online communication. By interacting with the different ethnic groups on social media, we intend to explore whether it is possible to reduce prejudice between the respective ethnic groups, as social media minimizes status differences and lessens the anxiety associated with intergroup contact (Hoffner & Bond, 2022). We further develop our ideas based on the insights from intergroup contact theory that interpersonal interactions with members of the outgroup can promote positive attitudes toward the outgroup (Allport et al., 1954), such as the elderly, sexual minorities, mentally ill, or racial and ethnic minorities (Kim & Wojcieszak, 2018). Allport et al. (1954) suggested that positive effects of intergroup contact occur in contact situations characterized by four key conditions: equal status, intergroup cooperation, common goals, and support by social and

institutional authorities. A meta-analysis (Pettigrew & Tropp, 2006), however, found that while contact under Allport's conditions is especially effective at reducing prejudice, even unstructured contact is effective at reducing prejudice, so it is best to view Allport's proposed conditions as facilitating rather than essential. Hence, our theoretical framework will employ intergroup contact theory as unstructured contact rather than structured contact and test its potential.

Often members of one ethnic group do not have frequent FtF contact with members of another ethnic group that they dislike or perceive as outgroups. Macedonian and Albanian youth study in different schools and speak a different language, and many live in different parts of the country or different parts within a city, hang out and socially interact mostly in different places, and for the most part follow different religions (Christian or Muslim). All of these ethnic differences significantly contribute towards perceiving the others as members of an outgroup, often depicting the outgroup as a threat to the ingroup's values, belief systems, morality, or worldview, or even as more realistic threats, which revolve around harm to the ingroup's power, resources, or general welfare (Stephan et al., 2002). The work on various forms of indirect contact shows that FtF interaction is not required for contact to reduce prejudice and improve tolerance (Kim & Wojcieszak, 2018). In light of the growth and popularity of computer-mediated communication (CMC), scholars argue that intergroup contact theory can be applied fruitfully to online environments (Hasler & Amichai-Hamburger, 2013).

Online contact can be considered indirect, in the sense that the contact can be non-FtF (e.g., through text, images, etc.), but can also be considered a more direct form of contact because the synchronous nature of the Internet text as a chat tool ensures individuals to interact in real-time, allowing for the actual engagement of self in the immediate situation (White et al., 2015). In this way, E-contact can act as a bridge between more distal, indirect forms of intergroup contact and direct, FtF intergroup contact (White et al., 2015). Hence, based on the insights derived from the intergroup contact theory, we view E-contact as an interaction mediated by new technology (i.e., VI) (White et al., 2015; Hasler & Amichai-Hamburger, 2013), and we think that this type of intergroup online contact can occur through comments, likes, shares, etc., by the members of different ethnic groups, facilitated by the online activity of the VI. In this view, greater intergroup harmony is said to occur through direct contact between opposing group members in the presence of core facilitating conditions (e.g., online activities of VI) (White et al., 2015). Figure 1 illustrates our theoretical framework, grounded in PSR theory and intergroup contact theory, on which we intend to build our future research.

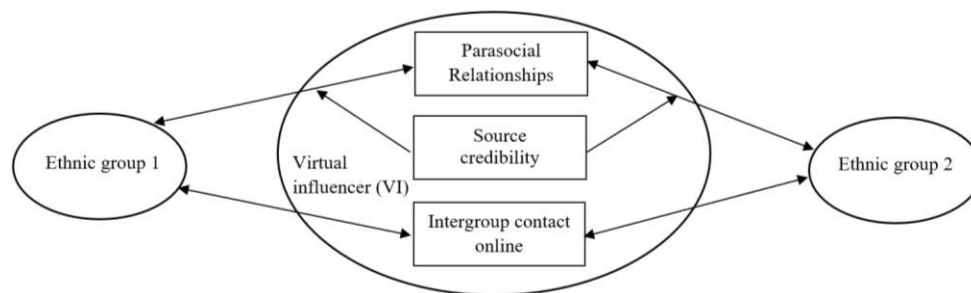


Figure 1 Theoretical framework

Although our study is still in its infancy, here we discuss briefly and explain the interrelationships between the key constructs based on the theoretical framework in Figure 1. In future steps of our inquiry, we plan to examine how parasocial intervention can reduce prejudice towards people belonging to different ethnicities and reduce interethnic hate speech online. The PSI of the different ethnic groups with the VI can be viewed and measured as a single conceptual variable (Bocarnea, 2007). PSRs have been shown to help reduce prejudice in a society as an extended version of intergroup contact theory (Lotun et al., 2022). Although we are aware that beliefs are extremely resistant to change, we believe

that youth followers can change their beliefs about the outgroup members if they engage in PSIs with the VI that promote interethnic tolerance. The media have long shaped societal beliefs (Lotun et al., 2022), and we believe that VI's social intervention can reduce interethnic prejudices and interethnic anxiety (Lotun et al., 2022). Further, unlike the standard approaches to prevent online hate spreading which involve suspending user accounts or deleting hate comments paving the way for accusations of censorship and overblocking (Tekiroglu et al., 2020), we believe it is better to intervene by counternarrative through VI's promotion of tolerance online. As a result, we believe VI can inspire empathy through its generalizable content and reduce social distance, as well as outgroup avoidance, by highlighting intergroup differences. (Lotun et al., 2022).

### **3 Research context, method, and preliminary findings**

This study uses North Macedonia as a context because it is a country with a mixed population. According to the last census, the Republic of North Macedonia is a country in Southeast Europe comprising several ethnic groups, with Macedonians making up 58.4% of the population, followed by Albanians at 24.3%, Turks at 3.9%, Romani at 2.5%, Serbs at 1.3%, and 10.6% of the population being others ([https://www.stat.gov.mk/PrikaziSoopstenie\\_en.aspx?rbtxt=146](https://www.stat.gov.mk/PrikaziSoopstenie_en.aspx?rbtxt=146), visited on October 11, 2022). It has experienced interethnic conflict followed by the integration of different minorities into governance structures. It is, however, imperative to work towards enabling positive ethnic relations to prevent conflicts like this from resurfacing. Given the infancy of the VI as a construct, qualitative studies are particularly beneficial in enabling researchers to gain deeper insight regarding the use of VI for social good.

Hence, we use an exploratory focus group to gain feedback about potential VIs' usefulness and utility. We intend to analyze the collected data with Reflexive Thematic Analysis (RTA). RTA is a qualitative research method that can be widely used across a range of epistemologies and research questions (Nowell et al., 2017). RTA employs an interpretive perspective that strongly relies on researchers' reflexivity (Braun & Clarke, 2019) where the aim of coding and theme development is neither to "accurately" summarize the data, nor to minimize the influence of researcher subjectivity on the analytic process, because neither is seen as possible or indeed desirable (Braun et al., 2019). Rather than providing a coherent and compelling interpretation grounded in data, the researcher acts as a storyteller and plays a key role in the knowledge production process. (Braun et al., 2019). According to RTA, an appreciation of one's own influence is crucial to conducting good interpretive qualitative research, and analysts must acknowledge this during the process but remain reflexive throughout to understand how their positioning has influenced their interpretations (Lazard & McAvoy, 2020). We chose this methodology because it was well suited to our research problem, since it is a useful method for examining the perspectives of different groups, highlighting similarities and differences and generating unanticipated insights (Braun & Clarke, 2006, King et al., 2017).

In the first phase for this research in progress paper, we collected data from field experts, including people from NGOs who had experience in work with youth on promotion of interethnic tolerance. The interview protocol that we have used for the discussion in this focus group was previously tested by two independent academic experts who are familiar with the focus group methodology. The questions we used to guide the focus group discussions centered around three topics: 1) Respondents' familiarity with VIs (4 questions) 2) VI's potential profile characteristics (11 questions), and 3) potential challenges (2 questions). Rather than selecting participants for the focus group randomly, we selected them according to their characteristics in relation to the artifact that was being discussed (Tremblay et al., 2010). Potential participants were identified via personal contacts and emails to the NGOs. Hence, we set up one initial focus group that is familiar with the application environment for which the artifact was designed so they could adequately inform the refinement and evaluation of the artifact.

This initial focus group included 12 participants from the NGO sector with different ethnicities who have had previous experience working on projects that foster interethnic tolerance in youth. Based on Stewart et al., 2007, the size of the focus group was determined according to the definition that a focus

group is a moderated discussion of six to twelve participants who talk about a topic under the direction of a moderator who promotes interaction and keeps the conversation on the topic. Table 2 of Appendix 1 presents the basic demographics of the focus group participants, including their age, gender, ethnicity, level of education, and NGO membership distribution. The focus group was held at the beginning of November 2022 via video conference on Microsoft Teams lasting from 1.30 to 2 hours and was video recorded. All participants filled out a written consent form for participation in which they were told that they are going to be recorded during the session. All documents and the discussion in the focus group were in English.

In conducting the focus group, our first step was to set up the ground rules, which were meant to maintain respect between members of the focus group and to emphasize the importance of stimulating open discussion where each participant could take part because we valued all individual views. At the beginning, we asked all participants to introduce themselves by just saying their first names. Then, the moderator showed two videos from VIs so that everyone could get sense about the construct under investigation. Following the videos, the moderator asked the participants to confirm their understanding of VIs and whether they could distinguish between real and virtual influencers. After participants confirmed that they understood what VIs were, the moderator began the discussion by asking questions regarding the potential design of VI to promote interethnic tolerance and potential project challenges. Participants then raised their hands on Microsoft Teams, after which the moderator let them freely express their opinions and facilitated the discussion with supplemental questions. Whenever the discussion of a certain question appeared saturated, the moderator asked if anyone wanted to add something not said before and moved to the next question. This process of guiding the discussion was followed through all 17 questions from the questioning route. Members from NGOs working on ethnic tolerance in youth were delighted to be able to take part in the discussion on how VIs can be used to promote interethnic tolerance. Hence, they actively participated in the focus group discussion, contributing valuable insights and creative ideas about how VIs can promote interethnic tolerance among youth.

Since this is a work in progress, we share only brief and preliminary results here, as we continue to collect and analyze data from three other focus groups with students as youth representatives, and two focus groups with industry experts from social media and animation studios. At this point, from our initial coding of the transcript, we can only report that most focus group participants agreed and had a consensus view that content appeal, inclusiveness, and quality are the most important factors for VI's success in a social good campaign to reduce interethnic tolerance. In support of this initial finding, we present two excerpts from the focus group discussion.

*The quality of VI's content is crucial to its success. In order to attract the youth's attention nowadays, VI's content must be constantly interesting (Participant 3)*

*Content that is not inclusive or does not appeal to all major ethnic groups might be damaging, hurting the feelings of those groups left out (Participant 8)*

#### **4 Research process outline**

In the following Figure 2, we present the research outline giving the steps that have been conducted so far and what we intend to realize in the future. As Figure 2 shows, in phase 1 we conducted an exploratory focus group with NGO experts to gain initial feedback on VI's potential for reducing interethnic tolerance among youth. Phase 2 of the study will involve focus groups with youth representatives (e.g., students) and industry experts from animation studios and multimedia and social media companies. Further insights gained through the upcoming exploratory focus groups in phase 2 will serve as the basis for developing a VI artifact tailored to the Macedonian context. Through confirmation focus groups in phase 3, the VI prototype will be tested for its usability in promoting interethnic tolerance among youth participants, followed by a report on the results.



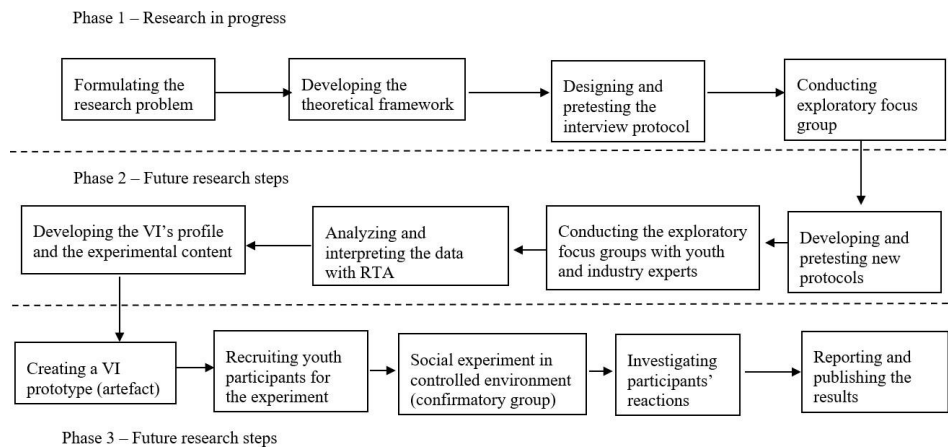


Figure 2 Research process outline

## 5 Conclusion

The purpose of this research in progress is to test the soundness of our research idea and the theoretical framework in front of IS community at the conference, and to share some preliminary findings from the early stage of our research. We hope that the presentation of our work will bring spirited discussion and useful feedback to strengthen further our research in future. Even though preliminary results suggest that VI may be a viable method for reducing interethnic intolerance, it is too early to draw any firm conclusions, and further research is needed. The content that is created and shared appeared to be of utmost importance. Interesting ideas came from the discussions in the focus group suggesting that the VI’s content should communicate inclusiveness of all major ethnic groups in a particular context. In spite of the early stage of our study, the preliminary results are quite encouraging for us to continue this research endeavor.

### Appendix 1 – Focus group demographics

Demographic structure	Org. A	Org. B	Org. C	Org. D	Org. E	Org. F	Org. G	Org. H	Total
	N=3	N=2	N=2	N=1	N=1	N=1	N=1	N=1	N=12
<i>Sex</i>									
Women	3	1	2	1	1	0	0	1	9
Men	0	1	0	0	0	1	1	0	3
<i>Age</i>									
18-20	0	0	2	0	0	0	0	0	2
21-24	0	0	0	1	0	1	0	1	3
24+	3	2	0	0	1	0	1	0	7
<i>Ethnic origin</i>									
Macedonian	2	2	2	1	1	0	0	1	9
Albanian	0	0	0	0	0	1	1	0	2
Turk	1	0	0	0	0	0	0	0	1
<i>Education</i>									
Secondary school	0	0	2	0	0	0	0	0	2
Bachelor studies	2	2	0	1	0	1	1	1	8
Post-graduate studies	1	0	0	0	1	0	0	0	2

Table 2. Focus group demographics

## References

- Allport, G. W., Clark, K., and Pettigrew, T. (1954). *The nature of prejudice*. Cambridge, Mass.: Addison-Wesley.
- Appel, G., Grewal, L., Hadi, R., and Stephen, A. T. (2020). "The future of social media in marketing," *Journal of the Academy of Marketing Science*, 48(1), 79-95.
- Bosi, L., Lavizzari, A., and Portos, M. (2022). "The impact of intolerance on young people's online political participation," *Politics*, 42(1), 95-127.
- Breves, P., Liebers, N., Motschenbacher, B., and Reus, L. (2021). "Reducing resistance: the impact of nonfollowers' and followers' parasocial relationships with social media influencers on persuasive resistance and advertising effectiveness," *Human Communication Research*, 47(4), 418-443.
- Bocarnea, M. C. (2007). "Celebrity-persona parasocial interaction scale," In R. A. Reynolds, R. Woods, and J. D. Baker (eds.), *Handbook of research on electronic surveys and measurements*, Idea Group Reference/IGI Global, 309-312.
- Braun, V. and Clarke, V. (2006). "Using thematic analysis in psychology," *Qualitative research in psychology*, 3(2), 77-101.
- Braun, V., and Clarke, V. (2019). "Reflecting on reflexive thematic analysis," *Qualitative research in sport, exercise and health*, 11(4), 589-597.
- Braun, V., V. Clarke, & N. Hayfield. (2019). "'A starting point for your journey, not a map': Nikki Hayfield in conversation with Virginia Braun and Victoria Clarke about thematic analysis," *Qualitative Research in Psychology*, 19(2), 424-445.
- Conti, M., Gathani, J., and Tricomi, P. P. (2022). "Vis in Online Social Media," in *IEEE Communications Magazine*, vol. 60, no. 8, 86-91.
- Council of Europe. (1997). *Recommendation No. R (97) 20 of the Committee of Ministers to Member States on "Hate Speech"*. URL: <https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=0900001680505d5b> (visited on August 16, 2022).
- da Silva Oliveira, A. B., and Chimenti, P. (2021). "Humanized Robots: A Proposition of Categories to Understand Virtual Influencers," *Australasian Journal of Information Systems*, 25.
- Epley, N., Waytz, A., and Cacioppo, J. T. (2007). "On seeing human: a three-factor theory of anthropomorphism," *Psychological review*, 114(4), 864.
- Hasler, B. S., and Amichai-Hamburger, Y. (2013). *Online intergroup contact* (220-252). Oxford University Press.
- Hjerm, M., Eger, M. A., Bohman, A., and Fors Connolly, F. (2020). "A new approach to the study of tolerance: Conceptualizing and measuring acceptance, respect, and appreciation of difference," *Social Indicators Research*, 147(3), 897-919.
- Hofeditz, L., Nissen, A., Schütte, R., and Mirbabaie, M. (2022). "Trust Me, I'm an Influencer!-A Comparison of Perceived Trust in Human and Virtual Influencers," *ECIS 2022 Research-in-Progress Papers*. 27.
- Hoffner, C. A., and Bond, B. J. (2022). "Parasocial relationships, social media, & well-being," *Current Opinion in Psychology*, 101306.
- Horton, D., and Richard Wohl, R. (1956). "Mass communication and para-social interaction: Observations on intimacy at a distance," *Psychiatry*, 19 (3), 215-229.
- Ingham, L. (2018). Virtual influencers: Lil Miquela and Shudu Gram are online marketing's future. Verdict. June 21, 2018. Retrieved from. <https://www.verdict.co.uk/virtual-influencers-lil-miquela-shudu-gram>
- Iyengar, S., and Westwood, S. J. (2015). "Fear and loathing across party lines: New evidence on group polarization," *American journal of political science*, 59(3), 690-707.

- Kelman, H.C., (1958). "Compliance, identification, and internalization three processes of attitude change," *Journal of conflict resolution*, 2(1), 51-60.
- Kim, D. Y., and Kim, H. Y. (2021). "Trust me, trust me not: A nuanced view of influencer marketing on social media," *Journal of Business Research*, 134, 223-232.
- Kim, N., and Wojcieszak, M. (2018). "Intergroup contact through online comments: Effects of direct and extended contact on outgroup attitudes," *Computers in Human Behavior*, 81, 63-72.
- King, N., and J. M. Brooks. (2017). *Template Analysis for Business and Management Students*, London: Sage.
- Lancaster, C. M. (2022). *A Multicultural Europe? Sociocultural Conflict in a Globalized Era*. PhD thesis, University of North Carolina.
- Lazard, L., and McAvoy, J. (2020). "Doing reflexivity in psychological research: What's the point? What's the practice?" *Qualitative research in psychology*, 17(2), 159-177.
- Lotun, S., Lamarche, V. M., Samothrakis, S., Sandstrom, G. M., and Matran-Fernandez, A. (2022). "Parasocial relationships on YouTube reduce prejudice towards mental health issues," *Scientific Reports*, 12(1), 16565.
- Lou, C., and Yuan, S. (2019). "Influencer marketing: how message value and credibility affect consumer trust of branded content on social media," *Journal of Interactive Advertising*, 19(1), 58-73.
- Mastro, D. (2015). "Why the media's role in issues of race and ethnicity should be in the spotlight," *Journal of Social Issues* 71(1), 1-16.
- Melián-González, S., Gutiérrez-Taño, D., and Bulchand-Gidumal, J. (2019). "Predicting the intentions to use chatbots for travel and tourism," *Current Issues in Tourism*, 24(2), 192-210.
- Moustakas, E., Lamba, N., Mahmoud, D., and Ranganathan, C. (2020). "Blurring lines between fiction and reality: Perspectives of experts on marketing effectiveness of virtual influencers," in *2020 International Conference on Cyber Security and Protection of Digital Services (Cyber Security)* (pp. 1-6). IEEE.
- Nisreen, A (2022). "Virtual Influencers: A new frontier in interdisciplinary research," *Journal of Business Research*.
- Nowell, L. S., Norris, J. M., White, D. E., and Moules, N. J. (2017). "Thematic analysis: Striving to meet the trustworthiness criteria," *International journal of qualitative methods*, 16(1), 1609406917733847.
- Pettigrew, T. F., & Tropp, L. R. (2006). "A meta-analytic test of intergroup contact theory", *Journal of personality and social psychology*, 90(5), 751.
- Seeger, A. M., Pfeiffer, J., and Heinzl, A. (2021). "Texting with humanlike conversational agents: designing for anthropomorphism," *Journal of the Association for Information Systems*, 22(4), 8.
- State Statistical Office of North Macedonia. (2022). "News release: Census of Population, Households and Dwellings in the Republic of North Macedonia, 2021 - first dataset, 2021," URL: [https://www.stat.gov.mk/PrikaziSoopstenie\\_en.aspx?brtxt=146](https://www.stat.gov.mk/PrikaziSoopstenie_en.aspx?brtxt=146) (visited on October 22, 2022).
- Stein, J.-P., Linda Breves, P., and Anders, N. (2022). "Parasocial interactions with real and virtual influencers: The role of perceived similarity and human-likeness," *New Media & Society*.
- Stephan, W. G., Boniecki, K. A., Ybarra, O., Bettencourt, A., Ervin, K. S., Jackson, L. A., McNatt, P. S. and Renfro, C. L. (2002). "The role of threats in the racial attitudes of Blacks and Whites," *Personality and Social Psychology Bulletin*, 28(9), 1242-1254.
- Stewart, D. W., Shamdasani, P. N., and Rook, D. W. (2007). *Focus Groups: Theory and Practice*, 2nd Edition, vol. 20, Newbury Park, CA: Sage Publications.
- Tan, J. (2019). *The rise of the AI influencer: are they simply easier to work with?*. URL: <https://www.marketing-interactive.com/rise-of-ai-influencers-how-you-can-get-a-piece-of-this-pie> (visited on November 1, 2022).

- Tekiroglu, S. S., Chung, Y. L., and Guerini, M. (2020). "Generating counter narratives against online hate speech: Data and strategies," in Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics, Association for Computational Linguistics, 1177–1190.
- Travers, C. (2020). *What is a Virtual Influencer? Virtual Influencers, Defined and Explained*. URL: <https://www.virtualhumans.org/article/what-is-a-virtual-influencer-virtual-influencers-defined-and-explained> (visited on September 7, 2022).
- Tremblay, M. C., Hevner, A. R., and Berndt, D. J. (2010). "Focus groups for artifact refinement and evaluation in design research," *Communications of the Association for Information Systems*, 26(1), 27.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (1995). *A global quest for tolerance—1995 United Nations year for tolerance*. URL: <http://www.unesco.org/new/en/social-and-human-sciences/themes/fight-against-discrimination/promoting-tolerance/1995-united-nations-year-for-tolerance/> (visited on August 16, 2022).
- Waytz, A., Gray, K., Epley, N., and Wegner, D. M. (2010). "Causes and consequences of mind perception," *Trends in cognitive sciences*, 14(8), 383-388.
- White, F. A., and Abu-Rayya, H. M. (2012). A dual identity-electronic contact (DIEC) experiment promoting short-and long-term intergroup harmony. *Journal of Experimental Social Psychology*, 48(3), 597-608.
- White, F. A., Harvey, L. J., and Abu-Rayya, H. M. (2015). "Improving intergroup relations in the Internet age: A critical review," *Review of General Psychology*, 19(2), 129-139.
- Wills, K. (2019). *Meet Lil Miquela: The AI Influencer Taking Over Instagram*. URL: <https://www.standard.co.uk/esmagazine/lil-miquela-ai-influencer-instagram-a4084566.html> (visited on November 1, 2022).
- Wolff, B., Kelter, L., Schlagwein, D., and Schoder, D. (2022). "Is Information Systems Research Concerned with Societal Grand Challenges," *ECIS 2022 Research-in-Progress Papers*. 11.
- Yuan, S., and Lou, C. (2020). "How social media influencers foster relationships with followers: The roles of source credibility and fairness in parasocial relationship and product interest," *Journal of Interactive Advertising*, 20(2), 133-147.