



RELIABILITY OF VIRTUAL IDENTITY (V. ID.) TEST

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Abstract

Self-representation of individuals become unique these days in Digital world frequently called online social-media. This representation known as virtual identity mediated via computers or smartphones. Present study was carried out to construct a reliable test for college and university students. A research statement was drawn to guide the reliability of Virtual Identity (V.ID.) Test. It is a 5-point Likert scale with 127 items along strongly disagree to strongly agree options for the candidates. A sample of 1521 students was randomly assigned from the Chandigarh city (India). Items were screened on the basis of item analysis. Reliability was conducted by Cronbach's alpha ($\alpha=.95, p<0.01$) method.

Keywords: Virtual Identity, social-media, reliability

CONCEPTUAL FRAMEWORK

An individual's identity is made up of a variety of distinctive qualities. A person's identity however is multifaceted and transforming; parts are hidden, determined by culture/community, and are never final (Kroger, 1996). Jagodzinski and Hipfl (2004) reported that media immersion offers brief transcendence from these youths' preoccupation with their own life problems, and ways of role-playing solutions. Young and older can both have numerous identities in the postmodern world's digital atmosphere, more specifically in the virtual worlds known as avatars in online communities. The online identity considered to have two differing conceptualizations with the first one referring to identity as virtual self-presentation on internet rather than their physical presence and the second one referring to identity as a psychological attribute

containing thoughts, insights and ideas that individuals have about their online self-representations and the transition of their self into virtual selves (Smahel, 2003). Subrahmanyam and Smahel (2011) divide online identity into the personal and social virtual identity.

The personal virtual identity defines individuals in online settings and the social virtual identity reflects how an individual is engaged in online communities and the position within the communities. In the same line, Thomas (2000) believes virtual identities are shaped by a sense of belonging to and participation within a virtual community. Literature indicates that online identity is a multi-layered dynamic, and fluid concept (Barton & Lee 2013; Chen 2013; Lee & Barton 2011) since participants perform their identities in rather different communities to interact with other individuals. As Norton and Toohey (2011) state, online identities are highly context-bound rather than being fixed.

Online social networks become the most popular Internet activities, with one third of internet users' population visiting these sites. More than two-thirds of the global on-line population visit and participate in social networks, confirming its worldwide popularity (Benevenuto et al., 2009). No doubt, the online social network has a global phenomenon. With an activity that spreads so quickly, numerous worries and risks emerge. The threat of abuse and privacy breaches by malevolent users serves as an example of that kind of difficulty. The development of trust and the safeguarding of users become a constant concern inside the online social networking environment. Virtual Persons are the identities that it encounters in such online settings.

Social network sites enable people to easily communicate and interact with each other to maintain existing relationships or build new connections (Tong & Walther, 2011). On social network sites, individuals can create their own profiles, post messages and photos, and share interesting items with their friends (Ellison, Steinfield & Lampe, 2007). In the present time, technology have the potential to blur the boundaries between reality and fantasy, or the real and the virtual (Marsh, 2010). Residents of virtual worlds can create virtual identities that can be tailored to their preferences and expectations through respective avatars and related profiles. No longer confined by the physical realities and existential limitations, virtual environments provide individuals with a clean slate onto which to construct their desired virtual identities (Kennedy, 2006; Turkle, 1994), offering radically new possibilities for identity redefinition and self-recreation (Matviyenko, 2010; Riberio, 2009; Turkle, 1995). Amongst other aspects, taking advantage of their freedom and relying on their own resources, users can establish and enhance a unique identity for themselves, utilizing a variety of symbolic materials available (Clothier, 2005; Tubella, 2005).

Concerned framework, has no longer been sufficient to think about identity development or creation only in the conventional sense, with reference to the actual physical reality. Instead, the core question, "Who am I?" needs to be split into two halves, one addressing the real self and the other addressing the virtual self in the case of those who live in virtual worlds. Furthermore, these two selves should not be considered distinct

entities but rather ones that encapsulate different aspect of an individual's personality (Jerry & Tavares-James, 2012).

The real underlying identity, referred to as the subject, is concealed behind the Virtual Person. The subject can be real or fabricated, and can have multiple masks through which they interact (Alexa MySpace, 2010). Research from various fields has concentrated on the impact of embodiment and virtual identity, particularly in the gaming industry. Much of that focus has been on identity as defined by gender, race and hyper-sexualized physique as well as the empowerment individuals experience when they interact in digital platforms as an idealized self (Davis & Chansiri, 2019). The potential to experience parasocial contact has ingrained in the relationship between online identity, social capital generation and digital work in virtual worlds. Virtual-world identity and parasocial interaction have been found to be correlated (Hai-Jew, 2009). The term parasocial interaction was coined by Horton and Richard Wohl (1956) referring to the relationship between individuals and media figures. Traditional parasocial interaction is a one-way and non-dialectical relationship with a media character, in which viewers perceive and respond to the figure as if they were in a social relationship (Banks & Bowman, 2016a; Jin & Park, 2009).

REVIEW OF LITERATURE

Virtual worlds have the ability to add alternative place for children to study, play and grow in addition to the classroom, home, and playground. The physical world is becoming interconnected with virtual worlds, and it is important for researchers to understand how this will affect children's development (Beals, 2010). McKenna and Bargh, 2006 said that The ability to communicate with others in a largely anonymous setting made possible by internet newsgroups gives stigmatised people a place to belong that they might not have had otherwise. Thus, membership in these groups should become an important part of identity and Virtual Identity, a new terminology used in virtual environments, was introduced to enhance the anonymous communication in such types of complex networks (Gomaa et al., 2016).

Heger and Gaertner (2018) identified the evidence consistent with identity fusion and explore a reciprocal pattern of willingness to endorse extreme acts of both self and group sacrifice that can be derived from identity fusion theory but not the social-categorization framework. In general, the identity-synergy principle has been supported by evidence of goals that are mutually beneficial to both the group and the individual, rather than being antagonistic. Fusion positively predicted both self-sacrifice for the group and group-sacrifice for the self.

Gonzales and Hancock (2008) reported how computer-mediated self-presentations can alter identities. It has significant consequences for how people construct their identities online, especially for those who utilise blogs, social networking sites, or dating sites as platforms for public self-presentation. The results also point out to potential areas for theoretical advancement regarding identity building in relation to computer-mediated communication.

Nair and Aram (2014) focused on identity construction on Facebook in a Postmodern Society. It comes to the conclusion that there must be a relationship between the influences and effects of information and communication technology on social identity, which shows that technologies like Facebook act as a catalyst for postmodernism and change and revolutionise both the individual's and society's social identities.

Gomaa et al. (2016) described the impact of the number of cloud users and their locations (either local or remote) on the application response time in cloud environments using the proposed virtual identities. Furthermore, the complete data flow across all tiers from the beginning to the completion of the application task for creating a virtual identity has been simulated using an Application Characterization Environment whiteboard.

Beals (2010) examined the Virtual worlds are online graphical environments that are becoming an increasingly large part of the online experience of young people. Virtual worlds have the ability to add another place for children to study, play, and grow in addition to the classroom, home and playground. Virtual and physical worlds are increasingly connected and it became crucial for scholars to comprehend how it would impact children's development. Youth can explore a variety of content production opportunities, including customizable avatars, media galleries and virtual representations of personal spaces, thanks to the development of virtual world technologies. The ability of young adults to generate content in particular can be a significant way to assist and encourage adolescent identity development.

Jin (2012) introduces the novel model of “virtual identity discrepancy” as an investigative framework for computer-mediated self-representation and interpersonal communication in avatar-based virtual environments (VEs). And also, while uncertainty reduction mediates the association between nonverbal immediacy and flow in nonverbal communication between avatars, expectancy violation mediates the relationship between self-disclosure and trust in text-based conversation.

McKenna and Bargh (2006) studied virtual identity in context of age of the internet with demarginalization of virtual group participation. Internet newsgroups give people a somewhat anonymous way to communicate with one another, giving stigmatized people a sense of community that would otherwise be unavailable. Thus, belonging to these entities ought to play a significant role in defining one's identity. So, it concluded that the psychological benefits of membership in a virtual community are quite real, regardless of one's viewpoint on the values of the many marginalized identities. They almost certainly will become a more prevalent aspect of life in the era of the Internet.

Carrió-Pastor (2016) highlighted that Identity shaping is an inherent goal of individuals in both offline and online environments. Offline interactions are typically used to foster and form these identities, and there are analogous ways for users to employ discourse (pictures, word, multimodal combinations, etc.) online to foster and shape their identities. In particular, social networking sites and 3D virtual worlds have been studied

as two potential virtual environments for interactions. Both exhibit small variances but have similar results in terms of identity shaping.

Pisano et al. (2017) intends to examine the ability of portraying the online and offline identity in a sample of Italian adolescent participants. The 200 Italian teenagers between the ages of 14 and 17 taken for the sample. Participants responded to an ad hoc questionnaire that probed various facets of virtual reality representation. In order to implement effective programmes for the prevention and intervention of problematic internet use in adolescence and maladaptive behaviour generally, it is necessary to conduct further research on the relationship between real and virtual identity. Clinicians and other professionals should thoroughly discuss problematic Internet use with adolescent patients and their parents in light of the risks connected with risky online behaviour. The use of a self-report, not a widely verified instrument, has the biggest drawback.

Reyes (2019) examines two digital communication contexts where social actors engage, communicate and participate in virtual communities in distinct ways. Online identities are established through interaction and discourse, which identifies variations in groupness and exemplifies the nature of certain online environments. The study examines 500 readers comments made in response to an article about the new Spanish orthographic reforms that appeared on the newspaper El Pas' website. Additionally, it examines 200 topics from WordReference.com's "Sólo español" (Spanish only) subforum. The investigation looks into the socio-cultural effects of language interaction on identity and hierarchy in digital communication.

Stokrocki (2020) studied how virtual identities change in virtual worlds. Author describes how the changing avatar identity as it moves through various communities in virtual worlds and in the real world. After being welcomed to the Second Life virtual world by one of the graduate students, the persona evolved into something more whimsical and imaginative. The Lizard of ARS, however, who can alter the colour to blend into the surroundings, give birth without males and regrow the tail, has the most remarkable transmutation. As it meets children in the classrooms to ask them to recreate art, the parody identity becomes clear and it changes in real life. All of these interpersonal relationships, settings and modern platforms are included in virtual identity. Identity changes more quickly when ARS is reinvented. The Avatar has itself, which has the infantile side of it as seen in the Digital Selves.

Takano and Taka (2022) examined how avatar identification affected users' real conversation behaviour in a large-user avatar communication service. It also investigated how avatar customization helped users strengthen their connection to their chosen avatar. Study coined deep connection building and self-disclosure with friends in a virtual world are made easier by embodied identification, one of the avatar identifications; these relationships imply that there may be a favorable connection between them, although the evidence is largely

circumstantial. An experimental study focusing on the Pigg Party's (group belonging) manipulation of avatar customization should be conducted to gain deeper understanding of the findings. The execution of such an experimental study can aid in understanding the causal links between the variables.

NEED FOR THE STUDY

The virtual identity has most important aspect of every individual who were using online social media applications. At present the young adults were most prone to use online social media applications. They have their multiple roles within the online social platform. The virtual identity is concerning their identity (i.e. ID) which were identical for individuals' presence on online social media platform. Gradually, there are many kinds of identity diffusions and identity clashes were found which were point out the individuals' identity originality or fake roles and their consequences of their lives. Present study highlights the authentication of virtual identity of individuals where they were having their different roles were shown or their reality or fakeness were resolved.

OBJECTIVES

To construct a virtual identity test for young adult students.

HYPOTHESES

It is expected that there is a need of virtual identity test.

METHODOLOGY

Sample

There were 1521 participants who contribute the research purpose. The age range of all participants were young adults between 18 to 25 years old. The sample conducted only from Panjab University and Affiliated Colleges of Chandigarh city. Participants were categorized between Male, Female, Transgender and Not to say (i.e. not disclose their gender identity) responses. The majority of female participants were higher than other participants. All participants were pursuing graduation and post-graduation courses in the concerned institute of the city. There were no one were allowed who were pursuing professional courses.

Tool used

A self-prepared virtual identity test was applied for the testing. The virtual identity test was prepared by the scholar with proper conditions of test construction. The test composed of 127 items grouped in four factors: Narrative Script, Virtual Intimacy, Virtual Community and Virtual Material Culture. All elements were collected virtual social content of individuals.

PROCEDURE

Test development

The process of item development involved several stages. As mentioned above, it began by performing a literature review and assessment of existing studies, therefore, following a deductive method. Aiming to construct a virtual identity test, it sought to produce items that could express the thought and underlined elements of virtual identity. Initially, 127 items were prepared to capture online social behaviour of participants. Participants can express their response using a five-point Likert-type response scale (1=strongly disagree, 2=disagree, 3=neutral/undecided, 4=agree and 5=strongly agree). There was no fix time limit to complete the task but directed to complete at soon as they can. It could take 20-25 minutes to complete.

Statistical Analysis

Firstly, the data transfer to the SPSS file reliability analysis has been computed. Then validity indices have been counted. After reliability and validity, the factor analysis employed. Cronbach's alpha was used in order to estimate the internal consistency of the V. ID Test. The validity of the internal structure of the instrument was evaluated performing correlations between the total score by means of Person's correlation coefficient. All statistical analyses performed with SPSS version 25.0.

RESULT AND DISCUSSION

A total number of 1521 participants were finalized for the sample. The sample was composed of a total of 932 females, 582 males, 3 transgender, and 4 individuals who denote their gender as 'not to say'. The mean age of the sample was 19.59 ± 1.53 . Table 1 shows the reliability of the whole test as well as of each item based on Cronbach's alpha. The overall Cronbach's alpha value for the whole test came out to be 0.953 which indicated that the test has shown a high level of internal consistency. The minimum criteria for inclusion of any item into the final version of the test were fixed 0.3 item-total correlation. The items that were having low item-total correlation have been excluded from the final version of the test and only those items were included in the final version of the test that had qualified for the minimum criteria of 0.3 item-total correlation. The Cronbach's alpha of all the selected items has been shown in table 1.

The range of Cronbach's alpha for selected items varied between 0.267 to 0.919 which indicates that the content of each item is adequately reliable. In order to describe the comparative reliability of different items based on obtained Cronbach's alpha value. The items have been categorized into four categories i.e. range of Cronbach's alpha value below .0.4 (adequate reliability), 0.4 to 0.5 (moderately high reliability), 0.5 to 0.6 (high reliability), & above 0.6 (very high reliability). In the first category of .0.4 (adequate reliability) a total of 20 items were found. In the second category, 0.4 to 0.5 (moderately high reliability) total of 26 items was found. In the third category of 0.5 to 0.6 (high reliability) a total of 25 items were found and in the last category of above 0.6 (very high reliability) total of 5 items were found.

Reliability

The V.ID. Test showed an excellent internal consistency with Cronbach's alpha of 0.953.

Table 1

Reliability Coefficient obtained for Virtual Identity Test (N=68) (Revised version)

Item Description	Cronbach's Alpha if Item Deleted	Item Description	Cronbach's Alpha if Item Deleted	Item Description	Cronbach's Alpha if Item Deleted	Item Description	Cronbach's Alpha if Item Deleted
Item No. 09	.388	Item No. 51	.487	Item No. 70	.619	Item No. 101	.508
Item No. 11	.403	Item No. 54	.528	Item No. 71	.540	Item No. 104	.474
Item No. 21	.469	Item No. 55	.583	Item No. 72	.549	Item No. 105	.513
Item No. 22	.376	Item No. 56	.465	Item No. 73	.614	Item No. 106	.408
Item No. 26	.430	Item No. 57	.548	Item No. 74	.360	Item No. 107	.460
Item No. 27	.474	Item No. 58	.532	Item No. 78	.496	Item No. 108	.472
Item No. 28	.369	Item No. 59	.606	Item No. 80	.326	Item No. 110	.496
Item No. 34	.364	Item No. 60	.566	Item No. 84	.448	Item No. 112	.505
Item No. 35	.374	Item No. 61	.456	Item No. 85	.446	Item No. 115	.542
Item No. 38	.567	Item No. 62	.543	Item No. 86	.550	Item No. 116	.548
Item No. 39	.310	Item No. 63	.550	Item No. 87	.447	Item No. 117	.531
Item No. 43	.433	Item No. 64	.544	Item No. 88	.474	Item No. 118	.389
Item No. 45	.396	Item No. 65	.556	Item No. 89	.471	Item No. 121	.502
Item No. 46	.475	Item No. 66	.546	Item No. 93	.404	Item No. 123	.365
Item No. 47	.338	Item No. 67	.615	Item No. 94	.376	Item No. 125	.430
Item No. 48	.399	Item No. 68	.596	Item No. 95	.446	Item No. 126	.316
Item No. 49	.267	Item No. 69	.617	Item No. 98	.364	Item No. 127	.402

Inclusion criteria $\leq .358$

According to **Table No. 1**, there has been count a range of significant level as: *Low significant (0.267-0.399)*, *Moderate significant (0.402-0.496)* and *High significant (0.502-0.619)*. The minimum significant level value has been found 0.267 and maximum level of significant level found as 0.619 respectively. In the range of **low significant** level there are total 17 items were found. These item number are: Item no. **49, 39, 126, 80, 47, 74, 34, 98, 123, 28, 35, 22, 94, 09, 118, 45 and 48** accordingly. The **moderate level** of significant has been found 24 items. These items are as: Item no. **127, 11, 93, 106, 26, 125, 43, 85, 95, 87, 84, 61, 107, 56, 21, 89, 108, 27, 88, 104, 46, 51, 78 and 110** accordingly. And last, the **highly significant** level of significant has been 27 items found. These are as follows: Item no. **121, 112, 101, 105, 54, 117, 58, 71, 115, 62, 64, 66, 57, 116, 72, 63, 86, 65, 60, 38, 55, 68, 59, 73, 67, 69 and 70** respectively.

Conclusion

In general, the results suggested that the Virtual Identity Test (V. ID. Test) has a reliable test with internal consistency value (Cronbach's alpha found = 0.953) significant at 0.01 level. The high level of significant value i.e., 0.953 denotes that all 68 items were found reliable. The possible limitation for present study would be only conducted on young adults. It should be examined on younger individuals as well as adult persons which were be touch the new boundaries of the online social media network.

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