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Research Paper

Impact of Online Social Intelligence and Online Communication Skills on Interpretation of Ambiguous Emojis

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ABSTRACT

Online Social Intelligence and Online Communication Skills are essential for every individual in today's world. As online communication lacks physical and emotional cues, this study aims to understand the impact of Online Social Intelligence and Online Communication Skills on the Interpretation of Ambiguous Emojis. The study was conducted on 105 participants who were above 16 years of age. Self-formulated scales were used to measure the Interpretation of Emojis, the Online Social Intelligence and Online Communication Skills of the participants. It was hypothesized that Online Social Intelligence and Online Communication Skills will have a greater impact on the Interpretation of ambiguous Emojis for participants in the age range of 16-22 years, assuming that they obtain a high score in all 3 variables. The results support the hypothesis as more than half of the participants in the 16-22 years age group have scored above average in all 3 scales, however, less than half of the participants in the age group of 23-30 years have also scored above average on all 3 scales. As assumed, very few participants in the age group of 31 and above have an above average score across all 3 scales.

Keywords: *Emojis, Online Intelligence, Online Communication, Social Media*

Communication has been the driving force of human existence. Human beings developed, learned, and adapted several ways, and methods of communication which helped them to become who they are today. The process of socialization also plays a major role in the overall development of an individual. One learns the dos and don'ts of social communication through exposure and practice of living in a society and interacting with members of the society. Every individual possesses a certain level of this particular ability that helps them to communicate with people and connect with each other emotionally. Social intelligence has been defined differently by different theorists, but in layman's terms, it is the ability of an individual to understand other people and interact successfully with members of society in a particular setting/situation. Several tests measure the social intelligence or social skills of an individual in an offline setting, most of which include the dimensions like social awareness, assertiveness, sociability, self-disclosure, social information processing, emotional decoding, etc. However, in this digital age, a person needs to form and maintain relationships through online communication. With the advent of messaging applications like WhatsApp, Facebook Messenger, etc., text-based

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communication has helped people to send across a message within seconds, this mere gap of a few seconds has made online interpersonal communication quite simple and synchronous. However, due to a lack of facial cues in text-based communication, emoticons (combination of characters/signs) were used to denote small gestures like a smile, laugh, frown, and heart; these emoticons soon developed into small yellow "smilies" or emojis that represented a wide array of human emotions, from a simple smile to a complicated sigh.

According to Unicode, as many as 92% of the world's internet population uses emojis. There are 3,633 standardized emojis — and the year 2022 likely saw 107 additions. In this world full of emotions where online communication takes place at such an enormous level, emojis are an integral part of the texts. Emojis are used for various purposes in online communication, like enhancing the tone of the text, adding an essence of personal touch, making a text sound less intense, and simply using it to bring a fun element to the conversation. Several facial and non-facial emojis differ in presentation across operating systems and also differ in interpretation and usage across individuals. Facial emojis are easier to interpret in a text; what leaves the text open to various interpretations are the ambiguous emojis that are popularly used today. Ambiguous emojis are those that have more than one underlying meaning. The cognitive experience of identifying an ambiguous emoji is similar to the experience of "reading between the lines". However, this ambiguity in the meaning of an emoji can cause communication problems and lead to misunderstandings and communication gaps between the two conversational partners. Though there are meanings assigned to each emoji, there are different ways in which people interpret or use them in their day-to-day communication. Factors that may affect the usage and identification of emojis are age, sex, culture, generation, social media usage, awareness of recent trends on social media, and more that increase the subjectivity in the identification of these emojis.

Emotions, when studied in the context of non-verbal cues, are better labeled when elements like the tone of the speaker, reaction time, response time, interest, and presence of mind of both partners are noted in any given conversation. Even in face-to-face communication, the emotions of the partner are decoded through the nonverbal cues that they provide and emotions are expressed through facial expressions or body language. Decoding and expressing emotions become difficult in computer-mediated or online communication as individuals cannot look at each other while conversing. This dimension helps the researchers see how well the individual pays attention to emotions in a text, even when there is a complete lack of cues. An individual's ability to accurately sense the tone of the text received, decode it and express appropriate emotions using very little aid, is what is essential to researchers studying this dimension in the online communication context. Perception of online communication differs from person to person. One may use online communication only for professional purposes while others may use it for informal purposes. This perception or purpose of use plays an important role for researchers to analyze the level at which the individual relies on online communication, the broader the purpose of using online communication, the deeper will be their understanding of texts. As online communication facilitates easy, quick, anonymous, non-physical modes of communication, it becomes easier for individuals to broaden their social network and find depth in relationships.

This study aims to understand the relationship between the level of online social intelligence and communication skills of an individual and the way in which they interpret and use ambiguous emojis, also studying the underlying effect of age on usage and interpretation.

Online social intelligence and communication skills will be measured using a self-formulated scale which was constructed in line with the dimensions of Social Information Processing, Empathy, Emotional Decoding of the Tromso Social Intelligence Scale (2001), the MESI Methodology Scale (2014), the Electronic Communication Skills Scale (2019) and the Perceptions of Online Communication Scale (2006). Social information processing, as its theory suggests, is based on how interpersonal relationships are formed through computer-mediated communication. Due to a lack of non-verbal cues, an individual has to form impressions based on the text received. As more and more people are getting used to the new way of communication and gaining a sense of intimacy, it becomes important for researchers to understand how both conversational partners manage to understand and process a simple text into a valuable piece of information.

LITERATURE REVIEW

Social intelligence and its components have been defined and conceptualized in different ways by different authors and researchers. Thorndike (1920) described the two main structures of social intelligence– the cognitive aspect and the behavioral aspect, to understand and manage others and act wisely in interpersonal relationships. Other researchers also contributed to the definition of social intelligence by highlighting certain aspects like perception and reception of others' internal moods and states, knowledge of social norms and techniques that help in manipulation, charm, and adaptation within social situations (Silvera, Martinussen & Dahl, 2001; Kosmitzki & John, 1993). Researchers have tried their best to conceptualize the social intelligence construct and explore the facets that separate it from closely related concepts like emotional, academic, and practical intelligence. Social competence, emotional intelligence, social skills, self-monitoring, and social deftness are some of the aspects that come under Social Intelligence (Ferris et.al, 2002).

A study explored the link between the usage of social networking sites (SNS) and the social competence of adolescents and found a high correlation between heavier SNS use and offline social competence (Tsitsika et.al, 2014). This is because individuals are able to apply and rehearse their social skills in the online set-up, it also helps them gain social and interpersonal support by self-disclosure without facing any overt emotional consequences. However, this study only assumed a possible relationship between online and offline social competence and measured social competence in the context of face-to-face social communication. Social skills according to Klein et.al (2006) are grouped under two domains, communication and relationship building. To understand how individuals use their social communication skills differently in each context, Mantzouranis (2019) developed a test that measured the real and electronic communication skills of an individual where each sub-scale had different questions and was based on certain common factors. To establish the difference between the two sub-scales, each of them was correlated to the Social Skills Inventory (SSI) and it was found that the Real Communication sub-scale had a higher correlation with SSI than the Electronic Communication sub-scale as SSI measures the social communication skills of an individual purely in the face-to-face set-up. Oviedo and Fox Tree (2021) studied the effect of a meeting via video chat and/or via text on confidence and performance, which concluded that participants who first met via text performed poorly on the anagram task but were more confident while working with their partner. Here, the medium of communication played an important role in relationship building, as text-based communication helps people to present their most desirable selves, it enhanced their confidence but not their performance.

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According to a conceptual framework of Social Information Processing Theory, individuals use verbal and non-verbal cues to communicate, form, and manage identities and relationships in any context; as online communication platforms are the least rich platforms for expressions, individuals use whatever cue they have at hand. This usage of minimal cues helps the individual to form an impression and maintain relationships that may be as intimate and as rich as face-to-face communication. (Lo, 2008; Walther, 2011). Several kinds of research have been conducted in different fields to study the non-verbal cues in computer-mediated communication that aid developers in enhancing user experience. According to a meta-analysis of emoji research, emojis are used more often than emoticons, viewed positively, aid in emotional expression and understanding, reflect personality traits, and users' emotional states, and differ with cultural background, personal characteristics, and platform of use; therefore, making up for the lack of non-verbal cues in online communication and promoting online social interaction (Bai et.al, 2019). Gender differences were observed in the usage and reception of emojis in a text message, where participants had to rate the appropriateness of the text messages and the likability of the sender based on a 7-point Likert scale. The results concluded that affectionate emojis (hearts and kisses) were considered to be more appropriate and likable when they came from a female sender and less affectionate, friendly emojis (smiling face) were considered to be equally appropriate but more likable when they came from a male sender than from a female sender (Butterworth et.al, 2019).

Emojis are used for different purposes like initiating and maintaining conversations, fostering interpersonal relationships (Kelly & Watts, 2015), enhancing the tone of the message, conveying emotional states, delivering information (Pohl et.al, 2017), and popularly used because they contain greater breadth and expressiveness than their predecessor - emoticons (Tauch & Kanjo, 2016). Emojis are used to communicate within and across cultures, as individuals have a shared understanding of the emojis, which reduces the language barrier, aids in maintaining a personal connection, and establishes greater closeness (Thollander & Kumar, 2019). A survey was rolled out to understand the interpretation of emojis, and a vast cultural gap was found between the subjective interpretation given by participants and the meaning assigned to the emoji by Unicode Consortium. However, these emojis were politically inclined, most of which were food emojis.

METHODOLOGY

Aim of the study

The main aim of this study is to help researchers, counselors, psychologists, and facilitators understand what the younger population is trying to communicate. With the advent of online forums like 7 cups which helps people to vent out and listen to others' problems in online private chat rooms anonymously, it becomes important for the listeners to understand what the young client is trying to communicate. Although such online forums work on a superficial level, this research aims to highlight the communication gap that is created when people assign subjective meaning to emojis. As correlational research, the aim is to study if there exists any relation between the interpretation of ambiguous emojis and online social intelligence and communication skills. As a part of this fast-moving, technological world, online social communication skills are an essential part of the overall development of an individual as it not only helps in easy networking but also save time in relationship maintenance. As the younger generation is already acquainted with the recent developments,

the older generation must adapt/shift to this new way of communication as it requires a different skill set altogether.

Hypothesis
- Online Social Intelligence and Online Communication Skills will have a Significant impact on Interpretation of Emojis.
- Participants in the age group of 16-22 years will have higher scores on online communication skills and online social intelligence and a deeper interpretation of the emojis
- Participants in the age group of 23-29 years will have medium scores on Online Communication skills and online social intelligence and a basic interpretation of the emojis.
- Participants in the age group of 30-36 years will have low scores on Online Communication Skills, and online social intelligence, and a literal interpretation of the emojis.

Variables
- *Online Social Intelligence (OSI)* - Social intelligence was measured using the scores obtained on a Self-formulated OSI Scale.
- *Online Communication Skills (OCS)* - Online Communication Skills was measured using the scores obtained on a Self-formulated OCS Scale.
- *Interpretation of Emojis* - A questionnaire was designed solely for the purpose of this study and participants' understanding of emojis will be measured based on the depth of interpretation. The questionnaire has 10 ambiguous emojis with the literal meaning (score of 1), basic meaning of the emoji (score of 2), popularly used meaning of the emoji (score of 3) and a rarely used meaning of the emoji (score of 4) as the four options, and the participants were also be provided with a blank to write down if they use or identify them in any other way (score of 5).

Sample
The study was conducted on 105 participants, 35 per age group. Individuals above 16 years of age, who use any Messaging App for informal communication on a day-to-day basis. Data was collected with the help of Google Forms. The sample was divided into 3 age groups; 16-22 years, 23-30 years, and 31 and above years.

Controls
- Participants having a minimum level of education to be able to read and type texts
- Participants using any messaging application for at least 1 year
- Participants had normal or corrected to normal vision.
- Participants used or at least received emojis via text.

Tools
- Self- formulated Online Social Intelligence
- Self- formulated Online Communication Skills Scale.
- Self-formulated Interpretation of Emoji Scale.

Pilot study

A pilot study was conducted on 5 participants to test the reliability of the self-formulated scales. The reliability was established using MS Excel functions and by calculating the Cronbach's alpha for each scale. As the alpha obtained for all 3 scales is 0.9, internal consistency for the scales is high.

Table 1:

OSI	TOTAL	OCS	TOTAL	IEmoji	TOTAL
1	48	1	66	1	30
2	27	2	25	2	12
3	53	3	62	3	31
4	38	4	60	4	23
5	51	5	66	5	34
Total variance	117.3	**Total variance**	303.2	**Total variance**	77.5
Item Variance	16.8	**Item Variance**	32.3	**Item Variance**	12.4
Alpha	0.93	**Alpha**	0.962	**Alpha**	0.94

RESULTS

The study was conducted on a large group of participants (N=105), 35 participants in each age group and the data was obtained using google forms. It was the most compatible method of data collection because the participants had to be presented with the emojis. The scores obtained on all 3 scales (IEMOJI, OSI & OSC) were analyzed using the SPSS software and MS Excel. The sample consists of males (N=37) and females (N=68). The mean, standard deviation and variance for each variable was calculated. The average score of Interpretation of Emoji was 21.64 (SD=6.9), the average score of Online Social Intelligence and Online Communication Skills is 40 (SD=9.9) and 46.3 (SD=10.2).

Table 2: Descriptive Statistics

	N	Range	Mean	Std. Deviation	Variance
IEMOJI	105	25	21.64	6.962	48.464
OSI	105	48	40.00	9.904	98.096
OSC	105	50	46.30	10.216	104.364

Normality Testing

Normality tests were conducted on each variable and the Shapiro-wilk (W) statistic indicate non-normal distribution of scores across all 3 variables. Normality tests were also conducted for normality of each variable per age group. Results indicate a non-normal distribution for each variable per age group. Finally, a Kolmogorov-Smirnov Test was run to reconfirm normality. Nevertheless, the null hypothesis of a normal distribution had to be rejected for all 3 variables.

Table 3: Normality Tests

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
IEMOJI	.128	105	<.001	.941	105	<.001
OSI	.125	105	<.001	.935	105	<.001
OSC	.109	105	.004	.975	105	.044

a. Lilliefors Significance Correction

Table 4.1: Normality of IEMOJI across age groups

		Statistic	df	Sig.	Statistic	df	Sig.
IEMOJI	16-22	.204	35	<.001	.867	35	<.001
	23-30	.190	35	.003	.928	35	.025
	31 and a	.195	35	.002	.894	35	.003

a. Lilliefors Significance Correction

Table 4.2: Normality of Online Social Intelligence across age groups

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	AGE	Statistic	df	Sig.	Statistic	df	Sig.
OSI	16-22	.132	35	.126	.972	35	.513
	23-30	.113	35	.200[*]	.964	35	.301
	31 and a	.278	35	<.001	.794	35	<.001

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Table 4.3: Normality of Online Communication Skills across age groups

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	AGE	Statistic	df	Sig.	Statistic	df	Sig.
OSC	16-22	.088	35	.200[*]	.980	35	.757
	23-30	.085	35	.200[*]	.960	35	.224
	31 and a	.284	35	<.001	.877	35	<.001

*. This is a lower bound of the true significance.

Table 5: Kolmogorov-Smirnov Test Summary

	Null Hypothesis	Test	Sig.[a]	Decision
1	The distribution of IEMOJI is normal with mean 22 and standard deviation 6.962.	One-Sample Kolmogorov-Smirnov Test	<.001	Reject the null hypothesis.
2	The distribution of OSI is normal with mean 40 and standard deviation 9.904.	One-Sample Kolmogorov-Smirnov Test	<.001	Reject the null hypothesis.
3	The distribution of OSC is normal with mean 46 and standard deviation 10.216.	One-Sample Kolmogorov-Smirnov Test	.004	Reject the null hypothesis.

a. The significance level is .050. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 299883524.

Correlation Analysis
As the data is not normally distributed, Spearman's rank order correlation was used to test the relationship between variables. According to the data analysis, the correlation coefficient between the scores of IEMOJI and scores of OSI is rho=0.165. The correlation coefficient

between scores of IEMOJI and scores of OCS is rho=0.281. However, the correlation coefficient of the independent variables, OSI and OSC is rho=0.467

Table 6.1: Correlation between IEMOJI and OSI

			IEMOJI	OSI
Spearman's rho	IEMOJI	Correlation Coefficient	1.000	.165
		Sig. (2-tailed)	.	.093
		N	105	105
	OSI	Correlation Coefficient	.165	1.000
		Sig. (2-tailed)	.093	.
		N	105	105

Table 6.2: Correlation between IEMOJI and OSC

			IEMOJI	OSC
Spearman's rho	IEMOJI	Correlation Coefficient	1.000	.281**
		Sig. (2-tailed)	.	.004
		N	105	105
	OSC	Correlation Coefficient	.281**	1.000
		Sig. (2-tailed)	.004	.
		N	105	105

**. Correlation is significant at the 0.01 level (2-tailed).

Table 6.3: Correlation Between OSC and OSI

			OSC	OSI
Spearman's rho	OSC	Correlation Coefficient	1.000	.467**
		Sig. (2-tailed)	.	<.001
		N	105	105
	OSI	Correlation Coefficient	.467**	1.000
		Sig. (2-tailed)	<.001	.
		N	105	105

**. Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression Analysis

A multiple regression analysis was carried out to check the model fit, insignificant relationships were found between the scores of Interpretations of Emojis to scores of Online Social Intelligence and Online Communication Skills (p>0.001). The multiple R = 0.3 which indicates a weak positive correlation between the dependent variable (IEMOJI) and the independent variables (OSI and OSC). The Adjusted R square statistic is 0.07 which means only 7% of the values fall on the predicted model, this makes the data least fit for the model. Specifically, a 0.11 increase in the scores of Interpretations of Emojis for every 1% increase in the scores Online Social Intelligence and a 0.13 increase in the scores of Interpretations of Emojis for every 1% increase in the scores of Online Communication Skills.

Table 7: Regression Models
Table 7.1: Summary Output

Regression Statistics	
Multiple R	0.309656658
R Square	0.095887246
Adjusted R Square	0.078159545
Standard Error	6.684010886
Observations	105

Table 7.2 ANOVA

	df	SS	MS	F	Significance F
Regression	2	483.2954635	241.6477	5.408893	0.005852648
Residual	102	4556.952156	44.676		
Total	104	5040.247619			

Table 7.3: Coefficients

	Coefficients	Standard Error	t Stat	P-value
Intercept	11.01187158	3.300790614	3.336132	0.001186
OSI	0.114028835	0.077626881	1.468935	0.144928
OSC	0.131008512	0.075259779	1.740751	0.084743

Equation – **11 + (0.11*OSI) + (0.13*OSC) +. e**

Non-parametric Analysis of Variance

As the data is not normally distributed, independent-samples Kruskal-Wallis Test was conducted to determine the effect of age on the scores of all 3 variables. The results indicate difference across age groups for the Interpretation of Emoji and Online Communication Skills ($p<0.05$). Therefore, the null hypothesis can be rejected, concluding that there is a difference between the scores of each age group. However, the test indicates no difference among age groups for the Online Social Intelligence Scores($p>0.05$).

Table 8: Kruskal-Wallis Test

Table 8.1: Hypothesis Test Summary

	Null Hypothesis	**Test**	**Sig.[a,b]**	**Decision**
1	The distribution of IEMOJI is the same across categories of AGE.	Independent-Samples Kruskal-Wallis Test	<.001	Reject the null hypothesis.
2	The distribution of OSI is the same across categories of AGE.	Independent-Samples Kruskal-Wallis Test	.975	Retain the null hypothesis.
3	The distribution of OSC is the same across categories of AGE.	Independent-Samples Kruskal-Wallis Test	.005	Reject the null hypothesis.

a. The significance level is .050.
b. Asymptotic significance is displayed.

Table 8.2: IEMOJI across Age groups

Total N	105
Test Statistic	39.650[a]
Degree Of Freedom	2
Asymptotic Sig. (2-sided test)	<.001

a. The test statistic is adjusted for ties.
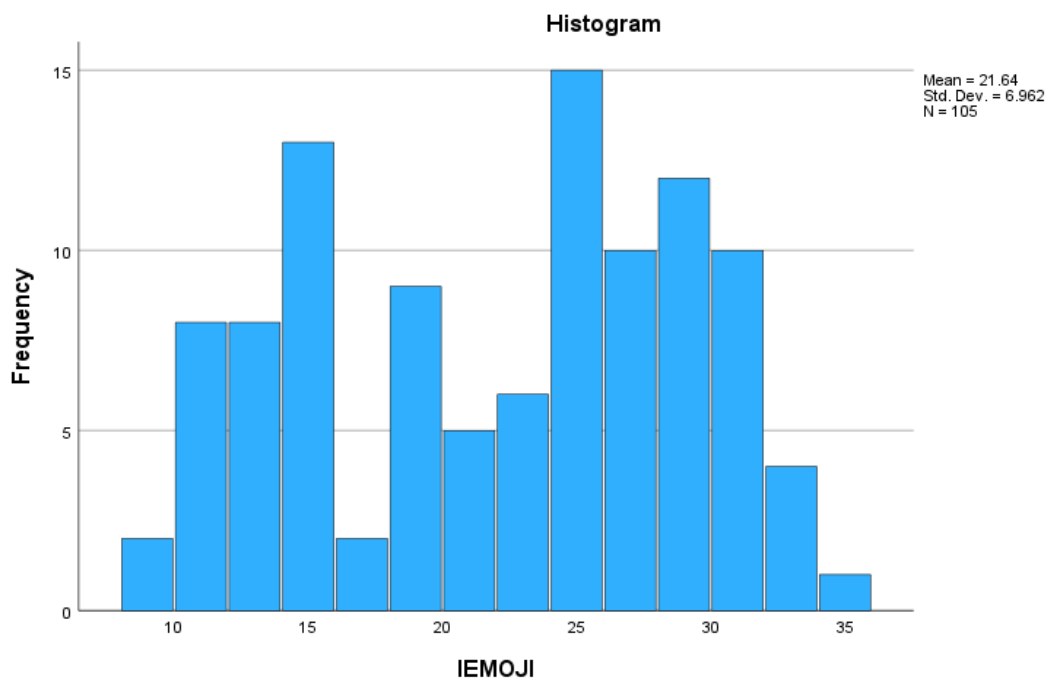
Table 8.3: OSI across Age groups

Total N	105
Test Statistic	.052[a]
Degree Of Freedom	2
Asymptotic Sig. (2-sided test)	.975

a. The test statistic is adjusted for ties.

Table 8.4 OCS across Age groups

Total N	105
Test Statistic	10.454[a]
Degree Of Freedom	2
Asymptotic Sig. (2-sided test)	.005

a. The test statistic is adjusted for ties.

Graphical Representation
Histograms

Figure1: Normality of IEMOJI scores

Figure 2: Normality of OSI scores

Histogram

Mean = 40
Std. Dev. = 9.904
N = 105
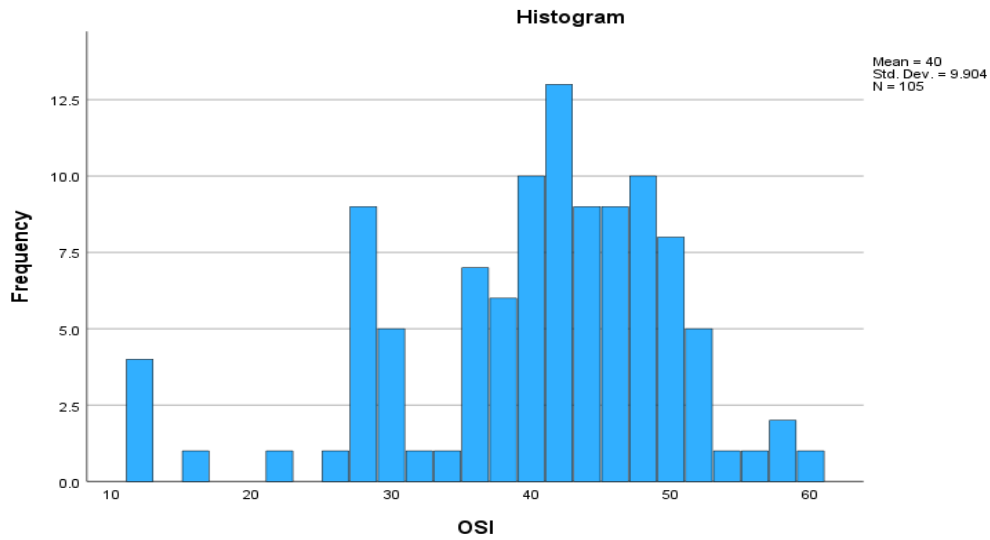
Figure 3: Normality of OSC scores

Histogram

Mean = 46.3
Std. Dev. = 10.216
N = 105
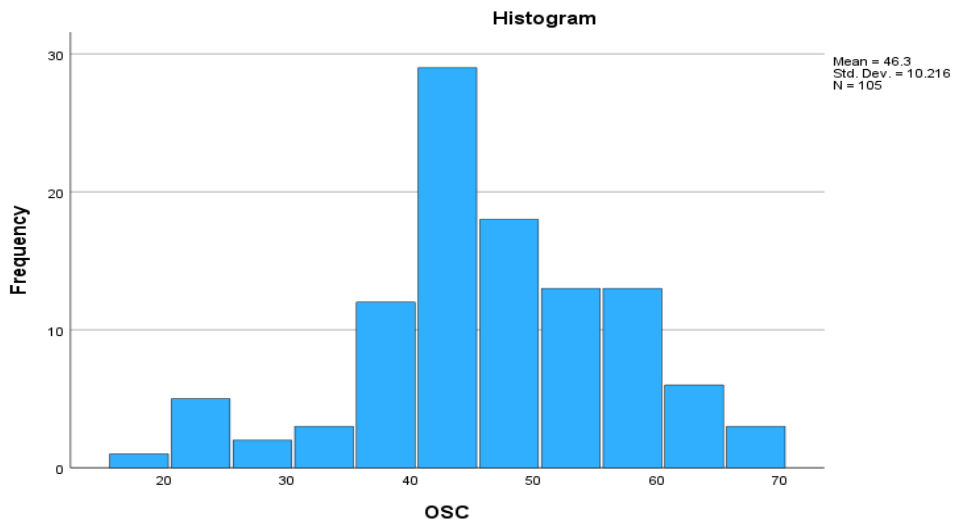
Boxplots

Figure 2: Distribution of IEMOJI scores across age groups
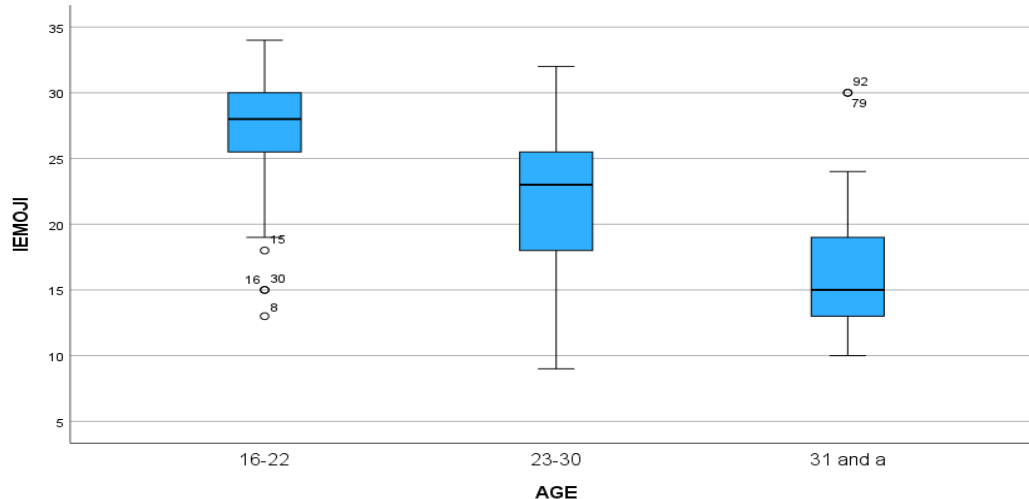
Figure 3: Distribution of OSI scores across age groups
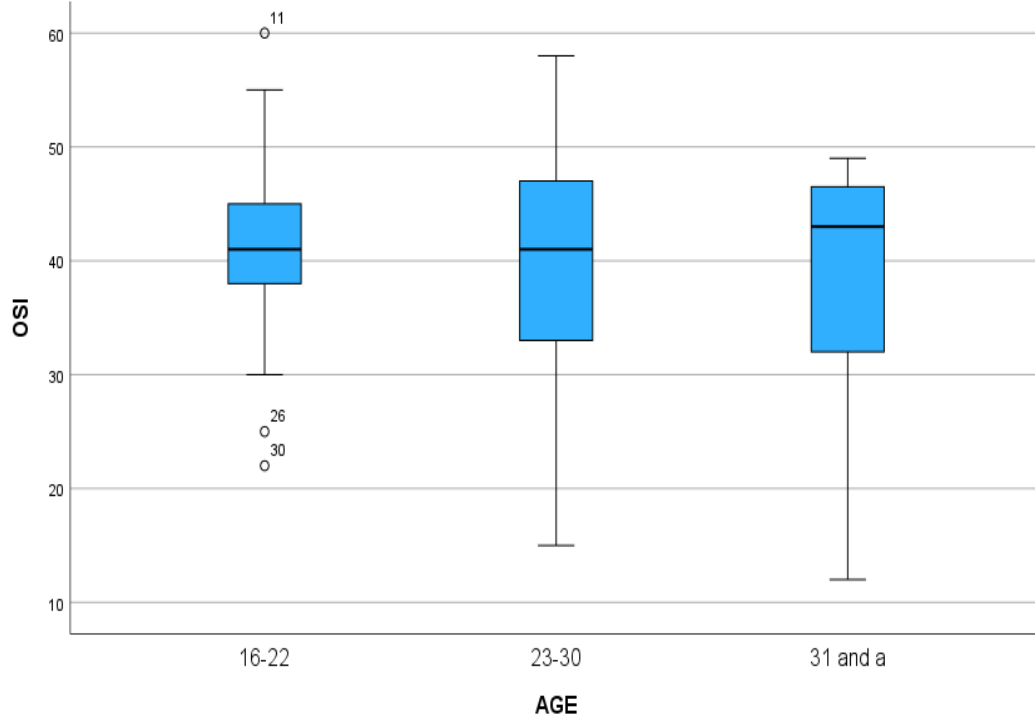
Figure 4: Distribution OSC across age groups
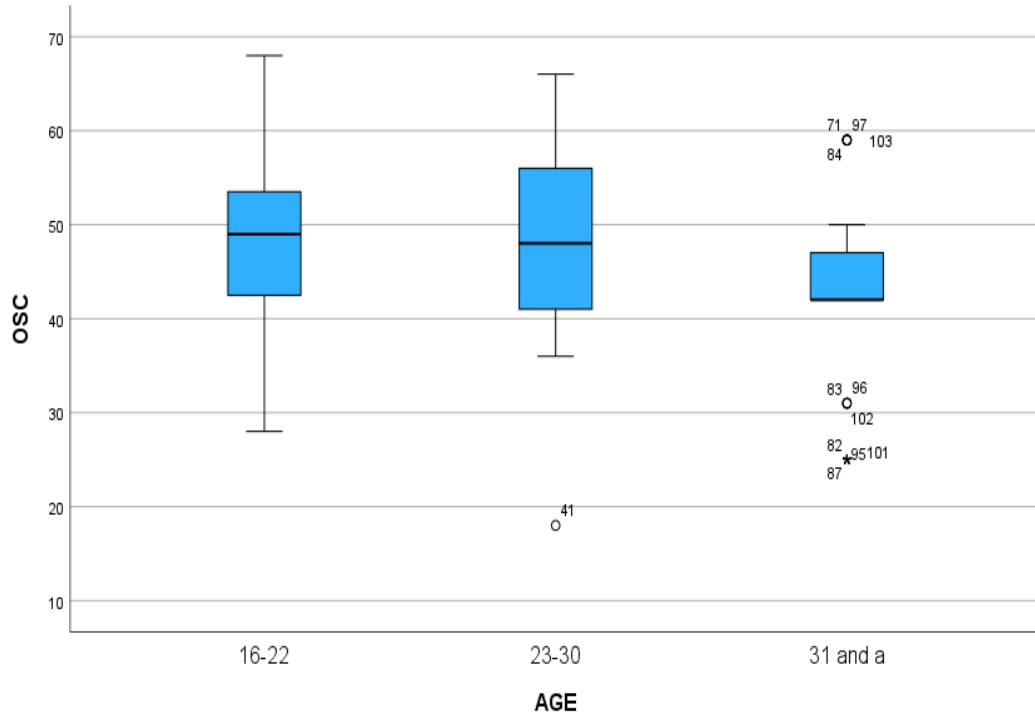
Regression Scatter Plots
Figure 5: IEMOJI values with OSI
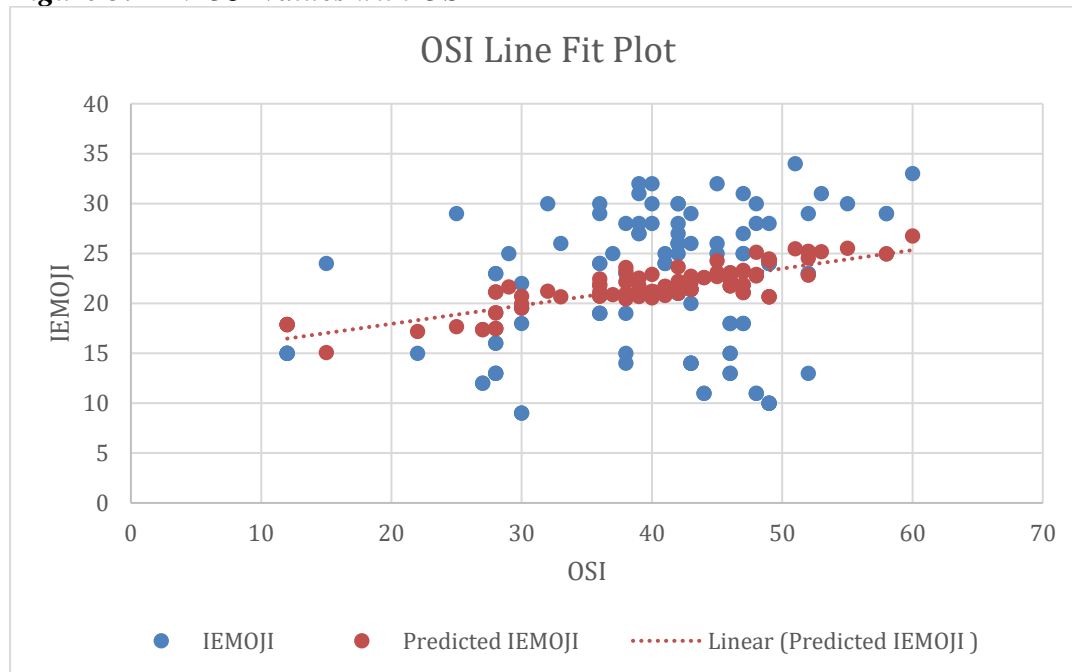
Figure 6: IEMOJI values with OSC
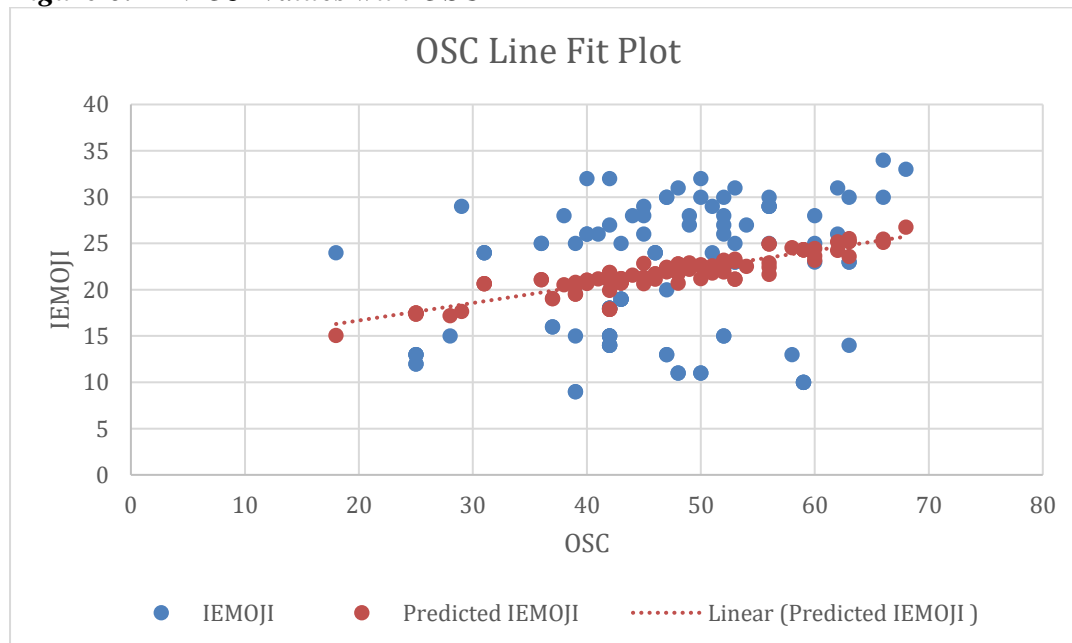
DISCUSSION

Multiple Regression analysis and Spearman's Rank Order correlation was carried out to study the impact of Online Social Intelligence and Online Communication Skills on Interpretation of Ambiguous Emojis. The results indicate that there exists a positive but weak relationship between Interpretation of Emojis and Online Social Intelligence and Communication Skills. This result was substantiated by the correlation analysis conducted which also indicated weak positive correlations between the variables. A correlation analysis was also carried out to understand the relationship between the independent variables,

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Online Social Intelligence and Online Communication Skills and the results indicate a moderate positive relationship. The aim of this study was to check if there exists a relationship between the variables and understand the role of age, therefore, it can be concluded that a negligible but positive correlation does exist between the three variables, but significant difference in the scores can be seen for scores of all three variables across the three age groups. Therefore, the statistical analysis provides no significant result to accept the first hypothesis.

The study was conducted on a large group of participants and the sample was overrepresented by females (n=68). It was hypothesized that participants in the age group of 16-22 will have an above average score on all three variables, participants in the age group of 23-30 will have medium score on all three variables and participants in the 31 above age group will have low scores on all three variables. The results indicate that 86% participants in the age group of 16-22 years have obtained an above average scores (>21.6) on the Interpretation of Emoji Scale; 51% and 57% participants in this age group have also scored above average in the Online Social Intelligence Scale and Online Communication Skills Scale respectively. This result substantially supports our second hypothesis. Results for the other two age groups were analyzed and it was found that 66%, 51% and 57% participants in the 23-30 age group scored above average on IEMOJI OSI and OSC scales, and only 14% participants in the age group of 31 and above scored above average in the Interpretation of Emoji scale and Online Communication Skills Scale; interestingly, 66% participants in the 31 above age group obtained an above average (>40) score for the Online Social Intelligence Scale which could be due the test items derived from the Tromso Social Intelligence Scale which was constructed for the measurement of Social Intelligence in real life, physical settings. This result does not support the third hypothesis but has substantial evidence to accept the 4th hypothesis. The above hypotheses are also supported and validated by the results of the independent Kruskal-Wallis Test conducted to check for the difference between scores of each age group in each variable. Additionally, 60% of all females who participated in the study have scored above average on the Interpretation of Emoji Scale which indicates substantial gender difference in the interpretation of emojis.

According to the review of literature, majority of the studies conducted did not take in to account the age factor that would play a role in the subjective interpretation of emojis and a qualitative analysis of the data was conducted to understand the level of subjectivity in interpretation. The measurement tools used for data collection in this study were quantitative in nature as each participant obtained a score for each item. Similar to any qualitative data, the measurement tool used in this study did not have any correct or wrong answer, only the level of subjectivity was scored (Eg: a score of 1 was given to the literal meaning of the emoji). The Online Social Intelligence Scale and the Online Communication Skills Scale measured the abilities using a Likert Scale, however, these tools have moderate positive correlation with each other because the scales that were used to develop these self-formulated OSI and OSC scales were actually constructed for a different purpose. However, items in the OSI and OSC scales were worded and framed differently in order to suit the purpose of the study. The psychometric properties of the scales were also analyzed by conducting a pilot study on 5 participants.

The over-representation of females in the sample can also be the reason behind the variations in the scores of Interpretations of Emoji scale across age groups as more than half of the number of females who participated in the study have scored above average on the

IEMOJI scale. The current results are in line with a study conducted by Rodrigues et.al in 2018 to understand gender difference in the interpretation of emojis and it concluded that females have a clearer and meaningful understanding of emojis than males. A study by Tsitsika et.al in 2014 was conducted to explore the link between usage of social networking sites and social competence in adolescents where the researchers assumed a possible relation between online and offline social competence. As noted earlier in the review of literature, social competence is one of the aspects of social communication and social intelligence, the current results are in line with the assumption of the possible relation between online and offline social competence as 20 out of 35, that is 57% participants in the age group of 16-22 years use messaging application for more than 3 hours in a day and they have scored above average in all three scales. Similar results were established in another study conducted by Prada et.al in 2018 where younger participants and females reported using more emojis than their older and male counterparts.

Limitations

The main limitation of the study is that age was measured using a nominal scale. Precise results would have been achieved if the age was measured in terms of a ratio scale. Another important limitation could be the presentation of emojis in different browsers that the participants would have used to access the form. Though the participants were informed to use only Google Chrome Browser, as the administration was carried out in an online medium, it may have affected the results. The length of the form and the number of questions per scale could have affected the motivation to participate in the study and continue. Feedback about the form was obtained from few participants in the age group of 31 and above and they mentioned that the statements were not relatable to them. On the other hand, younger participants were more interested to fill the form as they found the questions to be more relatable. As relatability of statements is an essential factor to consider while administration, the excess or lack of it could have affected the responses. Significant relationships between the variables could have been achieved by constructing standardized tools to measure all three variables because currently there exists no scale that taps into the online aspect of social intelligence. Appropriate testing procedures and norms can be followed for further research, in order to achieve better and significant results.

CONCLUSION

The current research assumed a possible relationship between the Interpretation of Emojis and Online Social Intelligence and Online Communication Skills. The variables were systematically tested using different tools and measures, under suitable administrative circumstances. the data was analyzed using appropriate statistical tools and software that ensured the provision of precise results. The results indicated a weak positive correlation between the variables; however, when these variables were tested in relation to three different age groups, positive results were obtained which indicate that Interpretation of Ambiguous Emojis and Online Communication Skills substantially differ across age groups. The variables were also analyzed in terms of other factors, like usage of emojis, number of hours spent on the messaging application, and the sex of the participant. It was observed that participants who had an above average score on all the variables also used emojis more frequently, spent more hours on the application and were biologically female. To conclude, the aim of the study was partially fulfilled as there exists a relationship between the three main variables but only when the age factor is taken into consideration.

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Conflict of Interest

The author declares no conflict of interest.