BODY IMAGE PERCEPTION AND COGNITIVE DISTORTIONS AS PREDICTORS OF INTERPERSONAL COMMUNICATION AMONG STUDENTS OF BENUE STATE UNIVERSITY, MAKURDI, NIGERIA

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ABSTRACT

This research examined how students' perception of their body image and cognitive distortions affect their interpersonal communication at Benue State University, Makurdi. A cross-sectional survey was conducted among 200 participants from the same university, selected through a simple random sampling technique. The Interpersonal Communication Scale (ICS), Body-Image Questionnaire (BIQ), and Cognitive Distortions Questionnaire (CD-Quest) were utilized to gather data. Three hypotheses were tested using linear and multiple regression analysis. The first hypothesis indicated that body image perception did not significantly impact students' interpersonal communication [f (1,198) = 1.294; p >.081 and R2 =.006)]. The second hypothesis demonstrated that cognitive distortions significantly influenced students' interpersonal communication [f (1,198) = 14.844; p <.000, R=.264 and R2 =.070)]. The third hypothesis indicated that both body image perception and cognitive distortions collectively affected students' interpersonal communication [f (2,197) = 8.833; p <.000, R=.287 and R2 =.082)]. Based on these findings, it is recommended that students be encouraged to enhance their verbal and non-verbal skills and be mindful of their body language as both are crucial for effective communication. Additionally, it is suggested that professionals like therapists and coaches, who are adept at helping individuals modify unhelpful thought patterns, should be made accessible in educational institutions, whether secondary or tertiary. If the cost of individual treatment is prohibitive, other resources such as mindfulness apps, cognitive behavioral therapy, mutual support groups, group therapy or coaching (which can be more affordable), student assistance programs through school work, or online communities could be explored.

Keywords: *Cognitive distortions, Body image, Interpersonal Communication, Perception*

BACKGROUND

Communication is a fundamental aspect of human functioning, serving as the bedrock of robust, healthy interpersonal relationships. Interpersonal relationships are initiated and nurtured through communication (Minarsi, Nirwana, &Yarmis, 2018). The quality of communication directly influences the quality of interpersonal relationships (Veas, Castejón, Gilar, &Miñano, 2015). Communication is crucial in establishing interpersonal relationships, where such relationships bolster the ability to interact personally and understand others effectively (Nirwana, et. al., 2018). Moreover, communication can be defined as the interaction between individuals.

Traditional communication involves face-to-face interaction, but in the realm of social media, communication transpires when someone responds or comments on others' status or initiates a conversation with another person (Othman, Apaudi, & Noah, 2016). Communication is deemed to be 98% of the most effective and significant function of management and aspects of leadership (Sabancı, Ahmet, Sönmez, & Yılmaz, 2016). Communication plays a pivotal role in executing organizational activities and is bolstered by the rapid evolution of communication as organizational needs evolve (Üstüner & Kis, 2014; Sabancı, Ahmet, Sönmez, & Yılmaz, 2016). In the past decade, higher education literature has increasingly emphasized the importance of interpersonal communication for fostering student community spirit, enhancing learning outcomes, and promoting student patience (Ogwuche, Caleb & Relojo-Howell, 2020).

While much of the network-based higher education literature has delved into peer relationships and to some extent classroom relationships, students also communicate with non-academic family members, colleagues and others that shape their experience (Mayhew et al., 2016; Small, 2017). Furthermore, student relationships with others serve a decisive purpose in many cognitive and psychosocial theories related to classroom learning and college student development (Abes et al., 2019). Factors such as students' intent in forming relationships, the environment they are

embedded in and the routines they form all influence the structure of student interpersonal communication (Small et al., 2015). Different types of relationships offer different resources and values such as social and academic support (Tinto, 2015).

Academically speaking, students often form relationships to establish study groups at the beginning of the semester (Brown, 2019; McCabe, 2016), and these relationships evolve over time. Mechanisms for fostering communication include physical accessibility, course enrollment, involvement in human lessons and student social identity (Marin & Hampton, 2019; Smith &Vonhoff, 2019). Primarily, there is a challenge in conducting effective discussions about students' performance issues, with a tendency to tolerate, protect, and work efficiently towards resolution (Le Fevre& Robinson, 2015). From the perspective of internal communication assessment and monitoring, it appears to be less effective (Arar, 2019). Communication from the principal to teachers and students often takes the form of orders to promptly complete tasks. The delivery of information from the school principal to teachers, employees, and students is still quite challenging due to the separation of principal and teacher offices (Iriono, 2017).

In the era of information, with the widespread use of the Internet, major social network platforms are developing rapidly. The advent of mobile networks has particularly accelerated the development of new media and the pace of people's lives. According to CNNIC's 43rd "Statistical Report on the Development of China's Internet Network", as of December 2018, China had 829 million Internet users, with an Internet penetration rate of 59.6%, an increase of 3.8 percentage points from the end of 2017. A total of 56.53 million new netizens were added (Li, 2015; Valley, 2015). The rise of the Internet has brought about significant changes in people's social behaviors and methods.

The emergence of WeChat has introduced a new model of communication. WeChat is a free application launched by Tencent on January 21, 2011 to provide instant messaging services for smart devices. Its communication mode combines text images, voice videos, small videos and other functions for easy and convenient communication with friends (Yu, & Yang, 2018). Interpersonal communication skills are indispensable in education for imparting knowledge to learners and improving educational performance and achievements for better outcomes (Gay, 2018). This implies that teachers as systems in education need to complement, assist, remind and improve educational conditions to create an optimal learning atmosphere (Basir &Basir, 2020). The benefits of interpersonal communication include the ability to report and work with various people, handle conflict, negotiate differences, make objective requests effectively and efficiently, be open to others' ideas and express their views on important matters in problem-solving processes (Singh & Lairopuii, 2014). This statement aligns with Howard's opinion that one of the most important skills is having the ability to communicate effectively within the workplace to ensure your ideas, wants, and needs are heard (Boztepe, 2017; Rusman, 2017). This statement also aligns with Low, Chong & Ellis's opinion that effective communication skills are a critical component of teaching. If there is a mismatch between what was intended to be conveyed and what is conveyed then even the best teaching decisions can result in ineffective teaching outcomes (Boztepe, 2017)..

Liliweri (2015) posits that interpersonal communication is crucial for maintaining relationships and interactions. Without it, these relationships and interactions would naturally dissolve. Essentially, the ability to communicate effectively is key to successful social interaction. This is particularly true in an educational setting where learners need to have good interpersonal communication skills. Liliweri (2015) further suggests that there is a mutual relationship between interaction, relations, and interpersonal communication. Interpersonal communication skills are defined by Wiseman as the ability to manipulate and control one's environment to achieve personal goals (Nadeem, Mohammed & Dalib, 2017).

Singh and Lairopuii (2014) view interpersonal communication as a process of sharing information and understanding between individuals, which is vital for organizational success. From a linguistic

perspective, interpersonal communication involves verbal, non-verbal (body language), and paralinguistic elements (voice tone, intonation) used by students and educators to express meaning, implement academics, and create connections (Tranca & Neagoe, 2018). Interpersonal communication plays a significant role in educational achievement. It can influence student performance and make students more active in completing tasks (Oktary et al., 2019).

Scholars like Siburian (2013) and Ramananty & Martinus (2016) argue that active interpersonal communication, a sound educational philosophy, and strong motivation for achievement can enhance student interpersonal communication. Interpersonal relationships refer to the strong bond formed between individuals involved in an interpersonal relationship. The bond is often strengthened by the attraction between individuals. Interpersonal communication is a unique form of communication that focuses on what is happening between individuals, regardless of their location or existence (Wood, 2015). It has numerous benefits including supporting successful student interaction in learning environments, establishing and maintaining good relationships between individuals, conveying knowledge or information, changing attitudes and behaviors, solving human relationship problems, improving self or body image, and paving the way to success (Suranto, 2011).

In the past, physical appearance held less significance. The ancient Greeks, for instance, valued "kalokagathia," a concept that emphasized the importance of a refined mind and body (Pop, 2016). Today, however, body image (BI) is a complex construct that encompasses a person's perceptions, thoughts, and feelings about their body (Grogan, 2016). It includes perceived BI (how one sees oneself), ideal BI (what society deems acceptable), and body image of the opposite sex (BIOS) - how males perceive females' bodies and vice versa. Body image is not just about physical appearance. It also involves emotions and attitudes towards one's body size, shape, and aesthetics (Firdevs & Sevil, 2015). It's influenced by various factors, including the importance one places on physical appearance in relation to their overall self-image (Tylka & Wood-Barcalow, 2015). Positive body image refers to an individual's acceptance and appreciation of their unique body and its functions (Zaccagni, Masotti, Donati, Mazzoni & Gualdi-Russo, 2014).

Conversely, negative or distorted body image is a condition where an individual perceives their features and body size as distorted. The perception of body image has significant global interest due to its impact on physical, psychological, and behavioral well-being. Distorted self-body image can lead to strict dieting, excessive weight control, low self-esteem and self-worth. On the other hand, positive body image perception can lead to cognitive distortion, social acceptance, self-confidence, life satisfaction and healthier attitudes towards eating behaviors and physical activity. Body image is now seen as a multidimensional construct involving perception, affect, and behavior (Joo et al., 2018).

Life satisfaction is associated with lower mortality risk and fluctuations in life satisfaction can be harmful to health and survival (Kawel-Boehm et al., 2015). Therefore, the consequences of distorted body image on physical, psychological and behavioral well-being have led to increased global interest in body image perception. Unfortunately, much of the literature on body image focuses on dissatisfaction with one's body (Green, 2018).

The perception of body image varies across different cultures and regions. Much of the existing research on body image perception has been conducted in Western countries, leaving a knowledge gap about this perception in Eastern Mediterranean Region (EMR) nations (Rodgers, Neville, & La Grow, 2017; Keshk et al., 2019). Body image perception plays a significant role in an individual's lifestyle and can influence their sense of satisfaction and well-being. Negative body perception can impact lifestyle choices, increasing the risk of obesity and making negative habits difficult to change (MihaKaucic et al., 2017).

It can also influence the type of physical activity one prefers and how much they enjoy it. Social beauty standards can determine participation in physical activity, especially for those who have been judged for their weight (More et al., 2019). University students, who are at a critical age for

developing their identity in relation to physical self-evaluation and self-worth, may be more susceptible to pressures to conform to perceived physical appearance standards. A positive body image leads to a realistic perception of body size, a sense of well-being, and comfort with one's body. Conversely, a negative body image leads to a distorted perception of body size, continuous comparisons with others, and dissatisfaction. In some cultures, satisfaction with body image may lead to maintaining a higher Body Mass Index (BMI), contributing to the prevalent problem of overweight and obesity.

Body Schema

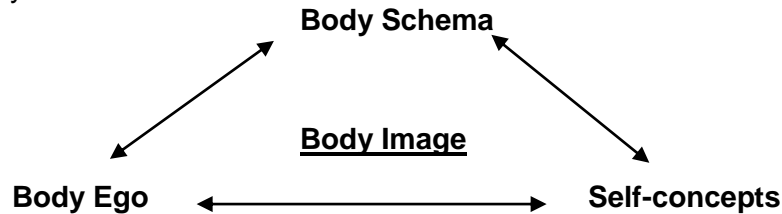**Body Image**

Body Ego　　　　　　　　　　　　**Self-concepts**

Fig. 1: Components of Body Image (Schidler, 1950)

Negative body image perception, particularly among young adults, can lead to numerous harmful effects. However, research on body image perception in the Eastern Mediterranean Region, especially among university students, is limited (Rodgers, Neville, & La Grow, 2017; Keshk et al., 2019).

Cultural and environmental factors significantly influence the standards of ideal body size and its consequences, necessitating national studies (Musaiger & Al-Mannai, 2014). Cognitive distortion, a result of certain thinking patterns or cognitive abilities, plays a role in this. Cognition encompasses both the content of thought and the processes involved in thinking. It includes modes of perceiving and processing material, as well as problem-solving attitudes and strategies. In individuals with depression, their thinking and preoccupations are often characterized by inaccurate and exaggerated views of themselves and events (Beck, 2015). Cognitive distortion is described as an inaccurate way of interpreting an experience (Barriga et al., 2000) or making a statement or claim (Liu et al., 2014). It's a type of clinically problematic cognition relevant to a specific status and scope of operation (Guglielmo, 2015). Cognitive distortion convinces us of something untrue as if it were true (Rohany et al., 2016).

These inaccurate thoughts often reinforce negative thoughts or emotions. Cognitive distortions are divided into two broad categories: self-serving cognitive distortions and self-debasing cognitive distortions (Rehna, 2017). These thinking errors cause an individual to either negate or degrade themselves. They result from faulty and ineffective information processing due to inconsistent, irrational, and erroneous thinking (Bruno, 2010). Cognitive distortions facilitate both internalizing and externalizing behavior. Internalizing individuals inaccurately debase themselves directly or indirectly, potentially leading to self-harm. Externalizing individuals exhibit biased processing tendencies such as attributing hostile intent to others (Finne & Svartda, 2017).

Cognitive distortions, a concept from Cognitive Behavioral Therapy (CBT), refer to biased ways of thinking about oneself and the world. These distortions are specific and common ways people distort their thinking. Such irrational thoughts and beliefs can lead to problematic emotional states and behavior, such as anxiety, low self-esteem, depression, and relationship conflicts (Rabina, 2017). Without intervention, cognitive distortions can worsen psychiatric symptoms (Dudley et al., 2016). However, the variety of cognitive distortions, such as overgeneralization or catastrophizing, can complicate identification and appropriate intervention by clinicians. Being aware of these distortions is crucial so that you can shift your thinking to more rational and objective thoughts whenever possible.

More rational thinking tends to lead to more positive emotional and behavioral experiences. Humans naturally assign meanings to their own actions and those of others. They evaluate and interpret the contextual meaning of their experiences based on various decisions. These

interpretations of incoming experiences and attributions have a complex relationship with each other. For example, judgments about the world around us help set beliefs in our minds that are held for a long time along with values. These beliefs and values then influence how individuals and groups in society evaluate those beliefs, values, and conduct (Helmond, Overbeek, Brugman & Gibbs, 2015). The behavior we exhibit is the result of integrated knowledge that depends on our beliefs about the social world around us. Motivational factors also play a significant role in shaping these beliefs. Biased, illogical, irrational or judgmental beliefs can lead to prejudiced and illogical behaviors (Rehna, 2017). Then individuals start to irrationally justify those behaviors and their underlying beliefs. In psychology literature, these irrational justifications and beliefs are referred to as cognitive distortions (Roberts, 2015).

EMPIRICAL REVIEWS

Research on body image issues in adults from the Eastern Mediterranean Region is limited, with even fewer studies focusing on Arabian samples or the general teachers' group (Keshk et al., 2019). This underscores the need for more research on body image from diverse socio-cultural viewpoints, particularly in Arab countries and the Omani context, where such studies are scarce. The majority of body image research tends to concentrate on pathologies linked to body dissatisfaction, leaving a gap in the literature for non-pathological body image theories (Green, 2018).

A study by Adishta and Arpita (2020) examined the correlation between body image, gender differences, and self-esteem among adolescents. The study used a survey method and targeted adolescents aged 18-19, with an equal number of males and females. They were given a Body Satisfaction Questionnaire and Rosenberg's self-esteem questionnaire. The findings revealed no correlation between body image and self-esteem in both genders. However, gender differences were observed in body image among adolescents, but not in self-esteem (Onah, Okafor, & Deborah, 2019). Agam, Tamir, and Golan (2015) investigated how gender roles affect adolescents' self-esteem and body image, and how prevention programs delivered in mixed or single-gender groups influence these factors. They found that gender roles impact adolescents' self-esteem, with boys generally reporting higher self-esteem than girls. Girls are more likely to develop internalizing problems related emotions, while boys are more prone to externalizing problems related emotions. Body dissatisfaction can lead to detrimental emotional, psychological, and physiological effects.

During adolescence, girls seem to be more susceptible to the adverse psychological health effects of stress; they exhibit significantly higher levels of adaptation, depression, and eating disorders. Boys are more likely to display externalizing behavior problems such as aggression, antisocial behavior, and delinquency. The study also noted gender differences in adolescents' perceptions, emotional expression, and behavior. Some studies found gender differences in seeking support, with females using coping strategies more than males. However, the impact of prevention programs on adolescents' body image and self-esteem when delivered in mixed or single-gender groups yielded conflicting results..

Bansal (2017) conducted a study to explore the correlation between body image satisfaction and self-esteem in adolescent girls. The study involved a random sample of 100 adolescent girls who were given two questionnaires; The Body Shape questionnaire by Cooper et al and Rosenberg's Self-esteem scale. The results showed that 36% of the girls were satisfied with their body image, 37% had a positive body image, and 6% were dissatisfied. Additionally, 12% of the girls had very high self-esteem, and 69% had positive self-esteem. The study concluded that higher body image dissatisfaction was associated with lower self-esteem levels. Contrarily, Davis, Fowler, Best, and Both (2019) found that body discomfort did not significantly predict female life satisfaction. This inconsistency in findings underscores the need for further research. Individuals with body concerns are more likely to engage in unhealthy behaviors such as increased smoking and other

harmful habits (Kilpela et al., 2015), potentially leading to chronic health problems, physical injury, and reduced life expectancy. Women often grapple with body insecurities and low self-esteem (Henn et al., 2019; Kang et al., 2019). Individuals who are comfortable with their self-image exhibit control over their appearance, sexuality, and physical functioning. Physical exercise has been shown to alleviate psychological issues associated with job pressures and increase employee satisfaction (Arundell et al., 2018).

However, much of the body image literature continues to focus on pathologies associated with body dissatisfaction. A recent trend in psychology has called for positive outcome avoidance and enhancement rather than negative outcome approaches (Green, 2018). Programs that encourage individuals to be healthier can improve their emotional well-being and mental health while promoting physical fitness (Pengpid & Peltzer, 2019). Moreover, existing research has shown a relationship between general happiness and a preference for social interaction related to physical activity (Hrafnkelsdottir et al., 2018).

In a study conducted among female Kuwaiti university students assessing body image perceptions using female silhouettes figures, the difference between current perceived body image (PBI) and ideal body image (IBI) was used as a measure of body image dissatisfaction (BID). The study revealed a high significant correlation within PBI, IBI, BID and between them and BMI (Kabir, Zafar & Waslien, 2013). In another study involving 2203 Turkish adolescent students aged 15-18 years old using the Rosenberg Self-Esteem Scale (SES), it was found that body image dissatisfaction was related to low self-esteem and depression in adolescents..

Yavuzer (2015) conducted a study to explore the relationship between cognitive distortions, self-handicapping tendencies, and self-esteem among university students. The study involved 507 university students from Nigde University and Aksaray University in central Anatolia, Turkey, selected through random sampling from a total of 4,720 students. The findings indicated that cognitive distortions (such as self-criticism, self-blame, hopelessness, and preoccupation with danger), and self-esteem significantly predicted self-handicapping tendencies. The study also revealed significant findings related to the moderating role of self-esteem in the relationship between cognitive distortions and self-handicapping. Interpersonal communication within a higher institution setting can lead to conflicts due to differences in religious, cultural, and ethnic backgrounds, as well as distinct departments and levels.

Wahlstorm (2016) suggested that effective interpersonal communication involves both the sending and receiving of information, which can be influenced by factors such as body image perception and self-esteem. The Vulnerable model posits that lower self-esteem is a significant risk factor for future depression (Orth, Robins & Roberts, 2008). Individuals with low self-esteem often seek constant approval from their friends and loved ones to feel valuable. This need for approval increases the likelihood of rejection and subsequent depression. This study aims to determine the influence of body image perception and cognitive distortions on interpersonal communication among students of Benue State University.

Hypotheses
   i.   Body image perception will significantly predict interpersonal communication among students of Benue State University, Makurdi.
   ii. Cognitive Distortion will significantly predict interpersonal communication among students of Benue State University, Makurdi.
   iii. Body image perception and cognitive distortion will jointly predict interpersonal communication among students of Benue State University, Makurdi.

METHODS

Design: This study utilized the cross-sectional design, which is a method used to gather data at a specific point in time to make inferences about a particular population. This design is appropriate for this study as it allows the researcher to collect data from a cross-section of flooding activities in Makurdi metropolises.

Setting: The study was conducted in Benue State University, a state-owned university located in Makurdi, Benue State, Nigeria. The university has 8 faculties in total including the college of health sciences.

Participants: The participants for this study will be students of Benue State University, Makurdi from all faculties (social sciences, sciences, arts, education, law and management sciences). In details, 20's are 40(20%), 21's are 20(10%), 22 are 20(10%), 23 are 20(10%), 25 are 20(10%), 26 are 40(20%), 27 are 20(10%) and 28 are 20(10%). Religion; Christianity are 140(70%), Islam are 40(20%) and others are 20(10%). Accordin to their levels of study; 100, 60(30%); 200, 60(30%), 300, 40(20%) and 400, 40(20%). Ethinicity, Tiv=100(50%), Idoma=80(40%) and Igede=20(10%).

Technique techniques: The simple random sampling method will be used to select participants for the study. The sample size for the study will be determined using Taro Yamane's sample determination formula, keeping in mind that a sample size must represent at least 10-20% of the population of a study (Emaikwu, 2012).

Instruments

Interpersonal Communication Scale (ICS): This is a seven-item questionnaire designed to measure communication. It investigates two factors of face-to-face communication: External Perception and Internal Disseverance. The former measures an individual's ability to interact with others, while the latter refers to one's desire to bridge the gap in communication. These factors were explored using various measures of communication, self-deception, social desirability, and gender.

Body-Image Questionnaire (BIQ): This 19-item questionnaire by Koleck et al. (2002) was administered. The responses were analyzed using principal component analysis, yielding a general Body Satisfaction dimension. The scale was scored from 1 (very much/often) to 5 (not at all/rarely), with a high score indicating Body Satisfaction.

Cognitive Distortions Questionnaire (CD-Quest): This brief, 15-item questionnaire assesses the frequency and intensity of cognitive distortions. It has demonstrated sound psychometric properties in various undergraduate samples and outpatient clinical samples.

Procedure: The research used 2 research assistants who are graduate students of the department of psychology, Benue State University, Makurdi to help in the distribution and retrieval of copies of the questionnaire. With the research assistants, we explained where necessary to the participants what they may not be clear about. The participants will be at liberty to quit participation when they feel not satisfied or want to quit. During data collection, the researcher carefully reviewed the completeness of the administration to ensure accuracy of the scoring. Finally to prevent scoring drift, scores will be carefully screened by the researcher and those that were found to have discrepancies will not be included in the analysis.

Data Analysis: Data for this study were analyzed using simple linear regression and multiple linear regressions. Simple linear regression will be used to test first and second hypothesis while the multiple linear regression will be used to test the third hypothesis. Also, descriptive statists such as percentages were used in analyzing demographic data of respondents.

RESULTS

Hypothesis One: Body image perception will significantly predict interpersonal communication among students of Benue State University, Makurdi.

Table 1: *Linear regression analysis summary table showing that body image perception will significantly predict interpersonal communication among students of Benue State University, Makurdi.*

Variables	R	R^2	F	B	t	P	Remarks
Constant	.081	.006	1.294		7.364	.257	Not
Body image				.081	1.137		Significant

Table 1 shows the result of a linear regression analysis indicating that body image perception significantly predicting interpersonal communication among students of Benue State University, Makurdi [f (1,198) = 1.294; p >.081 and R^2 =.006)]. The result was not significant, therefore hypothesis one was confirmed.

Hypothesis Two: Cognitive distortion will significantly predict interpersonal communication among students of Benue State University, Makurdi.

Table 2: *Linear regression analysis summary table showing that cognitive distortion will significantly predict interpersonal communication among students of Benue State University, Makurdi.*

Variables	R	R^2	F	B	t	P	Remarks
Constant	.2.64	.070	14.844		3.592	.000	Significant
Cognitive distortion				.264	3.853		

Table 2 shows the result of a linear regression analysis indicating that cognitive distortion will significantly predict interpersonal communication among students of Benue State University, Makurdi [f (1,198) = 14.844; p <.000, R=.264 and R^2 =.070)]. The value of R =.264 shows the level of relationship between, cognitive distortion and interpersonal communication among students of Benue State University, Makurdi and R^2 =.070, shows that cognitive distortion explains 7.0% of variability on interpersonal communication. The β value of .264 indicates that there is a positive relationship between cognitive distortion and interpersonal communication. That is, as cognitive distortion increases, there is a positive performance on interpersonal communication while as the cognitive distortion decreases; there is a negative performance on interpersonal communication. Therefore, hypothesis two was confirmed.

Hypothesis Three: Body image perception and cognitive distortion will jointly predict interpersonal communication among students of Benue State University, Makurdi.

Table 3: *Multiple regression analysis summary table showing that body image perception and cognitive distortion will jointly predict interpersonal communication among students of Benue State University, Makurdi.*

Variables	R	R^2	F	β	T	P	Remarks
Constant	.287	.082	8.833		3.907	.000	Significant
Body image				-.145	-1.642	.102	
Cognitive distortion				.356	.404	.000	

Table 3 shows the result of a multiple regression analysis indicating that body image perception and cognitive distortion will significantly predict interpersonal communication among students of Benue State University, Makurdi [$f(2,197) = 8.833$; $p < .000$, R=.287 and R^2 =.082)]. The value of R =.287 shows the level of joint relationship of body image, cognitive distortion and interpersonal communication among students of Benue State University, Makurdi and R^2 =.082, shows that body image and cognitive distortion jointly explains 8.2% of variability on interpersonal communication. The β value of -.145 indicates that there is a negative relationship between body image perception and interpersonal communication. The β value of .356 indicates that there is a positive relationship between cognitive distortion and interpersonal communication. Therefore, hypothesis three was confirmed.

DISCUSSION AND CONCLUSION

The first hypothesis suggests that body image perception will not significantly influence interpersonal communication among students of Benue State University, Makurdi. This finding aligns with the study by Adishta and Arpita (2020), which found no correlation between body image and self-esteem in both genders among adolescents. However, it contradicts the study by Agam, Tamir, and Golan (2015), which found that gender roles influence adolescents' self-esteem and body image, and that body dissatisfaction can cause harmful emotional, psychological, and physiological effects (Onah & Oladejo, 2023).

The second hypothesis suggests that cognitive distortion will significantly influence interpersonal communication among students of Benue State University, Makurdi. This finding is consistent with the study by Yavuzer (2015), which found that cognitive distortions and self-esteem significantly predicted self-handicapping tendencies. It also aligns with the study by Abes et al., (2019), which suggested that student relationships have a decisive purpose in many cognitive and psychosocial theories related to classroom learning and college student development. The types of relationships have different resources and values, such as social and academic support (Tinto, 2015; Onah & Dele, 2022).

The third hypothesis suggests a combined influence of body image perception and cognitive distortion on interpersonal communication among Benue State University students. This supports the idea that interpersonal communication is crucial for education, knowledge transfer, and enhancing academic performance (Gay, 2018; Onah, 2023). However, it challenges the notion that interpersonal communication significantly impacts students' educational success and acceptance. It also suggests that effective interpersonal communication can enhance student achievement, and students who struggle with tasks can become more engaged through comprehensive interpersonal communication (Oktary et al., 2019). Additionally, other researchers have discovered that active interpersonal communication, a sound educational philosophy, and strong motivation for success can enhance student interpersonal communication (Siburian, 2013; Ramananty & Martinus, 2016).

Recommendations

This study builds upon existing research, advocating for a continued focus on the various aspects of body image perceptions and their relationship with self-esteem in adolescents and other societal groups.
It is recommended that this research be replicated in different university settings across various regions, educational backgrounds, and cultures to determine whether the correlation between body image and cognitive distortion is context-dependent or more related to a specific age group. This would also allow researchers to gather more evidence to support the generalizability of the

study's findings, considering key variables such as age, ethnicity, residence, specific year of university study, and cultural and regional affiliations.

For school administrators and educators aiming to foster positive relationships with students; it's important to remember that successful interactions are based on mutual sharing of opinions, approaches, and benefits. Incorporating personal experiences can help build trust and respect, which are fundamental to any relationship. These interpersonal communications can make students more engaged in the classroom and help prevent excessive memory distortion. The study suggests that teachers should foster students' interpersonal communication skills by promoting two-way learning and understanding various learning models positively. This is particularly important in stressful school learning activities to enhance students' interpersonal communication skills.

Emphasis should be placed on developing adaptive cognitive frameworks and incorporating them into the curricula of universities and colleges of education. This can enhance the knowledge awareness of teachers and students, potentially reducing the academic and peer pressure they face.

Limitations:

i.   The sample used in this study was relatively homogenous in terms of ethnic background. Future research should aim to include participants from a broader demographic spectrum to enhance the generalizability of the findings.

ii. Information regarding participants' history and disability status was not collected in this study. Future research may consider including this information.

iii. The study was conducted solely at Benue State University, which may not be representative of all university students in Nigeria. As a cross-sectional survey, this study identified prevalence and underlying risk factors, but it could not determine causality.

REFERENCES

Abes, E. S., Jones, S. R., & Stewart, D. L. (Eds.). (2019). *Rethinking college student development theory using critical frameworks.* Stylus Publishing, LLC.

Adeem, N., Mohammed, M. U. & Dalib, S. (2017). A proposed model of ınter-cultural communication competence (ICC) in Malaysian Context. *International Journal of Educational Research Review,* 2 (2), 11-20.

Agam, R. Tamir, S. & Golan, M. (2015). Gender Differences in Respect to Self-Esteem and Body Image as Well as Response to Adolescents' School-Based Prevention Programs. *J PsycholClin Psychiatry* 2(5), 00092.

Aliyev, B. & Turkmen, A. (2014). Parent, Peer and Media Effect on the Perception of Body Image in Preadolescent Girls and Boys. *Universal Journal of Psychology* 2(7): 224-230, 2014.

Arar, K. (2019). Arab principals' and teachers' perceptions of trust and regulation and their contribution to school processes. *Leadership and Policy in Schools,* 18(4), 648-663. doi:https://doi.org/10.1080/15700763.2018.1475576

Arundell, L., Sudholz, B., Teychenne, M., Salmon, J., Hayward, B., Healy, G. N., & Timperio, A. (2018). The impact of activity based working (ABW) on workplace activity, eating behaviours, productivity, and satisfaction. *International journal of environmental research and public health,* 15(5), 1005.

Bansal, S. (2017). Relationship Between Body Image Satisfaction And Self-Esteem In Adolescent Girls. *Phonix - International Journal for Psychology and Social Sciences,* 1(2), 75-78. 84 http://www.phonixcentre.in/journals.php

Barriga, A. Q., Morrison, E. M., Liau, A. K., & Gibbs, J. C. (2001). Moral cognition: Explaining the gender difference in antisocial behaviour. *Merrill-Palmer Quarterly,* 47, 532-562.

Basir, S. & Basir, M. (2020). The influence of interpersonal communication and work culture on teacher performance in Junior High School at Wajo Regency (Indonesia). *Espacio.* 41(6); 12

Boztepe,O. (2017). The adaptation of student communication satisfaction scale into Turkish Culture. *International Journal of Educational Research Review,* 2 (1), 27-33.

Brown, M. (2019). The push and pull of social gravity: How peer relationships form around an undergraduate science lecture. *The Review of Higher Education,* 43(2), 603-632.

Davis, L. L., Fowler, S. A., Best, L. A., & Both, L. E. (2020). The role of body image in the prediction of life satisfaction and flourishing in men and women. *Journal of Happiness Studies,* 21(2), 505-524.

Finne, J. N., &Svartda, F. (2017). Social Perception Training: Improving social competence by reducing cognitive distortions. *International journal of emotional education,* 2(9), 44-58.

Firdevs, S. &Sevil, S. (2015). The impact of body image and self-esteem on Turkish adolescents" subjective well-being. *Journal of Psychology Research* 5(9); 536-551.

Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice.* Teachers College Press.

Green, A. (2018). Body Image and Participant Characteristics in Emerging Adults. (Ph.D.). University of Northern Colorado, Ann Arbor. *ProQuest Dissertations & Theses Global database.* (10845777)

Grogan S. (2016). *Body image: understanding body dissatisfaction in men, women and children.* Abingdon, UK: Taylor & Francis; 1-9. 2.

Helmond, P., Overbeek, G., Brugman, D., & Gibbs, J. C. (2015). A meta-analysis on cognitive distortions and externalizing problem behaviour: Associations, moderators, and treatment effectiveness. *Criminal Justice and Behaviour,* 42(3), 245-262.

Henn, A. T., Taube, C. O., Vocks, S., & Hartmann, A. S. (2019). Body image as well as eating disorder and body dysmorphic disorder symptoms in heterosexual, homosexual, and bisexual women. *Frontiers in psychiatry,* 10, 531.

Hrafnkelsdottir, S. M., Brychta, R. J., Rognvaldsdottir, V., Gestsdottir, S., Chen, K. Y., Johannsson, E., ... & Arngrimsson, S. A. (2018). Less screen time and more frequent vigorous physical activity is associated with lower risk of reporting negative mental health symptoms among Icelandic adolescents. *PloS one,* 13(4), e0196286

Iriono, L. (2017). Hubungan Antara Komunikasi Interpersonal KepalaSekolahdenganKinerja Guru Di SmaSwastaUisu Medan. Benchmarking, 1(1).

Joo, L. C., Ab Hamid, S.-A., Yaacob, N. M., Hairon, S. M., Cheng, K. Y., &Bujang, M. A. (2018). Validation of Malay Version of Body Self-Image Questionnaire-Short Form among Malaysian Young Adults. *The Malaysian journal of medical sciences: MJMS,* 25 (4), 131.

Kabir Y., Zafar T.A. &Waslien C. (2013). Relationship between perceived body image and recorded body mass index among Kuwaiti female university students. *Women Health.* 53(7):693-705.

Kang, H. J., Lee, J. M., Lee, S. M., Yang, H. K., Kim, R. H., Nam, J. G., . . . Han, J. K. (2019). Value of virtual monochromatic spectral image of dual-layer spectral detector CT with noise reduction algorithm for image quality improvement in obese simulated body phantom. *BMC Med Imaging,* 19(1), 76. doi:10.1186/s12880-019-0367-8

Kawel-Boehm, N., Maceira, A., Valsangiacomo-Buechel, E. R., Vogel-Claussen, J., Turkbey, E. B., Williams, R., Bluemke, D. A. (2015). Normal values for cardiovascular magnetic resonance in adults and children. *Journal of Cardiovascular Magnetic Resonance,* 17 (1), 1-33

Keshk, M. M., Fahim, H. I., Hassan, A. M., Boulos, D., & Sector, P. (2019). Body image perception and self-esteem among university students in Cairo. *Egyptian Journal of Community Medicine,* 37(1), 82-96.

Kilpela, L. S., Becker, C. B., Wesley, N., & Stewart, T. (2015). Body image in adult women: Moving beyond the younger years. *Advances in Eating Disorders: Theory, Research and Practice,* 3(2), 144-164.

Li, R. (2015). The influence of WeChat on college students' interpersonal communication. *Theory Research,* (3): 107-108.

Liliweri, A. (2015). *Komunikasiantar Personal.* Jakarta: KencanaPrenadamedia Group.

Liu, J. (2004). Childhood externalizing behavior: Theory and implications. *Journal of Child and Adolescent Psychiatric Nursing,* 17, 93-103

Marin, A., & Hampton, K. N. (June, 2019). Network instability in times of stability. *In Sociological Forum.* 34(2), 313-336.

Masri, S. (1997). *Media dankomunikasidalambahasaMelayu.*FajarBakti.

Mayhew, M. J., Rockenbach, A. N., Bowman, N. A., Seifert, T. A., &Wolniak, G. C. (2016). *How college affects students: 21st century evidence that higher education works (Vol. 1).* John Wiley & Sons.

McCabe, J. M. (2016). *Connecting in college. In Connecting in College.* University of Chicago Press.

MihaKaucic, B., Filej, B., ToplakPerovic, B., &Ovsenik, M. (2017). Spiritual Factor as an Important Element of Life Satisfaction in Old Age. *Informatologia,* 50(3/4), II-III.

Minarsi, H., Nirwana, H. &Yarmis, S. (2018). Contribution of the interpersonal communication toward problem solving strategies of high school students. *International Conferences on Education, Social Sciences and Technology*. doi: https://doi.org/10.29210/2018112 Website: http://icesst.fipunp.ac.id Padang, February 14th - 15th; 80-85

More, K. R., Phillips, L. A., & Colman, M. H. E. (2019). Evaluating the potential roles of body dissatisfaction in exercise avoidance. *Body image,* 28, 110-114.

Musaiger A. O. & Al-Mannai M. (2014). Association between exposure to media and body weight concern among female university students in five Arab countries: a preliminary cross-cultural study. *J Biosoc Sci.* 46(2), 240-247

Ogwuche C.H., Caleb O. &Relojo-Howell, D. (2020). Perceived stress and social support as predictors of subjective well-being among university students in Nigeria. *Psychology & Society,* 1(79), 120–125. https://doi.org/10.35774/pis2020.01.120

Oktary, D., Marjohan, M., &Syahniar, S. (2019). The Effects of Self-Confidence and Social Support of Parents on Interpersonal Communication of Students. *Journal of Educational and Learning Studies,* 2(1), 511.

Onah C. & Oladejo, J. (2023). Does Life Stress, Self-esteem and Family Conflict Associated with Risky Behaviour in Adolescents in Nigeria, *Journal of Nurses Voice and Impact,* 5(1), 25-32.

Onah C., & Dele, G.E. (2022). Demographic Factors and Sexual Behaviour as Predictors of Psychoactive Substance Use among Adolescents in Abuja, Nigeria. *Journal of Innovation in Psychology, Education and Didactics,* 26(2), 207-216.doi:10.29081/JIPED.2022.26.2.07.

Onah, C. (2023). Substance Abuse among Students: The Mediating Role of Peer Pressure and Depression in Nigeria. *International Journal of Scientific Research in Multidisciplinary Studies,* 9(1), 11-18. https://www.isroset.org/journal/IJSRMS/full_paper_view.php?paper_id=3035

Onah, C., Okafor, M. & Deborah, O. (2019). Peer Pressure, Alcohol Use and Drugs Abuse on Anti-Social Behaviour among Youths in Makurdi Metropolis, Benue State. *Journal of Counselling and Family Therapy,* 1(2), 1-8. http://doi.org/10.5281/senodo.2656085

Pengpid, S., &Peltzer, K. (2019). Sedentary behaviour, physical activity and life satisfaction, happiness and perceived health status in university students from 24 countries. *International journal of environmental research and public health,* 16(12), 2084.

Pop, C. (2016). Self-Esteem and body image perception in a sample of university students. *Eurasian Journal of Educational Research,* 64, 31-44 http://dx.doi.org/10.14689/ejer.2016.64.2

Rabina, D. (2017). Cognitive distortion among Annamalai University students. *International Journal for Innovative Research In Multidisciplinary Field.* 3(7), 566-567

Ramadanty, S. & Martinus, H. (2016). Organizational communication: Communication and motivation in the workplace. *Humaniora,* 7(1), 77-86.

Rehna, T., Hanif, R., Laila, U. E., & Ali, S. Z. (2016). Life stress and somatic symptoms among adolescents: gender as moderator. *JPMA. The Journal of the Pakistan Medical Association,* 66(11), 1448-1151.

Rodgers, V., Neville, S., & La Grow, S. (2017). Health, functional ability and life satisfaction among older people 65 years and over: a cross-sectional study. *Contemp Nurse,* 53 (3), 284-292.

Rusman. (2017). *Belajardan Pembelajaran Berorientasi Standar Proses Pendidikan.* Jakarta: Kencana.

Sabancı, A., Ahmet Ş.A., Sönmez, M. A., & Yılmaz, O. (2016). The Correlation between School Managers' Communication Skills and School Culture. *International Journal of Progressive Education,* 12(3).

Schidler, P. (1950). *The image and appearance of the human body.* New York: International Universities.

Siburian, T. A. (2013). The effect of interpersonal communication, organizational culture, job satisfaction, and achievement motivation to organizational commitment of state high school teacher in the district HumbangHasundutan, North Sumatera, Indonesia. *International Journal of Humanities and Social Science,* 3(12)

Singh, A. K. &Lairopuii. (2014). Role of interpersonal communication in organizational effectiveness. *International Journal of Research in Management & Business Studies (IJRMBS),* 1 (4), 36-39.

Small, M. L. (2017). *Someone to talk to.* Oxford University Press.

Small, M. L., Pamphile, V. D., & McMahan, P. (2015). How stable is the core discussion network? *Social Networks,* 40, 90-102.

Smith, R. A., &Vonhoff, C. (2019). Problematizing community: A network approach to conceptualizing campus communities. *Journal of College Student Development,* 60(3), 255-270.

Tinto, V. (2015). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of higher education,* 68(6), 599-623.

Tranca, L. M., &Neagoe, A. (2018). The importance of positive language for the quality of interpersonal relationships. *Agora Psycho-Pragmatica,* 12(1), 69-77.

Tylka T. L. & Wood-Barcalow N. L. (2015). What is and what is not positive body image? Conceptual foundations and construct definition. *Body image.* 14, 118-129.

Üstüner, M., &Kis, A. (2014). The Relationship between Communication Competence and Organizational Conflict: A Study on Heads of Educational Supervisors. *Eurasian Journal of Educational Research,* 56, 23-44. doi:http://dx.doi.org/10.14689/ejer.2014.56.5

Valley, S., (2015). *Information Technology.* The Levin Institute - The State University of New York, New York City.

Veas, A., Castejón, J.-L., Gilar, R. &Miñano, P. (2015). "Academic Achievement in Early Adolescence: The Influence of Cognitive and Non-Cognitive Variables". *The Journal of General Psychology,* 142(4), 273–294.

Wood, J. T. (2015). Interpersonal communication: Everyday encounters. Cengage Learning.

Yavuzer, Y. (2015). Investigating the relationship between self-handicapping tendencies, self-esteem and cognitive distortions. *Educational Sciences: Theory & Practice.* https://doi.org/10.12738/estp.2015.4.2434

Yu, X., & Yang, P. (2018). A research into WeChat impact on behavior of college students. *Journal of Ningbo Institute of Education,* 20(6), 23-25

Zaccagni L., Masotti S., Donati R., Mazzoni G.&Gualdi-Russo E. (2014). Body image and weight perceptions in relation to actual measurements by means of a new index and level of physical activity in Italian university students. *Journal of translational medicine.* 12(1), 42