Non-verbal Communication: Anger and Dissatisfaction in Ghanaian Marriages

[1]William Kodom Gyasi (Ph. D) & [2]Manasseh Jonah Bangmarigu

[1]Department of Communication Studies
University of Cape Coast, Cape Coast, Ghana

[2]Department of Strategic Communication
University of Education, Winneba, Ghana

Correspondence: *manasbangmarigu95@gmail.com;*
william.gyasi@ucc.edu.gh

Abstract
Problems and challenges are part of matrimony. This study focuses on how nonverbal cues express anger and dissatisfaction in Ghanaian marriages. Data from 30 married couples were thematically analyzed, resulting in three outcomes. One, married couples use various forms of nonverbal communication such as proxemics, occulesics or eye movements, chronemics, kinesics, and behavioral cues to communicate anger. The married couples also use nonverbal cues such as frowning, mean face, eye contact, fisting of hand, denial of sex, and refusal to eat to express their anger and dissatisfaction. Two, married couples encounter difficulties such as misinterpretation of cues by partners, suspicion, and ineffective communication in their use of nonverbal cues to express their anger. Third, there are essential difficulties among couples regarding interpreting nonverbal cues that express anger. These findings prove that the need strongly exists to educate couples on how to interpret nonverbal cues as a vital component of the strategy to improve matrimonial communication.

Keywords: Communication; Family communication; Non-verbal communication; Marriage, Conflict, Non-verbal cues.

Introduction

Communication is not only what we say but also how we say what we say. Nonverbal communication is an aspect of communication that involves the use of nonlinguistic cues to send meaning (Ran, 2016). Nonverbal communication has the potential to reflect the true feelings, attitudes, and expectations of communicators in a communication activity (Tabacam, 2016).

According to Plumb (2013), nonverbal communication is a collection of expressions and body language that an individual deliberately or unconsciously expresses to the audience. Facial expressions, postures, eye behaviors, voice tone, and gestures are examples of these behaviors. The importance of nonverbal behaviors in displaying emotions cannot be overstated (Bjerregaard, 2010). These nonverbal cues keep the discussion flowing smoothly, encourage turn-taking, provide feedback, and convey subtle meanings.

Gamble and Gamble (2007) defined nonverbal communication as actions or attributes of humans, including their appearance, use of objects, sound, time, smell, and space, that have socially shared significance and meaning to others. Kilmukhametovaa and Buba (2015) posited that nonverbal cues are the markers of communicators' emotional states. In other words, through nonverbal cues, one can detect the true emotional expression of a communicator.

The expression of nonverbal cues differs across cultures and individuals (Song, Curtis, & Aragon, 2021; Pearson, Nelson, Titsworth, & Harter, 2003; Malek et al., 2019). For instance, in contact cultures such as those found in Africa, there is an open expression of emotions of warmness, closeness, and availability, while in non-contact cultures such as those of the West, they do not openly express warmness, closeness, and availability (Gordon & Druckman, 2018; Song et al., 2021; Reed, Zeglen, & Schmidt, 2012).

Moreover, men tend to touch women and keep a front position than women in similar cases (Adebayo, Omojola & Evbuoma, 2021; McDuff et al., 2017; McCullough & Reed, 2017). As Gamble and Gamble (2007) put it, 'males are the "touchers" and not the "touches" and are the leaders rather than the followers.' Men are equally more likely to suppress their emotions than females. However, their nonverbal communication cues can provide glimpses of the true feelings and attitudes men and women bring into the communication event (Igbinoba et

al., 2019; Kilmukhametovaa & Buba, 2015).

In family communication, the gender and cultural variables may impact the expression of emotions and attitudes in the communication event. According to Fitzpatrick (2004), family communication focuses on the use of communication to build and negotiate relationships and roles among family members. Family communication explores an aspect of interpersonal communication in the family context.

Fitzpatrick (2004) propounded the family communication patterns theory and argued that the area of family communication presents an understanding of the dynamic functions, processes, and outcomes over time in the family. One inevitable thing is the occurrence of disagreement among couples in the nuclear family. In a family disagreement context, the likelihood of expressing emotions by partners to register their displeasure is an area that can aid our understanding of the use of nonverbal cues in family communication.

Statement of Problem

Family communication patterns, and even theories, have been studied internationally by scholars like Fitzpatrick (2004), Aysen, Gregory, and Aviv (2006), and Kilmukhametovaa and Buba (2015), among others. In her study, Fitzpatrick (2004) discovered that ideology, interdependence, and conflicts are three key variables that determine the relational dimension patterns of couples. Ideology refers to the beliefs, values, and standards that individual partners hold in marriage. Interdependence focuses on the degree of connectedness that binds the couples together in the marriage context.

Finally, the conflicts variable covers the area of behavior avoidance of engagement. Based on this, Fitzpatrick (2004) found that couples may exhibit the traditional, independent, separate or mixed family pattern. The conflict avoidance bit in the typology explains how each family pattern minimizes conflict based on their unique practice of a particular relational pattern.

Aysen, Gregory, and Aviv (2006) discovered that the influence of family members in decision-making was based on socio-orientation and concept orientation. Socio-oriented family communication pattern emphasizes parent-to-child communication, while concept-oriented families emphasize more issue-focused debates (Aysen, Gregory, & Aviv, 2006). Based on this, the authors

categorized the family communication pattern into laissez-faire pattern (low socio-orientation, low concept orientation); protective pattern (high socio- orientation, low concept orientation); pluralistic pattern (low socio-orientation, high concept orientation), and consensual pattern (high socio-orientation, high concept orientation).

In nonverbal communication, Pattersson et al. (2022) observed that sustained and systematic empirical research on nonverbal communication was not widespread until the middle of the twentieth century. Nevertheless, Plumb (2013) examined the effect of the absence of non-verbal cues in instant messaging and computer-mediated communication. The author found that the absence of nonverbal cues in messaging affects the expression of emotions by communicators. The advantage of face-to-face communication over computer-mediated communication is the presence of nonverbal cues in face-to-face communication (Plumb, 2013). Since family communication is a type of interpersonal communication, face-to-face communication in family communication is bound to be paramount. This development makes the use of nonverbal cues relevant in communication.

Family communication studies have skewed towards generic patterns despite using nonverbal cues in face-to-face family communication. More work is still needed to understand the specific communication styles of family members, especially couples. In this area, using non-verbal cues to register conflict is worth exploring in the Ghanaian context. Even though there have been studies in Ghana on conflict management in the family setting (Nkulenu, 2016; Gyamfi, 2009; Ampah, 2013, Gyan and Tandoh-Offin, 2014), there is little knowledge on how nonverbal communication cues are used to express anger in the conflict situation among couples. This study explores using nonverbal cues among couples to express their anger in the Ghanaian nuclear family setting.

Objectives of the Study

The study's objectives are the following:

1. Explore the forms of nonverbal communication used to express anger in Ghanaian marriage.
2. To investigate the challenges associated with using nonverbal cues to express anger and

dissatisfaction in Ghanaian marriages.

3. To examine the extent to which married couples can appreciate nonverbal communication cues used by their spouse to express anger and dissatisfaction.

Research Questions
1. What are forms of nonverbal communication used to express anger in Ghanaian marriage?
2. What challenges are associated with using nonverbal cues to express anger and dissatisfaction in Ghanaian marriages?
3. To what extent can married couples appreciate nonverbal communication cues used by their spouse to express anger and dissatisfaction?

Significance of the Study
This study contributes to the gray area of communication in the Ghanaian nuclear family setting, which currently has low visibility in Ghana. The study provides empirical evidence of how couples express emotions such as anger in the family setting.

The study will also help develop an understanding of the common strategies to communicate and express anger among family members. Even though nonverbal cues can be expressed unintentionally (Gamble & Gamble, 2007), the same scholars consented that nonverbal cues can be used intentionally to achieve a particular communication effect, thus the metacommunication function. In essence, this study will help couples be more competent in interpreting their spouses' nonverbal cues to understand the emotional state of spouses.

Review of Literature

Nonverbal Communication
Nonverbal communication as an aspect of human communication has been studied by scholars such as Wood (2007), Gamble and Gamble (2007), Hall (1997), and many others. Nonverbal communication refers to communication produced by some means other than words (eye contact, body language, or vocal cues, for example) (Knapp & Hall, 2002). Nonverbal communication usually performs functions in communicative encounters. One, nonverbal communication cues are used to express emotions and attitudes and emphasize verbal cues. Moreover, nonverbal cues can help contradict or reinforce verbal cues. For instance, people can utter words that

exhibit happiness, but their nonverbal cues of a sad face or face smile could contradict or reinforce the verbal means. Gamble and Gamble (2007) found that nonverbal cues could be categorized into proxemic, chronemic, haptics, artifacts, and occulesics. These forms cover how distance, time, touch, physical adornments, and eye contact communicate.

Gender and Age Versus Nonverbal Cues

Communication scholars have discovered that gender and age affect the use of nonverbal cues. Gamble and Gamble (2007) discovered that males tend to express a high level of visual dominance, meaning that men look at others when speaking but look elsewhere when listening than women. Also, men are more likely to touch others than women in a communicative encounter. However, females tend to smile more than men in a communication encounter. Women are also known to be better interpreters of nonverbal cues than men. Regarding age, it is known that the level of competence in using nonverbal cues increases with age. This development implies that individuals can use and interpret nonverbal cues as they advance in age.

Emotions and Nonverbal Cues

One thing that has been highlighted is the authenticity of nonverbal cues' capability in expressing feelings and emotions. Emotions are physiological, behavioral, or communicative reactions to cognitively processed stimuli, manifesting emotionally (Planlap, Fitness, & Fehr, 2006). Muzichuk (2013) observed that non-verbal signs could manifest communicative intentions and emotions. Puccinelli, Motyka, and Grewal (2010) found that the retailers' customers expressed their feelings through nonverbal cues. Guerrero and Floyd (2006) distinguished two types of emotional classification: the affectionate prototype and the hostile prototype. The affectionate prototype shows the love and affection people show to others, but the hostile prototype is the expression of anger and disaffection towards others.

Shaver et al. (1987) divided emotion into primary and secondary emotions. Primary emotions are innate and usually experienced for short periods with little effort. For instance, anger, fear, surprise, joy, and disgust are primary emotions. These emotions have facial expressions that make them recognizable. On the other hand, secondary emotions are not innate

as primary, and they are experienced in the long term with fewer facial expressions to make them recognizable. These emotions include love, guilt, shame, embarrassment, and jealousy. Since anger is the primary emotion and disagreement is bound to occur in marriages, it is vital to explore how nonverbal cues are used to express anger. In expressing anger, Shaver et al. (1987) discovered that nonverbal cues such as high pitching, hitting objects, withdrawal, frowning, mean facial expression, fisting, gritting teeth, and walking away, among others, are used to register anger.

Empirical Review

Gamble and Gamble (2007) found that nonverbal cues provide metacommunicative function. This provision means that nonverbal cues provide the true meaning of what words convey by either emphasizing, contradicting, regulating, or reinforcing, among others. This is done through nonverbal communication forms such as movements, facial expressions, distance, artifacts, and color. One crucial discovery of Gamble and Gamble in their study was that males and females use nonverbal cues differently. For instance, while males seek to emphasize the strength of ideas

communicated and a dominant role in expressing nonverbal cues, females instead engage in relationship inviting cues with high emotional expression than males.

Moreover, despite such cues, too often we remain unaware of the messages our bodies, our voices, or the space around us sends to others. Even though interpersonal effectiveness depends on more than words, nonverbal messages are less likely than words to be intentionally deceptive. This development motivated the current study to understand the expression of nonverbal cues in emotion, such as anger.

In another study, Puccinelli, Motyka, and Grewal (2010) investigated the impact of customer nonverbal cues expressivity on retail marketing. Using literature and personal observation of purchase actions customers portray at retail centers, the authors discovered that customers use nonverbal cues to express their true feeling towards buying situations. Moreover, customers who mask their true feelings in their nonverbal expressions end up expressing feelings that are consistent with the nonverbal cues they portray. Puccinelli et al. (2010) discovered that expressing nonverbal cues during buying situations depends on the opportunistic situation,

involvement level, personal characteristics, and cultural norms. The idea is that the knowledge of nonverbal communication cues among retailers can help them maximize their influence on customers' buying decisions.

In detailed works on normative masking, Safdar et al. (2009) discovered that the Japanese displayed rules that strictly limit the display of powerful emotions (anger, disgust, and contempt) more than those in U.S. or Canadian cultures. Likewise, Puccinelli, Tickle-Degnen, and Rosenthal (2004) found that the type of communication event determines the conformity to cultural norms. For instance, the discussion usually allows the diversion from the cultural norms, while task-based interaction requires conformity to the cultural norms. In the Ghanaian setting, cultural masking of how males and females should engage in communication has not been assessed.

As a way of deciphering these nonverbal cues expressions, the need exists to explore nonverbal cues used among Ghana couples, hence this study. Kilmukhametovaa and Buba (2015) explored the expression of emotions by movie characters. After examining the selected movies, the authors discovered that gestures and facial expressions were the dominant cues. Also, the characters and raconteurs expressed their emotions through the narration.

Theoretical Framework

Expectancy Violation Theory
This study adopts the expectancy violation theory by Burgoon, 1993. Burgoon's (1993) standpoint is that communicators expect every communication encounter can be met or defied. Emotions occur in response to deviations from expected behavior. When a person experiences high social value in the expectation of defiance, he or she will have positive reinforcement. On the other hand, if a person has low social value in the violation, the dissonance with the violation situation.

Regarding emotions, Burgoon (1993) argued that when expectancies are not met, negative emotion follows; when expectancies are exceeded, positive emotion follows. Specifically, Burgoon (1993) theorized that positive violations of expectancies (e.g., someone you like unexpectedly gives you attention) lead to emotions such as joy, relief, and pride, as well as nonverbal behaviors such as affection and involvement. On the other hand, harmful violations of expectancies

(e.g., someone you like unexpectedly ignores you) lead to emotions such as anger, frustration, and disappointment, as well as flight-or-fight response tendencies. So, following a harmful expectancy violation, a person might withdraw from the interaction (flight) or become aggressive (fight). This theory will guide in understanding the anger expression strategies for anger expressivity among married couples in Ghana

Methodology
The Qualitative research approach adopted in the study allows the interpretation of reality from the perspective of the participants' understanding of reality (Rahi, 2017; Cresswell, 2014). Since the expression of anger is embedded in the individual, it is vital to use an approach that allows participants to express their views on the topic of investigation.

A total of 30 respondents were selected purposively for the study. Purposive selection because it offers the best way to achieve the set objectives. The 30 participants were graduate students in the Faculty of Arts, University of Cape Coast. Since Ghana is a multiethnic nation with six major ethnic groups and over seventy other cultural areas, the researchers considered the graduate students from different parts of the country studying at the university as suitable multiethnic respondents.

The ethnic distribution of the participants includes seven (7) Akans, three (3) Mole-Dagbani, six (6) Fantes, five (5) Gas, seven (7) Ewes, and two 2 Guans. This diversity was part of the research design matrix because of cultural orientation's role as an essential indicator of the use of nonverbal cues, according to Gamble and Gamble (2007). The respondents included 16 females and 14 males. The participants were married for at least one year to nine years of marriage.

For specific data collection, the researchers adopted the face-to-face interview approach to collect data. The interview was guided by semi-structured questions that allowed participants to share their views on the issues regarding expressing anger through nonverbal cues. The voice notes were transcribed and cross-checked before using the data to answer the research questions. The transcribed data were cross-checked with the recordings to ensure the transcription succinctly reflected the audio.

Regarding ethics, the participants were informed about the researchers' purpose and willingly consented to participate in

the study. Moreover, the researchers assured them that the responses provided would be kept confidential with no disclosure to the third parties except for the academic purpose. The participants' real names were not disclosed in any part of the study so that the identity of the participants could remain anonymous.

Results and Analysis
The results of the study will be in categories based on the research questions that

Q1. What are forms of nonverbal communication used to express anger in Ghanaian marriage?
There are different forms of nonverbal communication, as outlined by Gamble and Gamble (2007). The current study showed that four of these nonverbal forms were used to express anger and dissatisfaction towards partners.

First, partners usually resort to occulesics - a nonverbal communication to express their anger and dissatisfaction. Occulesic is the use of eye contact to communicate. In the data gathered, participants indicated that they have a way of looking at their spouse that shows that they are angry. In the extract below, the participant indicated how he uses occultic to communicate anger.

I usually look at her sternly, and she has to depict that I am angry with her. Most of the time, the look is normally different from how I look at her when we are not quarreling. (Extract from participant 3).

Another female participant said she used eye contact to communicate anger and dissatisfaction. As she indicated, she did not look the husband in the face when they disagreed as she does in peaceful times. The refusal to have eye contact with her shows anger and dissatisfaction towards the spouse.

I usually don't look at him when angry because he will not like my face. (Extract from participant 16)

The use of eye contact to communicate was used as a nonverbal form to express anger and dissatisfaction. The data also indicated that male partners usually resorted to this more than the females. This revelation confirms Song *et al.* (2021) finding that eye contact helps express the emotion of anger.

Another non-verbal form of communication was used mainly as kinesics. Kinesics involves the use of body movements to communicate. Some participants

indicated, in the data, that they used body movements to communicate. One participant indicated he usually fist his finger as a sign of anger.

I have a way I usually use my hand to show her I am angry. I fist my finger or raise the hand in a way. (Extract from participant 13).

A respondent indicated that she usually resorted to nodding and shaking her head as the only feedback to his husband when they had issues. This is usually done to avoid verbal responses that might express anger verbally.

Normally, when I am angry, and he speaks to me, I only nod my head or shake my head, but I will say a word to him. This is one way I use to communicate anger to my spouse. (Extract from Participant six)

Moreover, some participants used proxemic to communicate anger. Proxemics is the use of distance or space to communicate. One participant indicated that he usually sleeps in the hall instead of in the bedroom with his wife to register his anger.

I usually will not sleep in the bedroom with her because I am angry. I will go to the hall and sleep there. Sometimes, even if I am

sleeping in the bedroom, I will sleep on a student mattress instead of the normal bed. (Extract from Participant 9)

Also, most of the male participants indicated that they usually would walk away as a way to register their anger or dissatisfaction.

Regarding chronemics, the participants indicated they would leave home and return late at night when everyone was already asleep. This lateness in returning home was a nonverbal cue to express their dissatisfaction and anger.

When we disagree, I will leave the house and come back very late. (Extract from Participant 3).

The last ones grouped were not captured in Gamble and Gamble's (2007) classification. This nonverbal form could be described as behavioral rather than cues in that they are based on partners' behaviors. For instance, some members reacted by refusing to eat the spouse's food, denying the partner sex, and denying the partner necessities as nonverbal ways of expressing their dissatisfaction and anger.

I usually will consent to his sexual advances when I am angry. Mostly,

I will deny sex as a sign that I am angry. (Extract from Participant 29).
I don't eat her food when I am angry, and she knows that I am angry with her when I don't eat the food. (Extract from Participant 29).

From these excerpts, the participants use these behaviors to indicate their anger toward their spouses. In sum, the participants used nonverbal communication forms such as proxemics, occulesics, chronemics, kinesics, and nonverbal behavioral cues to express their anger and dissatisfaction to the audience. As Burgoon (1993) indicated, harmful expectations violations will always attract the expression of negative emotions such as anger. The current study found the hostile nonverbal cues identified by Shaver et al. (1987)**,** including frowning, mean facial expressions, denial and withdrawal, fisting, and walking.

Safdar et al. (2009) argued that cultural normalcy might make people suppress the expression of emotions such as anger. The current study found the current bearing to be in the refusal to eat by males as a way to get the female attention. In the Ghanaian context, refusing to eat a spouse's food unsettles the spouse. Nevertheless, others, such

as hitting and pitching, among others, are prohibited by culture.

Q2. What challenges are associated with using nonverbal cues to express anger and dissatisfaction in Ghanaian marriages?

The study found challenges in using nonverbal cues to express anger and dissatisfaction. Misinterpretation of the cues by partners was the most dominant in the participants' narratives. For instance,

Mostly when I stop eating the food, she may think I am eating from somewhere. (Extract from Participant 1)

Sometimes it takes time for him to know I am angry with him; that is why I am not talking to him. (Extract from Participant 6).

Also, some participants indicated that the partners usually suspect them of chasing others outside, which is why they are coming home late. Also, partners who resorted to refusal to eat found that they could not sustain it for long because the children were concerned about why he or she was not joining them at the dining table.

Sometimes, my children will say, " Dad, why are you not eating with us. This usually makes me reconsider my decision and start eating with the family. (Extract from Participant).

The nonverbal cues usually mar the effectiveness of communication. Feedback is usually delayed because partners have resorted to using nonverbal cues to express their displeasure.

Q3. To what extent can married couples appreciate nonverbal communication cues used by their spouse to express anger and dissatisfaction?

The major challenge was that a misinterpretation of nonverbal cues affected the effectiveness of nonverbal cues as a mode to express anger and dissatisfaction.

My partner might not understand the fisting of my hand until I openly inform him. (Extract from participant 12)
Mostly, he cannot interpret my frowning as a sign of anger. (Extract from Participant 2)

To a large extent, participants had difficulties interpreting nonverbal cues as a sign of anger and dissatisfaction. On the other hand, it appears that women had more competence in interpreting nonverbal cues than men. The men were consenting. Their wives could interpret it as a sign of anger, but the females generally could not say that of their husbands. This development confirms Gamble and Gamble's (2007) finding that females are better at interpreting nonverbal cues because of their relationship-centered communication than men, who are problem-centered communicators.

Moreover, the extent to which partners could interpret correctly depends mainly on the type of nonverbal cue used and the situation. For instance, in a situation of disagreement, nonverbal cues become clear signs of registering anger (Burgoon, 1993), but in mild emotional torture, the nonverbal cues will be interpreted differently. On the other hand, frowning, mean face, refusal to eat food, and denial of sex were easily interpreted by partners. However, lateness, fisting of fingers, and eye contact were less considered expressions of anger.

Conclusion
The current study has explored a gray area of family communication, thus using nonverbal cues to communicate anger and dissatisfaction. The study found three significant findings. One,

married couples use forms of nonverbal communication such as proxemics, occulesics, chronemics, kinesics, and behavioral cues to communicate anger. The married couples use nonverbal cues such as frowning, mean face, eye contact, fisting of hand, denial of sex, and refusal to eat to express their anger and dissatisfaction. Also, married couples encounter difficulties such as misinterpretation of cues by partners, suspicion, and ineffective communication. Third, there are largely difficulties in interpreting nonverbal cues even though this was based on forms used and the situation.

References

Adebayo, O., Omojola, O., & Evbuoma, K. (2021). Social media and emotional abuse in marriage: Evidence from Lagos State, Nigeria. *African Journal of Reproductive Health, 25(5s),* 68-79.

Aysen B., Gregory M. R. & Aviv S. (2006). Family communication patterns, *Journal of International Consumer Marketing, 19*(2), 75-95, DOI: 10.1300/J046v19n02_05.

Burgoon, J. K. (1978). Applying a corporative approach to nonverbal expectancy violations theory. *Human Communication Research, 4*, 129-142.

Fitzpatrick, M. A. (2004). Family communication patterns theory: observations on its development and application, *Journal of Family Communication, 4*, 3-4, 167-179, DOI: 10.1080/15267431.2004.9670129

Gamble & Gamble (2007). *Nonverbal communication*. London: Routledge.

Gordon, R. A., & Druckman, D. (2018). Nonverbal behavior as communication: Approaches, issues, and research. In *The Handbook of Communication Skills*. https://doi.org/10.4324/97813 15436135-4

Guerrero, L. K. & Floyd, K. C. (2006). *Nonverbal communication in close relationships.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Gyamfi, P. A. (2009). *The Role of Communication in Conflict Management in Ghana A Case Study in Ejura – Sekyedumase District in the Ashanti Region of Ghana*.

Gyan, E. K., & Tandoh-offin, P.

(2014). *Management of Conflicts in Senior High Schools in Central*. *4*(10), 85–92.

Hall, E. T. (1966). *The hidden dimension.* Garden City, NY: Doubleday.

Igbinoba, A.O., Soola, E. O., Omojola, O. Amodu, L., & Okorie, U. E. (2019*). Mass media and maternal health enlightenment*. Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020, 2019, pp. 7439–7444.

Knapp, M. L., & Hall, J. A. (2006). *Nonverbal communication in human interaction, 6th* ed. Belmont, CA: Thomson Wadsworth.

LeFebvre, L., & Allen, M. (2014). Teacher immediacy and student learning: An examination of lecture/laboratory and self-contained course sections. *Journal of the Scholarship of Teaching and Learning*, *14*(2), 29–45. https://doi.org/10.14434/josotl.v14i2.4002.

Malek, N., Messenger, D., Gao, A. Y., Krumhuber, E., Mattson, W., Joober, E., et al. (2019).

Generalizing Duchenne to sad expressions with binocular rivalry and perception ratings. *Emotion 19*, 234–241. DOI: 10.1037/emo00 00410

McCullough, M. E., & Reed, L. I. (2016). What the face communicates: Cleaning the conceptual ground. *Current Opinion in Psychology, 7,* 110–114. DOI: 10.1016/j.copsyc. 2015.08.023

McDuff, D., Kodra, E., Kaliouby, R. E., & LaFrance, M. (2017). A large-scale analysis of sex differences in facial expressions. *PLoS One 12:*e0173942. Doi10.1371/journal.pone.0173 942.

Nguyen, A. O. (2015). Effect of work-family conflict on quality of work-life in Ghana. *European Journal of Business and Management*, *7*(24), 52–61. https://www.researchgate.net/publication/297709265_Effect _of_Work-Family_Conflict_on_Quality_ of_Work-Life_in_Ghana.

Patterson, M. L., Dunbar, N. E., Mast, M. S., Fernández-Dols, J.-M., eds. (2022). *Advances and Obstacles in Contemporary Nonverbal Communication Research.*

Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88971-359-2

Pearson, J., Nelson, P., Titsworth, S., & Harter, L. (2003). *Human communication*. London: McGraw-Hill.

Plumb, M. D. (2013). *Nonverbal communication in instant messaging.* Mphil thesis in Master Of Arts Professional Communication, Southern Utah University, South Africa.

Puccinelli, N. M. (2006). Putting your best face forward: The impact of customer mood on salesperson evaluation. *Journal of Consumer Psychology, 16,* 156–162.

Puccinelli, N. M., Deshpande, R., & Isen, A. M. (2007). Should I stay or should I go? Mood congruity, self-monitoring, and retail context preference. *Journal of Business Research, 60*, 640–648.

Puccinelli, N. M., Tickle-Degnen, L., & Rosenthal, R. (2010). Effect of target position and target task on judge sensitivity to felt rapport. *Journal of Nonverbal Behavior, 28*, 211–220.

Ran, D. (2016). *Study on nonverbal communication and its application in EFL classroom of Primary school.* A Seminar Paper presented at the University of Wisconsin-Waterville.

Reed, L. I., Zeglen, K. N., and Schmidt, K. L. (2012). Facial expressions as honest signals of cooperative intent in a one-shot anonymous prisoner's dilemma game. *Evol. Hum. Behav. 33,* 200–209. DOI: 10.1016/j.evolhumbehav.20 11. 09.003

Rodman, A. & Proctor, C. (2003). *Human Communication*, New York, US: Warkworth.

Rychlowska, M., Jack, R. E., Garrod, O. G., Schyns, P. G., Martin, J. D., and Niedenthal, P. M. (2017). Functional smiles: tools for love, sympathy, and war. *Psychological Science, 28*, 1259–1270. DOI: 10.1177/0956797617706082

Saundry, R., Latreille, A., Dickens, P., Irvine, L., Teague, C., Urwin, P. & Wibberley, G., 2014. *Reframing Resolution - Managing Conflict and Resolving Individual Employment Disputes In The Contemporary Workplace*. [online] Acas.org.uk.

Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. (1987).

Emotion knowledge: Further explorations of a prototype approach. *Journal of Personality and Social Psychology, 52*(6), 1061–1086. doi:10.1037/0022-3514.52.6.1061.

Song, S. Y., Curtis, A. M. & Aragon, O. R. (2021). Anger and sadness expressions are situated in differences in facial expressions. *PLoS One 12*:e0173942. doi:10.1371/journal.pone.0173942.

Tabacam, C. D. (2016). Verbal and nonverbal communication of students with severe and profound disabilities. *Research in Pedagogy, 6*(2), 111-119.

Wood, J. (2004). *Interpersonal communication,* Boston, US: McGraw-Hill.