The Ultimate Battle: Mother versus Boyfriend

Analysing nonverbal immediacy behaviour

Sanne Hamelink, Marijn Brokx, Rowan Hermes, Danique van der Zon and Sabine Langhout

Abstract

The aim of this paper is to analyse the influence of nonverbal immediacy behaviour on recognizing the relationship (mother-daughter versus boyfriend-girlfriend) in vlog-like clips of female YouTubers. The researched nonverbal immediacy behaviours are: smile, gaze, touch, leaning, and body orientation. This influence is tested through stimuli collection (determining behaviours) and a perception test (testing perceptibility behaviours). Based on previous research, the expectation arose that the YouTuber would express more immediacy principles when accompanied by her boyfriend than when accompanied by her mother. Results show that respondents are unable to correctly recognize the company (mother or boyfriend). Also, stimuli collection shows that there is no significant difference in the presence of immediacy behaviours between boyfriend and mother condition. Concluding, a difference in nonverbal immediacy behaviour between mother-daughter and boyfriend-girlfriend is not proven in this research.

Keywords: nonverbal immediacy behaviour; perception test; leaning; body orientation; touch; gaze; smile.

§1 Introduction

The last decade has seen a tremendous upsurge in research and popular interest in the phenomena of nonverbal communication. Nonverbal communication is about the unspoken dialogue; all messages that people exchange beyond the words itself. Nonverbal behaviours may even form a universal language system. Scholars believe that nonverbal signals are part of a universally recognized and understood code. Research states that people rely heavily on nonverbal communication to express themselves and to interpret others' communication (Burgoon, Guerrero, & Floyd, 2016). Therewith, studies show that when verbal messages contradict nonverbal ones, adults usually believe the nonverbal messages over the verbal ones and rely on nonverbal behaviour to judge another's attitudes and feelings (Burgoon, 1985). Body, face, voice, appearance, touch, distancing, timing, and physical surroundings all play part in the production of nonverbal communication. The reason behind the fact that nonverbal behaviour often is more trusted than verbal communication, is because of the spontaneous nature of nonverbal communication. Nonverbal communication is spontaneous and uncontrolled; it is the so-called 'window to the soul'. There is a prevailing faith in the authenticity, truthfulness, and candour of nonverbal behaviours. Consequently, people trust them more than verbal behaviours (Burgoon et al., 2016).

The nonverbal side of communication is crucial and often overshadows the verbal communication that is going on. Successful relationships hinge on the ability to express oneself nonverbally and to understand the nonverbal communication of others. Individuals in intimate relationships are willing to exchange information to one another. As relationships progress to more intimate levels, individuals generally disclose more information about themselves and at a more personal level (Derlega, 2013). Likewise, this also accounts for the nonverbal part of communication in intimate relationships. Intimacy is seen as a type of interaction and has two primary foundations; intimate interactions are necessary to develop and maintain intimate relationships and emotions and behaviours associated with the experience of intimacy are displayed within the context of intimate interactions (Anderson, Guerrero, & Jones, 2006).

Intimacy is experienced and expressed in interaction. Although verbal factors are an important component of intimate interaction, nonverbal behaviours play a critical role in creating and sustaining intimate interactions and relationships (Anderson et al., 2006). Intimacy is experienced typically during interaction in close relationships in the presence of positive verbal and nonverbal behaviour that reflects and creates feelings of warmth. Allegedly, higher levels of intimacy could lead to increased nonverbal expressions, such as decreased distance, increased gaze and touch, more direct body orientation, and more forward leaning (Patterson, 2012). Increases in nonverbal involvement behaviour often lead to emotional reactions and can trigger affective states related to intimacy (Anderson et al., 2006).

Nonverbal behaviours related to intimacy have two fundamental characteristics: they reflect involvement and positive affect (Anderson et al., 2006). In other words; behaviours that reflect engagement and positive affect contribute to intimate interaction. Scholars use the term immediacy to describe a set of behaviours that communicates both involvement and positive affect. This set of behaviours consist on the following immediacy behaviours: interpersonal distance, touch, gaze, body orientation, and lean (Mehrabian, 2008). Anderson (2006) expanded this domain of immediacy behaviours to include kinesics, vocalic, and chronemic cues, such as smiling.

The first immediacy principle that is going to be discussed is interpersonal distance. A lot of information about the relationship between two people can be derived from the way these people are sitting next to each other. In the experiment, it can be assumed that the YouTubers have an intimate relationship with both their mother and boyfriend. The difficult, but not impossible part, is to recognize which relationship is more intimate. According to Hazan and Zeifman (1999) the asymmetrical or complementary attachment of early life, of a child to a caregiver, is replaced by a more symmetrical or reciprocal attachment to a sexual partner. The attachment to the caregiver, in this experiment the mother, or the sexual partner, in this experiment the boyfriend, is displayed through body language. Romantic

couples have a strong desire to sit close to one another and to have physical contact. In later stages of the relationship mutual support and care becomes more important than the physical closeness, and thus the cues become less obvious. Hazan and Zeifman (1999) found that people, whether the cues were obvious or not, had a preference for spending time with their partner rather than their parent. For this experiment this means that the video in which the relationship between the YouTuber and their collaborator is perceived as more intimate is likely the video filmed with the boyfriend rather than the mother.

Another important nonverbal cue is eye contact. Making eye contact with someone is positively associated with liking that person (Kleine, 1986). Especially when one feels attracted to another, making eye contact with them feels rewarding (Kamp et al., 2001; in Fink & Penton-Voak, 2002). Moreover, the extent to which someone makes eye contact, can give an indication of how attracted they feel to someone (Kleck & Nuessle, 1968). The more person A is intimate with person B, the greater the chance person A will often make eye contact with person B (Exline et al., 1964; in Argyle & Dean, 1965). Based on previous literature, one would expect that when YouTubers are accompanied by their partners, they will make more eye contact than when they are accompanied by their mothers.

The third immediacy principle that will be discussed is body orientation. Mehrabian (2008) claims that people use the posture and orientation of the body unintentionally to indicate if they like a person or not. Observing the relaxation of the body is a valuable signal to denote if a person has a positive attitude towards the person he is talking to. Relaxation of the body is detectable by the leanings of a person; the more a person leans towards the person he is talking to, the more he feels at ease and likes the person he is talking to (Mehrabian, 2008). Assuming that the YouTuber has a positive attitude towards both her mother and boyfriend, differences should not be observable. What is observable, is the side the body and face are turned to. The more intimate the relationship, the more the body and face are turned to the person is talking to. In this research, the face and the body of the YouTuber should be more turned towards the collaborator when the collaborator is the boyfriend compared to when the collaborator is the mother. Guerrero and Floyd (2006) confirm these results; lean and body orientation decrease the vertical and horizontal distance between people. Forward leans communicate immediacy, involvement, and affection and tend to lead to perceptions of greater intimacy.

Research has confirmed that across many contexts, including friendships, romances, family relationships, touch is associated with intimacy. Despite the consistency with which touch is perceived as intimate, touch may function to express intimacy differentially depending on the stage of a relationship (Anderson et al., 2006). In several studies, touch was observed unobtrusively and correlated positively to respondents' or observers' ratings of intimacy in developing relationships. Touch also appears to be important in communicating intimacy across a variety of relationship types. Monsour (1992) argued that physical contact is essential to perceptions of intimate interaction for friends. Similarly, Marston, Hecht, Manke, McDaniel, and Reeder (1998) found that tactile behavior (e.g., embracing, hugging, or kissing) is the primary way people communicate intimacy in romantic relationships. These findings suggest that the YouTuber will touch the collaborator more when the collaborator in the video is the boyfriend, compared to when the collaborator is the mother.

The last cue that is going to be discussed is smile. According to Gray, Parkinson and Dunbar, laughter is critical in relationship development because laughter has a positive influence on the willingness to disclose personal information. The results of their study suggest that intimacy is significantly higher after laughter. Besides, Anderson et al. (2006) state that smiling is an important facet of positive involvement that helps people initiate and maintain intimate relationships.

In this research, two sorts of intimate relationships will be compared to one another; a mother-daughter relationship and a girlfriend-boyfriend relationship. The domain YouTube is chosen to compare the two relationships on the following immediacy principles constructed by Mehrabian (2008) and Anderson (2006): interpersonal distance, touch, gaze, body orientation, lean, and smile. The goal is to find out if people are able to distinguish a mother-daughter relationship from a girlfriend-boyfriend relationship on the basis of the immediacy principles, when the YouTuber's collaborator in the video (the mother or the boyfriend) is not visible. The six immediacy cues the YouTuber expresses towards the collaborator should be decisive. As stated earlier, the more intimate the relationship, the more immediacy cues are expressed. It can be assumed that a girlfriend-boyfriend relationship more intimacy contains than a daughter-mother relationship. This leads to the following hypothesis:

H1: The YouTuber expresses more immediacy principles when the YouTuber is accompanied by her boyfriend, than when the YouTuber is accompanied by her mother in the video.

> *H1a: The YouTuber expresses more smiling in general when the YouTuber is accompanied by her boyfriend than when the YouTuber is accompanied her mother in the video.*
>
> *H1b: The YouTuber expresses more gazing at the other when the YouTuber is accompanied by her boyfriend than when the YouTuber is accompanied her mother in the video.*
>
> *H1c: The YouTuber expresses more touching the other when the YouTuber is accompanied by her boyfriend than when the YouTuber is accompanied her mother in the video.*

H1d: The YouTuber expresses leaning more towards the other when the YouTuber is accompanied by her boyfriend than when the YouTuber is accompanied her mother in the video.

H1e: The YouTuber expresses a body orientation more towards the other when the YouTuber is accompanied by her boyfriend than when the YouTuber is accompanied her mother in the video.

A perception test will be conducted to find out what the influence of the visibility of nonverbal immediacy cues is on predicting the collaborator (boyfriend vs. mother) of a YouTuber. Hence, hypothesis 2 sounds as follows:

H2: The difference in the presence of intimacy cues between the mother and boyfriend condition is positively correlated with the accuracy scores.

Concluding, the following research question will be investigated:

RQ: What is the influence of nonverbal immediacy principles on recognizing intimate relationships (mother-daughter vs. boyfriend-girlfriend?

§2 Materials

§2.1 Selection criteria and procedure

For this study, all YouTube clips were downloaded from YouTube with an online YouTube-to-mp4 converter. There were twenty videos in total picked, two for every YouTuber (one with the mother, and one with the boyfriend). The videos were automatically randomized in the survey so every video would appear just as often. The videos were all edited, the editing process will be discussed in the next section.

An important criteria of the video selecting process was to be as consistent as possible with the videos. Since people needed to be focused mainly on the nonverbal communication of the YouTuber it was not desirable for respondent to be distracted. For the sake of consistency, a few measures were taken in the selection process. All YouTubers were female, heterosexual, from a Western culture and between the age of 19-28. Furthermore, only two types of video themes were used in this research: make-up related and question/answer related. The video theme was always the same per YouTuber, meaning that when the video with the boyfriend was about make-up, the mother-video would be as well and vice versa for the question/answer videos. The search process started with the theme as well by putting in the search bar terms like 'mother does my make-up' or 'Q&A with boyfriend'.

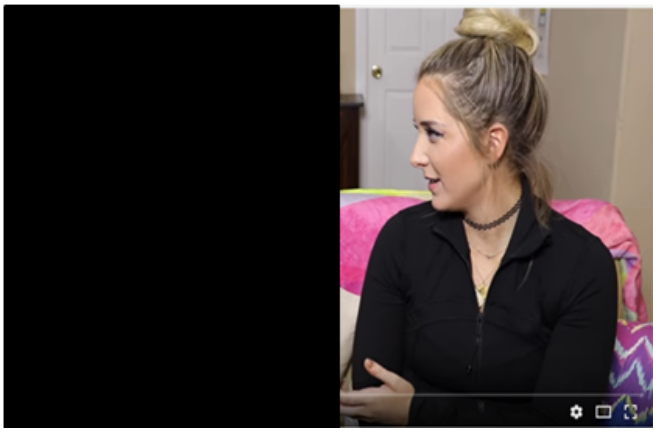

Figure 1: Screenshot video-clip with mother edited out.

§2.2 Video editing

In order to be suitable for the experiment, the previously collected YouTube clips needed to be edited. First the clips were shortened, to a duration of 30 seconds. Using edit software Premium the YouTubers collaborator (mom or boyfriend) was edited out and put under a black box as in figure 1. In the selected 30-seconds it was ensured that the collaborator of the YouTuber (mom or boyfriend) was never visible. In some video's the black box had a square shape, in others it had to be cut off diagonally, because of the movements of the collaborator. In some videos, the black box would move along with the movements of the co-operator so he or she would not be visible. Lastly, the sound was edited out because otherwise respondents would be able to hear the YouTuber and collaborator's voices.

§3 Coding

The 20 altered videos were coded by two researchers, who were unfamiliar with the videos prior to the alterations. Hence their perception of the videos was unbiased and comparable to that of the respondents of the forced choice test. The set of non-verbal cues in the coding scheme were derived from the literature discussed in the previous sections of this paper (Mehraban, 2008; Anderson, 2006). This set consisted of the following cues:

1. *Distance/lean:* Rated on a scale of 1 to 5. From leaning completely away from the company (1) through neutral (3) to completely leaning towards the company (5). A neutral score meant that the YouTuber was sitting upright. The extremes on this scale were based on how far (in degrees from the upright position) the YouTuber could lean towards the company, with 1 being the same number of degrees as 5, but in the opposite direction. This cue was predicated upon the position of the shoulders.
2. *Body orientation:* Rated on a scale of 1 to 5. From body orientation turned completely away from company (1) through neutral, straight into the camera (3), to turned completely towards to company (5). The neutral score on this scale indicated an orientation straight towards the camera,

with a contrast of 90 degrees towards or away from the company for the extremes. This cue was predicated upon the chest.

3. *Touch:* Counted in frequency and duration. How many times the company was touched and for how long. This cue was predicated upon arm and hand movement.
4. *Gaze:* Counted in exact numbers and duration. This cue was predicated upon eye and head movement.
5. *Smile:* Counted in exact numbers and duration. This cue was predicated upon lip movement.

After the set of cues was determined, as mentioned above, both coders coded the videos. These videos were coded through Elan, a video coding program. Also, the coders worked with the same template. This template consisted of the abovementioned cues, together with their measurements (milliseconds or 1-5 scale). This way, an equal coding output was guaranteed. After the coding was completed, the inter coder reliability was calculated. Since dealing with interval variables, Pearson's R was used to measure the inter coder reliability. The test pointed out that that the reliability was overall strong (table 1).

Table 1: Inter coder reliability per cue and condition

Cue (BF/MOM)	*Pearson's R*	*Sig*	*R interpretation*
Smile Boyfriend	0.868	.001	Very strong
Smile Mom	0.742	.014	Strong
Gaze Boyfriend	0.949	.000	Very strong
Gaze Mom	0.934	.000	Very strong
Touch Boyfriend	0.983	.000	Very strong
Touch Mom	0.947	.000	Very strong
Lean Boyfriend	0.711	.021	Strong
Lean Mom	0.587	.074	Mediocre
Orientation Boyfriend	0.837	.003	Very strong
Orientation Mom	0.491	.149	Mediocre

§4 Perception test

§4.1 Respondents

By means of convenience sampling, 79 respondents were recruited. A total of 51 respondents was included in the analysis, the other 28 respondents were excluded because they either hadn't finished the survey or because they recognized one or more of the clips. The group of valid respondents consisted of 23 males and 28 females. Ages ranged from 20 to 55 years (M = 27.63, SD = 10.21). More than 80 percent of the respondents had an education of HBO or WO.

§4.2 Instrumentation and procedure

Respondents filled in a questionnaire in Qualtrics. Through a short and clear introduction, respondents were thanked for taking part in the study, informed about the goal of the study, what would be required of them, the voluntary nature of taking part, and the fact that answers are confidential. Next three demographic questions about age, gender, and education were asked.

After the introducing questions, respondents were shown another page with instructions, preparing them to answer the following questions correctly. Next, the respondents were shown two clips of one YouTuber, consisting of two by Qualtrics randomly assigned conditions: YouTuber & mother and YouTuber & boyfriend. Every respondent was asked to look at five pairs of clips, so 10 clips total. It was decided to not have each respondent analyse all 20 clips from all 10 YouTubers, to ensure the survey would not take up too much time.

By limiting the number of clips to 10, the survey took about 10 to 15 minutes. The pairs of clips were randomly distributed by the program Qualtrics, making sure that each of the 20 clips was analysed by a similar number of respondents.

After looking at both 30-second clips of one YouTuber, respondents was asked to indicate in which clip the YouTuber was accompanied by her mother and in which by her boyfriend. After this choice was made, an open question had to be answered, asking on what behaviour the respondents based their decision. Respondents could provide 3 answers, of which 1 was mandatory.

The last two questions of the questionnaire were asked to determine whether the respondent had recognized (one or more of) the clips and whether the respondent recognized the YouTuber. This is essential knowledge, because if the respondent was familiar with either one of the clips or YouTuber, their choice might be based on recognition rather than nonverbal communication. So, if a respondent recognized at least one of the clips or the YouTuber, they were excluded from the analysis.

At the end of the survey the respondents were shown a thank you message, stating that the information they provided was valued.

§5 Results

The results for the transcriptions and perception test will be discussed separately, since they were both conducted and tested in different ways.

§5.1 Video transcriptions

Data The transcripts were exported and from this data the following variables were calculated for every video: total duration of smiling, gazing and touching in milliseconds, and the mean overall score of leaning and orientation on a scale

of 1 to 5. The first three were calculated by taking the sum of the durations, since every video was of comparable length these numbers did not need to be transformed. The overall leaning and orientation scores were calculated by multiplying the duration of an annotation by its score, then taking the sum of all these numbers, and then dividing this sum by the total duration. For example, if the YouTuber had a neutral body orientation for 20 seconds and then turned completely towards the company for the remaining 10 seconds, the mean score of 3,7 would be calculated as follows: (20 x 3) + (10 x 5) = 110, 110 / (20+10) = 3,667. The total duration was calculated this way (instead of just taking 30 seconds) to make up for when the annotations would sometimes slightly overlap by accident. The data of both coders was then combined by taking the mean of their numbers.

Results Since the stimuli collection consisted of 5 cues, each with two conditions: mother and boyfriend, a paired samples T-test was conducted to analyse whether there was a significant difference between the mother and boyfriend condition for each of the five cues. Results show that there was no significant difference between mother and boyfriend in any of the five cues. More specific, there was no significant difference between mother and boyfriend in the smile cue (M = 1.37, SD = 6.65, p = .531), the gaze cue (M = 2.06, SD = 3.73, p = .114), the touch cue (M = 1.82, SD = 6.05, p = .366), the lean cue (M = .06, SD = .41, p = .637), or the orientation cue (M = .16, SD = .39, p = .238).

§5.2 Perception test

Data The test-data was exported from Qualtrics. In SPSS, the set was cleaned of invalid data as described in the respondents' section. The multiple-choice answers (0=a, 1=b) were transformed into accuracy scores (0=False, 1=Correct). For each YouTuber the mean accuracy was calculated by taking the percentage of correct answers. From the transcription-data, the difference in cue presence was calculated for each YouTuber by subtracting the mothers' numbers from that of the boyfriends.

Results On average, the accuracy was 60.7 percent amongst all 10 YouTubers. The video with the highest accuracy score was judged correctly by 100 percent of the respondents, and the lowest accuracy score for a video was 25 percent. A Bivariate Correlation analysis was conducted to determine the extent to which the accuracy of the respondents could be explained by the difference in presence of nonverbal intimacy cues. Results show that smile was the only cue that can explain the accuracy in the guessing of the respondents: r (9) = .66, $p < .05$. Consequently, no significant correlation was found in all other cues. Gaze: r (9) = .10, p = .79, touch: r (9) = -.12, p = .75, lean: r (9) = .13, p = .72, and body orientation: r (9) = -.07, p = .84.

§6 Conclusion and discussion

§6.1 Theoretical implications

Previous research suggests that if a relationship is more intimate more information is disclosed between partners, both verbally and nonverbally (Anderson, Guerrero, & Jones, 2006; Derlega, 2013). According to Merabian (2008), intimacy is shown nonverbally via touch, gaze, body orientation, and lean. Anderson (2006) adds chronemic cues, such as smiling, to this list. All cues suggest a higher level of intimacy when the cues are more present or visible. Since Hazan and Zeifman (1999) found that people have a preference for spending time with their partner rather than their parent, the expectation was that The YouTuber will express more immediacy principles when accompanied by her boyfriend in video rather than her mother.

After conducting a paired samples t-test, no significant difference between mother and boyfriend in any of the five cues was found, disproving the first hypothesis that the YouTuber would express more immediacy principles with her boyfriend than with her mother. This means that the expressing of intimacy levels between boyfriend-girlfriend and mother-daughter are relatively the same. As mentioned by Hazan and Zeifman (1999) the relationship or attachment between child and caregiver is replaced by a relationship or attachment between partners. The data shows that both relationships can be at the same level of intimacy, or at least shown to be at a similar level via the cues. A reason for this could be that in later stages of a relationship mutual support and care becomes more important than the physical closeness. If a YouTuber values support and care over physical closeness in both relationships the differences in cues will be small.

A bivariate correlation showed the accuracy in which respondents were able to detect whether they were looking at a relationship between partners or a parent and child. The accuracy percentage for one YouTuber was 100 percent, meaning that all respondents correctly indicated in which clip the YouTuber collaborated with her mother or her boyfriend. Of course, this could be because the body language from this YouTuber is very distinct, but informally one respondent did indicate that the object the YouTuber was holding in one of the clips (a heart shaped pie) gave away the fact that that clip was with the boyfriend. The correlation shows that only the cue smile could explain the accuracy in which respondents were able to detect whether the YouTuber was with her boyfriend or mother. The second hypothesis will be rejected for all cues, but the smile cue.

The general conclusion for this research is that smiling is a nonverbal immediacy principle which helps recognising intimate relationships, but the difference between types of relationships is not possible.

§6.2 Limitations

YouTuber The focus of this study is body language, or more specifically the body language of YouTubers. What must be kept in mind is that people who videotape themselves to make YouTube videos are aware that they are being filmed. They will probably exaggerate some of their behaviour, because they are performing. Also, YouTubers are a certain type of person; often outgoing, willing to share a lot with their audience, and dramatic to a certain extend. What is consistent in the clips from the YouTubers is that they are all sitting down. According to Kuhnke (2007) people sitting in a fixed chair have a more fixed position. Swivelling chairs give people more freedom of movement to turn away or towards the other person. This could have had a small influence on the way the YouTubers body was orientated towards the collaborated. Lastly, the YouTubers that were chosen for this experiment are all Western. Eight of the YouTubers are American, one is Canadian, and one is Norwegian. The results of this study will therefore apply only to Western cultures.

Methodological While coding the various cue-choices had to be made as to what was considered enough movement to be coded as a certain cue. Smiling was coded as curling up the corners of the mouth. There is no distinction made between (suspected) fake or genuine smiles, simply because this is not a feasible action for this study.

Video As mentioned, the videos were edited by adding black boxes. These boxes were similar, but not the same, some were bigger than others and some moved. This might not have had any influence on the results, but it is a breach in continuation. Also, by adding the black boxes only one person was visible in the clip. The interaction between the YouTuber and the collaborator cannot be interpreted by the respondents. As said by Knapp and Hall (2007) movement is often about mimicking, which cannot be seen in the videos since one person is blocked off. While it was required for this experiment that one person was not visible, it might have made the task for the respondents a lot harder. The type of video was the same across all clips, but not in every video the same subject was discussed. It could be so that different subjects have influence on the nonverbal communication. Since there were 20 clips the effect, if there is any, is considered minimal. Lastly, in some videos objects (makeup, food, or shoes) or editing done by the YouTuber, were visible. This could have distracted the respondents from the nonverbal communication. However, respondents were able to play the clips again, making the effects of distraction by objects or editing in the video minimal.

References

Argyle, M. & Dean, J. (1965). Eye-contact, distance and affiliation. *Sociometry*, 289-304.

Andersen, P. A., Guerrero, L. K., & Jones, S. M. (2006). Nonverbal behavior in intimate interactions and intimate relationships. In *The Sage handbook of nonverbal communication*. SAGE Publications Inc.

Burgoon, J. K. (1985). The relationship of verbal and nonverbal codes. *Progress in communication sciences*, *6*, 263-298.

Burgoon, J. K., Guerrero, L. K., & Floyd, K. (2016). *Nonverbal communication*. Routledge.

Derlega, V. J. (Ed.). (2013). *Communication, intimacy, and close relationships*. Elsevier.

Guerrero, L. K., & Andersen, P. A. (1991). The waxing and waning of relational intimacy: Touch as a function of relational stage, gender and touch avoidance. *Journal of Social and Personal Relationships*, *8*, 147-165.

Fink, B., & Penton-Voak, I. (2002). Evolutionary psychology of facial attractiveness. *Current Directions in Psychological Science*, *11*(5), 154-158.

Hazan, C., & Zeifman, D. (1999). Pair bonds as Attachments: Evaluating the Evidence. In J. Cassidy, & P.R. Shaver (Ed.), *Handbook of Attachment: Theory, Research, and Clinical Applications* (pp. 336-354). Retrieved from: http://adultattachmentlab.human.cornell.edu/HazanZeifman1999.pdf

Kleck, R. E., & Nuessle, W. (1968). Congruence between the Indicative and Communicative Functions of Eye Contact in Interpersonal Relations. *British Journal of Social and Clinical Psychology, 7,* 241-246.

Kleine, C. L. (1986). Gaze and eye contact: a research review. *Psychological Bulletin, 100*, 78-100.

Knapp, M. L. & Hall, J. A. (2007). *Nonverbal Communication in Human Interaction* (5th ed.) Wadsworth: Thomas Learning.

Kuhnke, E. (2007). *Body Language for Dummies. Take it from the Torso*. Retrieved from: https://books.google.nl/

Marston, P. J., Hecht, M. L., Manke, M. L., McDaniel, S., & Reeder, H. (1998). The subjective experience of intimacy, passion, and commitment in heterosexual loving relationships. *Personal Relationships*, *5*, 15-30.

McDaniel, E., & Andersen, P. A. (1998). International patterns of interpersonal tactile communication: A field study. *Journal of Nonverbal Behavior*, *22*, 59-75.

Mehrabian, A. (2008). Communication without words. *Communication Theory*, 193-200.

Monsour, M. (1992). Meanings of intimacy in cross-and same-sex friendships. *Journal of Social and Personal Relationships*, *9*, 277-295.

Patterson, M. (2012). *Nonverbal behavior: A functional perspective*. Springer Science & Business Media.