CHAPTER 1

Emotion Communication and Person Perception

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An important part of human interaction is the communication of emotions. In fact, most human interactions involve some level of emotional exchange – be it only a friendly smile in greeting. Emotions can be expressed nonverbally, via the face, the voice, touch, and even smell, but also, albeit more rarely, verbally, by stating how one feels. Yet, by and large, the literature on emotion communication is heavily biased toward the study of facial expressions. In this chapter, we will therefore emphasize research on facial expressions of emotions. However, it should be noted that many of the processes discussed here apply equally to emotion communication via other channels. In real-life interactions, information from multiple channels is available and can be used for sense making. In what follows, we will first discuss what emotion expressions signal to the observer. We then discuss context influences and moderating factors. A last section will focus on person perception and the influence of emotion expressions on trait attributions.

What Do Emotion Expressions Express?

The question of what emotion expressions actually express has been subject to lively discussions in the field. The scientific study of emotion communication is usually traced to Darwin's seminal work "On the expressions of the emotions in man and animal" (1965). Darwin's basic message was that emotion expressions are evolved and (at least at some point in the past) adaptive. He described animal and human emotionally expressive behavior in great detail in order to support this point. Yet, this view has not been unchallenged (see also Hess, 2017; Lindquist et al., 2013).

Although there is relative agreement that emotion expressions have a communicative function, there is decided disagreement on what exactly they communicate and whether this communication reflects the internal state of the organism (Darwin, 1965; Fridlund, 1994;

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Lindquist et al., 2013). Most prominently, Fridlund's behavioral ecology theory (Fridlund, 1994) contradicted Darwin's assumption of the usefulness of the honest communication of emotional states. According to Fridlund, for emotion expressions to be truly useful as a communicative signal they should be linked to the organism's social motives rather than to the underlying emotional state of the communicator. From this perspective, emotion expressions should be considered as indicative of social motives and not of emotions per se. More recently, Barrett, Mesquita, and Gendron (2011) proposed that facial expressions do not in fact provide any specific information by themselves. Because emotion expressions are ambiguous in their signal value, it is proposed that their meaning is primarily constructed in light of the context of the interaction. This latter view is actually not much different from other approaches that highlight the importance of context and real-world knowledge for emotion communication (Adams et al., 2011; Hess & Hareli, 2016). Yet, the relative emphasis of these two general approaches differs with one assuming that emotion expressions do have meaning per se while the other focuses more strongly on the influence of contextual factors.

Notably, these discussions focus on the "true" meaning of the expressions, that is, on the question of whether expressions reflect some ground truth about the expresser. In stark contrast to this perspective stands the use that observers make of emotion expressions. Specifically, as is amply demonstrated by the use of facial expressions in the arts, for example films and literature, perceivers understand emotional facial expressions to express underlying emotional states and they react as a function of this understanding (see Niedenthal & Brauer, 2012).

That is, perceivers treat emotion expressions as if they were reliable indicators of emotions and act in accordance with their perceptions. They use this information about the sender's emotional state to infer not only how the expresser feels but also what the person might do next, that is, what are their action tendencies (e.g., Frijda, 1987; Frijda, Kuipers, & ter Shure, 1989); what might be a likely cause of the emotion as implied by appraisal patterns associated with specific emotions (e.g., Fontaine, Scherer, & Soriano, 2013; Roseman, 1991; Roseman, Spindel, & Jose, 1990); and even what the expresser might want the observer to do, that is, the appeal associated with the expression (Scarantino, 2019; Scarantino et al., 2022). Next to these functions of emotion expressions, which relate to the immediate situational context, emotion expressions also impact on person perception. Thus, emotion expressions can signal the expresser's values and motivations (Hess & Hareli, 2019) and more generally their character (Hareli & Hess, 2010).

Emotion Perception and Social Context

There are two principal strategies for decoding emotion displays (Kirouac & Hess, 1999). First, the sender's expressions can be used to draw inferences regarding his or her presumed emotional state using a pattern-matching approach (Buck, 1984). However, a second strategy depends upon the knowledge that the perceiver possesses regarding both the sender and the social situation in which the interaction is taking place. This information permits the perceiver to take the perspective of the encoder and helps him or her to correctly infer the emotional state that the sender is most likely experiencing. Recent research suggests that these two processes actually draw on different brain areas and result in different types of emotion judgments (Antypa et al., 2022; Hess & Kafetsios, 2022).

The Active Observer

The traditional view of emotion communication presumes that the decoder "reads out" the emotional state of the interaction partner based on the pattern-matching process just described. In this view the decoder remains passive, that is, no active sense making is involved. It should be noted, however, that in everyday life, emotion expressions are often weak, elusive, or blended, resulting in a signal that is often ambiguous (Motley & Camden, 1988). This ambiguity suggests that significant interpretive work is required on the part of a perceiver.

The social context of the interaction is a primary source of information that can be used to disambiguate such expressions. First, knowing what elicits the emotion, observers can use this information in conjunction with their knowledge about what sort of event will likely elicit a given emotion to guide their perception, particularly since people are aware of the typical relations between perceived features of a situation and the resulting emotions (Parkinson, 1999, 2001; Roseman & Evdokas, 2004). Firsthand knowledge about an interaction partner is another useful source of information. Knowing, for example, that a person is prone to anger, may bias the observer's judgment in that direction. Cultural rules and norms provide yet another guide. In cultures in which the expression of a given emotion is proscribed via display rules (Ekman, 1972) or via decoding rules (Buck, 1984), the detection of this emotion tends to be impaired.

It should be noted that in many real-life situations we may not have access to the sources of information listed here. In such cases, stereotype knowledge about the interaction partner can be a source of relevant decoding information. That is, the social group to which an expresser

belongs can provide stereotype information about the expresser's likely emotions. Knowing a person's gender or age – information that can be gleaned from the face, but also from sources such as voice (Lass et al., 1976; Linville, 1996) or gait (e.g., Montepare & Zebrowitz, 1993) – provides access to stereotypes about the expresser's emotionality, which can then influence the interpretation of expressions.

In this vein, in a seminal study, Hugenberg and Bodenhausen (2003) showed participants otherwise identical avatars which were either black or white, with an expression that changed from neutral to angry. The participants were faster to detect anger in the black (male) avatar. Importantly, the speed of detection correlated with the bias shown in a race IAT (Implicit Association Test; Greenwald et al., 1998). That is, the stereotype that links black males with threat influenced the perception of the expression.

Finally, the perceivers' own goals and needs, and even their own emotional state (see Showers & Cantor, 1985) influence emotion perception. Thus, participants who are more motivated to decode the emotions of others – because they are members of an ingroup whose emotions are of more interest (Thibault, Bourgeois, & Hess, 2006), or because accuracy is rewarded (Hess, Blaison, & Dandeneau, 2017) – are more accurate in decoding emotion expressions.

This discussion has important implications for the perception of emotions in elderly individuals. First, age stereotypes can influence emotion perception. A recent study found that participants implicitly associated young adult individuals with positive emotions, specifically happiness and serenity, and old adult individuals with the negative emotions of sadness and anger. Within negative emotions, participants preferentially associated young adult individuals with sadness and old adult individuals with anger (Freudenberg et al., 2020).

Not only the specific stereotypes that people may hold about the emotions that the elderly may experience, but also stereotypes regarding the personality of the elderly can bias emotion perception. Thus, individuals who perceive the elderly according to a stereotype that views them as weak and incompetent (Cuddy & Fiske, 2002) may tend to attribute sadness, which is associated with lack of coping potential (Scherer, 1997) rather than anger, which is associated with high coping potential, to an ambiguous expression by an older person.

The fact that Malatesta and colleagues (1987) found that individuals are better at recognizing expressions by those closer in age than those farther removed in age, opens the possibility that there may be age-related expressive dialects just like there are culture-related nonverbal dialects (Elfenbein & Ambady, 2002; Elfenbein et al., 2007). Such age-related nonverbal dialects would result in subtle differences in expressions

between young and old adults which would then make it more difficult for someone from one age group to decode the expressions of a different age cohort.

Finally, the visual salience of an encoder may play a role. Specifically, the elderly are often referred to as an "invisible demographic," a notion that expands beyond political visibility to the notion that they are also overlooked or disregarded in everyday interactions. This more fleeting attention may then result in reduced decoding accuracy, particularly if the expression is ambiguous.

Moderating Factors for Emotion Expression and Recognition

A number of influences on emotion communication have been studied over the years. Next to the question of cultural influences – as discussed previously – an often-raised issue regards gender differences in nonverbal communication, which overlaps with the question regarding status differences. These two issues will be briefly outlined next. Notably, as stereotypic views of the elderly often include notions of weakness and lack of status, the effects of perceived low status on emotional communication are especially relevant for this group.

Gender and Status

Differences in the expression and recognition of emotion displays have been found with regard to the status and gender of both expresser and decoder. Generally speaking, women are more emotionally expressive than men (Fischer, 1993). This is best established for smiling, such that women smile more than men particularly in situations where they experience negative affect. This difference emerges in childhood and gets stronger by the time women reach adulthood (for a review see, Hess, Beaupré, & Cheung, 2002). By contrast, men are perceived, and perceive themselves, as more likely to express anger when in a negative emotional state. Interestingly, in experimental situations where anger is induced in both men and women this difference disappears (Fischer, 1993).

The reasons for these well-established gender differences have been traced to two – nonexclusive – sources: differences in status and differences in social roles. Thus, Henley (1977, 1995) as well as LaFrance and Hecht (Hecht & LaFrance, 1998; LaFrance & Hecht, 1995) emphasize the importance of the inherent difference in status between men and women, which maintains to this day even in so-called egalitarian cultures (e.g., Ridgeway, 2011). Henley in particular, bases her argument on the assumption that the human smile is a homologue of the primate *silent-bared-teeth display*, which typically is used as a sign of submission. From

Henley's perspective human smiles signal submission and hence women, as the lower status gender, tend to smile more. This model may be a bit too simplistic though. On one hand people who smile tend to be rated as dominant (Knutson, 1996) and there is only limited evidence linking smiling as such to status and power. In fact, there are many different forms of smiles that serve different social functions, with the submissive smile being just one (Niedenthal et al., 2010). In this vein, Brody and Hall (2000) propose a more complex model, which includes social norms regarding gender adequate behavior, social expectations, but also a stronger trend toward positive affect experience in women than in men.

As regards anger expressions in men, status seems to be more clearly relevant. Thus, Averill (1997) considers power an "entrance requirement" for anger. The notion being that the anger display of a person who does not have power to back up the threat is less effective and in fact less legitimate. As an example, one may think of the angry temper tantrum of a child versus an angry expression of a member of a biker gang. This view concords with the position of appraisal theories of emotion which consider coping potential – the power to redress a situation – as the key appraisal for anger (Ellsworth & Scherer, 2003).

Emotion Expression in Other Channels

As mentioned previously, even though facial displays are the most frequently studied channel for emotion expression, emotions are obviously also expressed through other channels. In what follows, we will give a short overview of research on emotion expression through voice, posture, and gaze.

Voice

Research on emotion expression in the voice has been ongoing since it has become technically feasible to record voices. However, until about ten years ago, the frequency of studies per year in this domain remained low. In fact, just like research on posture and touch, research on voice gained impact with the advent of affective computing and the accompanying interest in automated affective sensing (Schuller et al., 2011).

There are two main approaches to classifying emotion relevant speech. On one hand, human perceivers can be asked to listen to voice excerpts and infer the emotions expressed. On the other, acoustic features of the emotional voice such as pitch, duration and intensity, or voice quality features can be measured and related to the intended emotion (Juslin & Scherer, 2005). Research employing the judgment study paradigm was able to ascertain that so-called basic emotions are well recognized in

speech, but early attempts at acoustic analysis were not always as successful (Banse & Scherer, 1996). However, newer approaches in affective computing using more sophisticated analysis algorithms have started to make inroads in this regard (Schuller et al., 2011).

Posture

Darwin's (1965) analyses of emotion expressions included many descriptions of emotional postures in both humans and animals. However, following Darwin, emotion-specific postures were rarely studied. Ekman and Friesen (1974), for example, considered postures only indicative of the intensity of an emotion and not of its quality. Yet, even early studies by Bull and colleagues (e.g., Bull & Gidro-Frank, 1950) suggested that some basic emotions can be recognized from postures. In recent years, interest in postures has blossomed again. Work on static body cues suggests that at least the basic emotions can be well recognized from postural cues alone (see Atkinson, 2013, for a review). Other work has shown that basic emotions can also be recognized from gait at levels that are comparable to facial emotion recognition, ranging up to 92 percent correct for sad and fearful expressions (Schneider et al., 2013). In addition, emotions such as pride and others that are not considered as basic (mainly because they are not associated with a prototypical and unique facial expression) seem by contrast to have a universal postural component (Tracy & Matsumoto, 2008). Further, there is evidence of cross-model mimicry of postures such that individuals who observe emotional postures tend to show congruent facial expressions in response (Magnée et al., 2007), suggesting that observers react to postural emotion cues in much the same way as to facial emotion cues.

Posture is strongly affected in elderly individuals. For example, older persons have more trouble maintaining an upright posture (Teasdale et al., 1992), which is one signal of dominance. A more "slumped" posture is associated with sadness rather than, for example, anger, and hence may bias emotion perception in this direction.

Gaze

Gaze direction is something not usually thought to be part of the emotional expression itself (Ellsworth & Ross, 1975; Fehr & Exline, 1987). Indeed, the faces employed in nearly all expression decoding studies have used stimuli where the expresser's gaze is directed at the perceiver. The general argument made concerning the effect of direct gaze is that it plays an important role in the perception of the intensity of the emotion but not in the perception of its quality (Argyle & Cook, 1976; Kleinke,

1986; Webbink, 1986). An obvious reason this might be the case is that direct gaze signals that the perceiver is the object of whatever emotion is being displayed by the expresser and thus captivates attentional resources (Cary, 1978; Ellsworth & Ross, 1975; Grumet, 1999; Macrae et al., 2002). By contrast, research by Adams and his colleagues (Adams et al., 2003; Adams & Kleck, 2003, 2005) support the *shared signal hypothesis*, demonstrating that the gaze direction of the expresser can affect the efficiency with which a given display is processed as well as determine the quality of the emotion that will be perceived in a blended or ambiguous expression. They argue that when different facial cues such as the specific expression and the direction of gaze share the same signal value (e.g., approach or avoidance) the shared signal facilitates overall processing efficiency. Others have reported evidence supporting perceptual integration in the processing of these cues. These studies also demonstrate that when gaze and emotion are not of relatively equal discriminability, direct gaze effects do occur (e.g., Graham & LaBar, 2007), and when emotion expression is more ambiguous, the shared signal effects emerge (Graham & LaBar, 2012). Thus, gaze direction appears to not only influence emotion perception but does so through the processes of both indirect attention capture and direct perceptual integration.

Nonverbal Behavior in Dyads

Research on nonverbal behavior has long focused either on the factors that influence how the expresser encodes certain traits or states or on the factors that influence how the perceiver decodes these traits or states. Yet, social interaction implies an interplay of encoding and decoding. One of the phenomena that occur in a dyadic context is behavioral synchronization. Early research on speech for example, noted that as an interaction progresses, the interaction partners converge with regard to certain characteristics of speech such as loudness and speed (Giles & Smith, 1979). The person who initially speaks louder and faster becomes softer and slower, and the converse for the other person. This convergence is linked to the amount of rapport between the interaction partners (Giles & Smith, 1979). Other research looked at behavioral synchronization and its effect on both experienced and perceived rapport (Bavelas et al., 1986; Bernieri & Rosenthal, 1991). This research was taken up and made popular by Chartrand and Bargh (1999) who coined the term *chameleon effect* to describe the similarities of nonverbal behaviors such as foot tapping and face touching between two interaction partners. As behavioral synchronization fosters affiliation, it has also been referred to as "social glue" (Lakin et al., 2003).

Facial Mimicry

A related but somewhat different phenomenon is facial or emotional mimicry which refers specifically to the imitation of emotional behavior (Hess & Fischer, 2013). Facial mimicry is often considered a form of affective empathy or a "low road" in the empathy process (Walter, 2012).

The Social Regulatory Function of Mimicry

Emotional mimicry seems to serve a social regulatory function in dyads (see Hess & Fischer, 2013) and depends on the relationship between interaction partners and more generally on their goals and intentions. Emotional mimicry has relational implications: Emotionally mimicking others can create social warmth but also social coolness when people do not mimic the other.

Thus, whether the relationship with the other is cooperative or competitive (Lanzetta & Englis, 1989; Weyers et al., 2009), or whether one identifies with the expresser as a member of a specific group (Bourgeois & Hess, 2008) are factors demonstrated to moderate mimicry. More generally, a negative attitude toward the expresser tends to inhibit emotional mimicry and increase the interpretation of the emotional signal as hostile (e.g., Hutchings & Haddock, 2008). Interestingly, Likowski and colleagues (2008) demonstrated that this is the case even when attitudes are newly formed. They showed participants computer generated faces together with narratives about a specific character. Only expressions by avatars who were presented as "good" in these narratives were consistently mimicked.

In line with affiliation at the individual level, affiliation at the group level also fosters mimicry. Thus, individuals are more likely to mimic the emotional reactions of in-group members than those of out-group members (Bourgeois & Hess, 2008; van der Schalk et al., 2011).

More recently, there has been an increased interest in top-down processes, such as social judgments, which can influence perception-action coupling, including mimicry (Cracco, Genschow, & Baess, 2022). In particular, social judgments about the appropriateness of an emotion expression influence emotional mimicry such that expressions that are considered to be inappropriate are not mimicked (Kastendieck et al., 2020; Mauersberger et al., 2022), an effect that is mediated by a desire to distance oneself from someone who does not adhere to emotion norms such as smiling at weddings. This might also be relevant for the mimicry of older individuals as socio-cultural expression norms can change over time, potentially rendering some emotion expressions less appropriate to younger observers. Hess, Chapter 8, this volume, discusses mimicry of older individuals in more detail.

Person Perception/First Impressions

People rapidly and spontaneously make judgments about the personality of others based on appearance cues (see e.g., Kenny, 2004; Todorov & Uleman, 2002, 2003). One classic study found that varying only one aspect of a photo (e.g., adding glasses) impacts on the perceived personality of the depicted person (Thornton, 1943). But appearance also sends signals regarding the social group membership of the person, including such aspects as gender, age, and ethnicity, all of which, as we noted earlier, impact on emotion perception.

It should be mentioned that there is some disagreement on how accurate first impressions are. Earlier approaches, such as physiognomy, which attempted to link certain facial features with specific traits (Lavater, 1804) have been thoroughly debunked. Looking at people's naïve theories and judgments, there is evidence for both accuracy (see Schwartzman and Rule, Chapter 2, this volume) and inaccuracy (see Franklin, Chapter 4, this volume). One reason why such judgments may be accurate was proposed by Berry and Brownslow (1989), who suggest that facial features may in fact shape behavior. They propose, for example, that, with time, babyfaced individuals adopt behaviors which fit their appearance and thus become what their face announces them to be.

Obviously, the decision of whether first impressions are correct or incorrect is often a matter of degree. Correlations between impressions and actual personality traits are generally low to medium in size. Accuracy is often above chance but far from perfect. Whether this counts as accurate may depend on the criterion that is used (for a more complete discussion see, e.g., Biesanz & Wallace, 2020). As such, first impressions often are somewhat correct but seldom fully correct. Yet, from a social psychological perspective even when being incorrect some of the time, first impressions still provide the observer with some idea of how to approach or respond to unknown others. At the same time it is important to keep in mind that first impressions are hard to correct as this requires both motivation and cognitive resources (Mann & Ferguson, 2015), see also, Chapter 7, this volume.

One important source of first impressions is facial appearance (Zebrowitz, 1997). A line of research, which has a long history, has focused on physical attractiveness (see also Sutherland and Young, Chapter 7, this volume) and on stereotype and halo effects that associate attractiveness with other desirable traits, sometimes labeled the "what is beautiful is good" stereotype (Felson, 1979; Reis et al., 1990).

Another line of research has focused on the static aspects of facial and bodily appearance cues that can signal general dispositions and behavioral intentions. For example, a square jaw, high forehead, or heavy eyebrows cross-culturally connote social dominance (Keating, Mazur, & Segall, 1981; Keating, Mazur, Segall, et al., 1981; Senior et al., 1999). On the other hand, a rounded face with large eyes, thin eyebrows, and low facial features – a babyface – connotes approachability (e.g., Berry & McArthur, 1985).

These behavioral dispositions cued by facial appearance are of central importance for our interactions with others as they allow us to infer the social characteristics of an individual we are about to interact with. In hierarchical primate societies, for example, highly dominant individuals pose a certain threat insofar as they can claim territory or possessions (food, sexual partners, etc.) from lower status group members (Menzel, 1973, 1974). Hence the presence of a perceived dominant other should lead to increased vigilance and a preparedness for withdrawal (Coussi-Korbel, 1994). In contrast, an affiliation motive is associated with nurturing, supportive behaviors and should lead to approach when the other is perceived to be high on this disposition.

Interestingly, the same information that is transmitted by relatively static morphological cues can also be transmitted by movement behaviors, including facial expressions. Of these, anger, happiness, and fear displays have been shown to be associated with perceived dominance and affiliation. Accordingly, drawing the eyebrows together in anger leads to increased attributions of dominance, whereas smiling leads to increased attributions of affiliation (Hess, Blairy, & Kleck, 2000; Knutson, 1996). At the same time, anger expressions are perceived as threatening (e.g., Aronoff, Woike, & Hyman, 1992), whereas smiles are perceived as warm, friendly, and welcoming (see e.g., Hess et al., 2002). Similarly, it has been argued that fear expressions elicit affiliative reactions in conspecifics (Bauer & Gariépy, 2001; Marsh, Ambady, & Kleck, 2005). This notion of a perceptual overlap between emotion expressions and certain trait markers, which then influences emotion communication, has been more recently taken up by Zebrowitz (see Zebrowitz & Montepare, 2006) as well as Hess, Adams, and Kleck (2007, 2008, 2009). Derived from this is the notion that the resemblance of certain facial features to emotion expressions drives the attribution of behavioral intentions to some types of faces (Zebrowitz et al., 2003). That appearance cues can have lasting effects on individuals was shown for example by Mueller and Mazur (1996), who found the perceived dominance of West Point cadets, based on photos alone, was a predictor of later military rank.

Further, emotion expressions can be used to infer a person's character – by a process called reverse engineering (Hareli & Hess, 2010). Specifically, according to appraisal theories of emotion a relevant change in the internal or external environment is evaluated according to a number of dimensions, such as whether the event is pleasant or unpleasant (pleasantness) or whether the change is in line with the motivational state of the individual or obstructs the individual's goals. Specific emotions are differentiated by the pattern of appraisals they are the result of. Thus, anger is an emotion that is characterized by appraisals of goal obstruction, high coping potential and a perception of norm violation. By contrast, sadness is characterized by appraisals of goal obstruction, but combined with low coping potential, with norms playing less of a role (Scherer, 1984). Importantly, the way a person appraises a given situation is specific to the individual and the individual's current state. Factors such as the personality and skills of the person determine their resources, values, and motivations. These in turn define the outcome of their appraisal of an event.

Notably, people's naïve emotion theories tend to be largely consistent with appraisal theory (Hareli, 2014). Hence, people can – based on their naïve emotion theories that represent the appraisals – reconstruct the appraisals of other people's emotions (e.g., Hess & Hareli, 2017; Manstead & Fischer, 2001; Roseman, 1991; Scherer & Grandjean, 2008). This in turn provides insights into their goals, values, and motivations and through these into their character (de Melo et al., 2014; Hareli & Hess, 2010). For example, an observer, who sees a person react with anger to an injustice can conclude that the person has values according to which the event in question appears unjust, perceives this injustice as incongruent with their own motivational state (which would be to see justice done) and also feels competent to act accordingly. It is important to note in this context that perceivers see emotions even in actually neutral, non-expressive faces (Adams et al., 2012) and these perceptions then entrain corresponding person perceptions.

Person Perception and the Aging Face

First impressions of older individuals can be affected by a number of factors, which are also likely to interact. First, as noted above, age stereotypes associate the elderly with a range of traits ranging from weak to wise (see Hummert, Chapter 6, this volume). Second, the aging face tends to be perceived as less attractive (Korthase & Trenholme, 1982), see also Chapter 7, this volume. This effect tends to be stronger for female faces and stronger for younger and middle-aged perceivers than older perceivers (Foos & Clark, 2011). As noted earlier, attractiveness has a strong

halo effect on other trait attributions – a phenomenon that is often labeled "what is beautiful is good" (Dion, Berscheid, & Walster, 1972). As such, a reduction in perceived attractiveness as a function of aging can be expected to entrain a less positive first impression overall.

Using avatars that had the same underlying facial structure and only differed in skin texture to control for the effect of such morphological features as high cheekbones or face shape, Hess and colleagues (2023) asked 387 participants to rate the neutral expressions of old and young avatars. They found that young appearing avatars were rated overall more positively and warm than old appearing avatars. This effect was found for both female and male avatars but was stronger for female avatars and mapped closely onto the effect for attractiveness. Only with regard to perceived maturity was the effect reversed. Interestingly, young female avatars were rated as more mature than young male avatars, an effect that disappeared for the older avatars.

This study also showed that participants saw generally more negative emotions in the neutral face of old appearing avatars. Yet, as noted above, such emotion perceptions also influence trait judgments. For example, ratings of pleasantness and warmth were strongly influenced by the intensity of perceived anger in the neutral faces.

In sum, the wrinkles and folds of older faces can be misperceived as emotion signals (Hess et al., 2012) and these erroneously perceived emotions impact on trait ratings. As the above study suggests that this is mainly the case for negative emotions (more happiness was perceived in the faces of young appearing avatars), the effect on person perception tends to be overall more negative. Further, older faces are perceived as less attractive, which also leads to more negative overall trait judgments. It should be noted, however, that stereotypes of the elderly include both positive and negative traits (see Chapter 6, this volume).

Conclusions

Nonverbal behavior plays an important role in the communication of emotions and personality traits. Nonverbal communication is embedded in a social context, which influences how expressions are perceived and interpreted. As such, stereotypes, social rules and norms, as well as the situational context and the social group membership of the expresser, can all influence the perception of emotions. First impressions are also influenced by these same factors. With regard to the perception of the elderly this implies complex interactions at the intersection of age, sex, and status.

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