

Emotions: functions and significance for attitudes, behaviour, and communication

James Dennison *,†,‡

†Migration Policy Centre, European University Institute, Florence, Italy and ‡School of Politics, Philosophy, Language and Communication Studies, University of East Anglia, Norwich, UK

*Corresponding author. Email: james.dennison@eui.eu

Abstract

Emotions are regularly cited as vital components of effective strategic communication. However, there is relatively little guidance about *how* emotions should be used. Eliciting emotions is key to persuasion because attitudes have a cognitive and emotive component, with predictable physiological outcomes that make messages more resonant and impactful on behaviour, supporting policy objectives. This article shows that communicators—in the field of migration and beyond—should choose their campaign’s emotional frame according to their desired physiological and behavioural reaction. This article applies the emotion schema of Plutchik to offer 32 separate emotions and their theorised physiological reactions, examples of stimuli, and behavioural societal effects. Furthermore, emotional outcomes can be altered via narratives, frames, personal-based messages, facial expressions and body language, aesthetics, ordering (‘emotional flow’), intensities, and combinations. Finally, the limits of emotion-based communication—not least the ‘appeal to emotion’ logical fallacy—and how to overcome those limits—grounding emotion-based communication in facts, values, identities, and efficacy—are considered. Emotion-based communication in the field of migration, although widely used, is largely untested so communicators should test different approaches but also can take lessons from fields such as corporate, health, and climate change communication.

Keywords: strategic communication, emotions, persuasion, migration, Plutchik

1. Introduction

What makes communication effective? What about regarding contentious public policy issues such as migration? How can we use communication to meet policy objectives such as safe, orderly, and regular migration (United Nations 2018), or ‘de-polarised’ debates (OSCE 2021), or ‘re-balanced’ narratives (ICMPD 2020)? Moreover, how can communication help governments uphold liberal democratic legal- and rights-based policy

<https://doi.org/10.1093/migration/mnad018>

© The Author(s) 2023. Published by Oxford University Press.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

frameworks against forces that would undermine them? How can communication contribute to maximising the potential benefits and minimising the potential costs of migration to origin and host country populations and migrants themselves? Strategic communication can have multiple functions: to inform, to persuade, and to motivate behaviour. However, perhaps the most common advice given on all three types of communication—in migration and otherwise—is the deceptively complex instruction to ‘use emotions, not facts’.

In the world of migration communication specifically, [Sharif \(2019: 5\)](#) suggests that ‘to win the debate’ one must ‘apply value-based and emotive approaches’ in addition to factual evidence, because ‘emotions play a bigger role than facts in attitudes to migration’. Similarly, [Welcoming America \(2018: 7\)](#) advises migration communicators to appeal to emotion and states simply that ‘Emotion > Logic’. They argue that ‘Logic supports our emotions and is used to justify our decisions, but research indicates we usually apply logic only after we’ve made our emotional decisions. Logic plays a part in decision making, but emotion is always the main ingredient. Emotions will get people passionate about your cause. Appeal to your audience’s emotions first and you’ll win them over’ ([Welcoming America 2018](#)). They further argue that ‘No press release, newsletter, petition, or anything else should go out without the personal and emotional touch a story generates’ ([Welcoming America 2018: 16](#)). The European Union’s (EU) own Fundamental Rights agency argues for the use of ‘real-life examples to trigger emotions’ since ‘triggering emotions can have a lasting impact’ ([European Union Agency for Fundamental Rights \(FRA\) 2022: 15](#)). Finally, a recent article for the European Parliament’s INGE committee argues that the power of online misinformation, particularly that directed at minorities, lay in its emotional appeal, both directly and via the prominence given to such messaging on social media newsfeed algorithms, concluding that ‘it is not effective to respond to disinformation with facts because people engage with the issues on an emotional level’ ([Szakács and Bognár 2021: 27](#)).

Belief in the persuasive role of emotion-based communication is not limited to public policy. *Forbes Magazine* recently described emotion as ‘the super weapon of marketing and advertising’ ([Saitarli 2019](#)), echoing training and advice given across the corporate world. One study showed that the emotional response elicited by a television advertisement has three times greater impact on the consumer’s decision of whether to buy or not to buy a product than the actual content of the advertisement ([Murray 2013](#)). Overall, it seems to be accepted wisdom that ‘using emotions’ is a highly impactful and perhaps even necessary way to communicate across various domains. Despite this, few of the above sources go into detail on several logically ensuing questions: Why are emotions so effective for persuasion? How should they be used to persuade? Which emotions should be used and under what circumstances? And which for migration communication in particular? To what extent and how are emotions currently being used in migration communication? Finally, what recommendations can be made to communicators about the use of emotions?

Answering these questions is substantively important because the use of emotions is so regularly argued to be a vital tool in communicating and, thus, meeting policy objectives such as those listed above. It is also scientifically interesting because understanding how and why emotion-based communication affects attitudes and behaviours will offer

support for more broadly applicable theories that seek to explain why humans think and act as they do in general. Because emotion-based communication in the field of migration has received very little academic study, this article takes an analytical approach based on first principles to answer what such communication is or could be and how it could be applied to migration most effectively based on the theoretical considerations and lessons from other policy areas. As such, it proceeds accordingly. Section 2 overviews how emotions have been conceptualised both in terms of their definitions, classifications, functions, and determinants. Section 3 asks how emotions have been used in communication and what lessons have been learned about what constitutes good emotion-based communication. Section 4 summarises previous findings to offer recommendations for practitioners and a framework of emotion-based migration communication. Finally, Section 5 overviews findings, shortcomings, and next steps for research.

2. Conceptualising emotions

Despite or perhaps because of their absolute centrality to human experience, emotions are notable for their lack of commonly accepted definition (Barrett, Lewis and Haviland-Jones 2016). Broadly and simply, emotions can be thought of as mental states that our bodies use to govern behavioural reactions to stimuli via both immediate physiology and conscious cognition. These mental states are common across humanity though what stimuli induce them may vary from individual to individual. They have partially involuntary physiological components, such as facial expressions, changes in heart rate, and muscular tension that are fairly commonly shared by all humans (Scherer 2005; Barrett and Russell 2015). Each emotion in the short term may be pleasurable or unpleasurable—albeit with significant qualitative differences within those two types—and thus give us the immediate motivation to both understand why we feel a certain way and to change our behaviours to achieve or avoid such feelings in the future. As such, emotions allow us to better understand ourselves within the world around us and—as evidenced by the inter-recognisability of facial expressions—our social world and each other.

Some definitions (American Psychological Association 2022) differentiate emotions, as mental states, from feelings (such as pain) that are argued to result from certain emotions, as well as from moods, which are argued to be of lower intensity and more often lack obvious stimuli or starting points, instead being somewhat cyclical. Others, however, define emotions as feelings. Furthermore, some theories see emotion as fundamentally linked with cognition, whereas others see emotion as causing cognition. The extent to which one can: recognise their own and others' emotions; evaluate their emotions' sources and meanings; link them to previous experiences; and control and influence them in oneself and others has together been theorised to represent 'emotional intelligence' (Salovey and Mayer 1990). A further concept of 'emotional stability'—long recognised in common parlance as 'even-temperedness'—reflects the extent to which one's mental state cannot easily be moved by external stimuli, with very low levels of emotional stability known as neuroticism (Ellis, Hoskin and Ratnasingam 2018).

3. Classification

Much like values (Dennison 2020a), academics have sought to understand emotions by classifying, categorising, and relating them to each other to predict what causes distinct emotions and, in turn, what are their effects. If a discrete set of emotions relate to each other in predictable ways across broader dimensions, then they can be arranged along a visual schema that represents each emotion's relationship to the others in terms of dimensions such as intensity (high or low), arousal (active or passive), affect (positive or negative), or motivation (approach or avoid), with some emotions constituting basic or primary emotions and more complex ones being secondary and formed by combinations of the primary ones.

Interestingly, the distinct schema of emotions, arrived at using diverse methods, draws similar conclusions about what constitutes 'basic human emotions'. Such theories include Ekman's (1972) 'Neuro-cultural theory of emotions'¹ derived from studies of adult facial expressions; Izard's (1977) 'Differential Emotions Theory' from adult and infant behaviours; Pankseep's (1988) 'Affective Neuroscientific' approaches from animal behavioural responses to direct brain stimulation, and Shaver et al.'s (1987) 'Prototype approach' (see also Gu et al.'s more recent and constrained, 2019, *Three Primary Color Model of Basic Emotions*).

For example, we can see in Fig. 1 Plutchik's (1980) 'wheel of emotions', as derived from his 'General Psychoevolutionary Theory of Basic Emotions', that a discrete number of emotions are arranged according to their intensity (by their verticality in the cone) and their similarity to each other (by their position in the circle) and the basic emotion from which they derive (by their colour with the primary emotion in the middle) giving eight basic emotions with four pairs of opposites. We also see primary 'dyads' between each of the eight sectors—these are theorised to be combinations of two primary emotions. As such, for example, disapproval is a combination of—at its most intense—grief and amazement.

In Fig. 2, we again see these primary dyads in addition to secondary and tertiary dyads formed by primary emotions that are two sectors apart (so that 'hope' is a combination of 'anticipation' and 'trust') or three sectors apart (so that 'outrage' is a combination of 'anger' and 'surprise'), respectively.

Moreover, just as each of the eight primary emotions above have their opposites, so too do the physiological reactions to each of the emotional states, as shown in Table 1. The physiological reality and behavioural importance of emotions are highlighted by studies that show how differing emotional states are felt in differing places in the body, making them recognisable and encouraging certain behavioural reactions (Doucleff 2013).

3.1 Functions and determinants

Emotions offer humans a rich source of information to better understand the relationship between themselves and their world. In doing so, they play a key adaptive role in helping us survive issues posed by our natural and social environments. This means, however, that we are left partially subject to our emotions. Whereas happiness rewards us, sadness punishes us, and fear and anger elicit stress (Gu et al. 2019). More complex governing

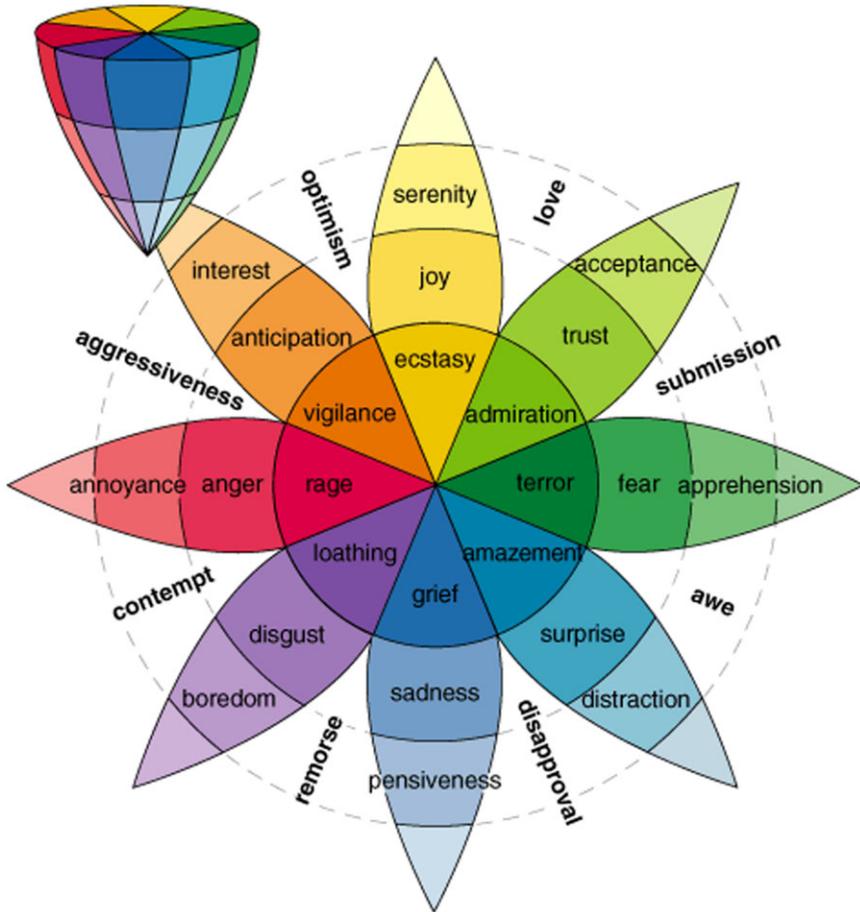


Figure 1. Plutchik's 'Wheel of emotions'.

abilities of emotions include the discomfort we feel when undergoing cognitive dissonance—when we *come to believe* two contrary things—forcing us to reconcile our attitudes, beliefs and so on, often in a painful process of 'facing up to the facts'; however, our emotions will not let us rest until we do (Harmon-Jones 2000). In fact, this discomfort has been argued to be one of the major sources of persuasion and attitudinal change—our emotional system forcing us to realise that our old beliefs were wrong so that we better survive and thrive in an ever-changing world. The rich variety of emotions we feel guides our attention and gives us qualitative information (Glore and Gasper 2000); the more emotionally intelligent we are, the better we can interpret and manage such information. Repeated emotional experiences can crystallise into longer term sentiments and attitudes (Frijda and Mesquita 2000) and even personalities so that understanding one's emotions is a key part of individualisation and mental health (Izard 2013). Indeed, Damasio (1994)

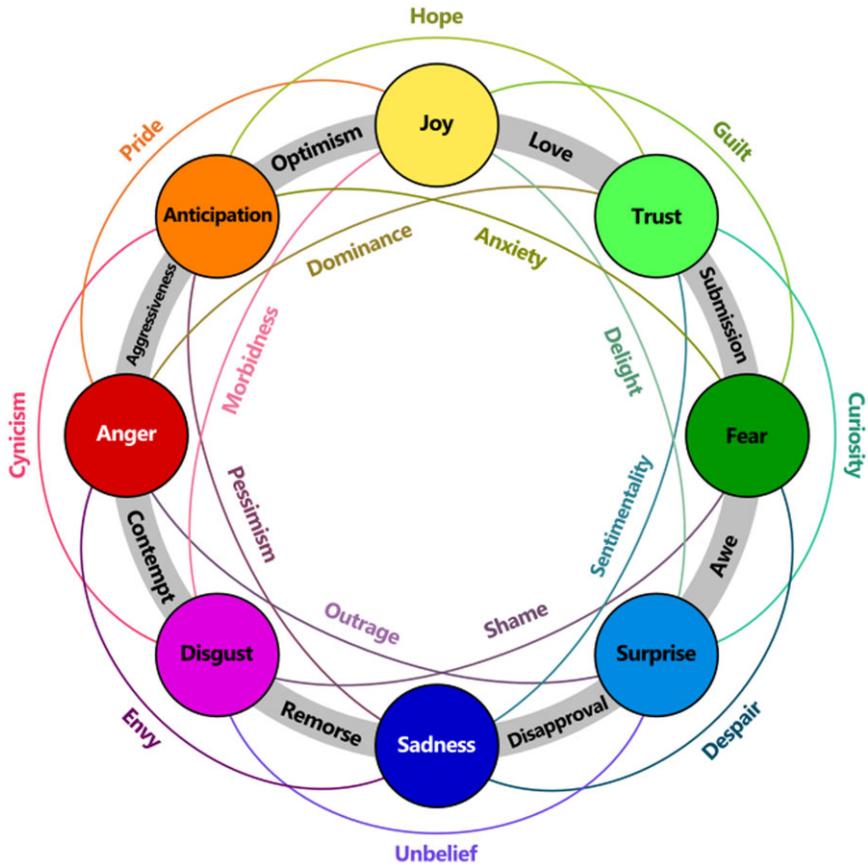


Figure 2. 'Dyad' emotions.

Table 1. Eight opposing primary emotions and their respective physiological reactions

| Plutchik's opposing primary emotions | Opposing physiological reactions |
|--------------------------------------|----------------------------------|
| Joy versus sadness | Connect versus withdraw |
| Fear versus anger | Feel small versus feel big |
| Anticipation versus surprise | Examine versus jump back |
| Disgust versus trust | Reject versus embrace |

showed that individuals who had suffered brain damage that disconnected the cognitive and emotional parts of the brain were no longer able to make decisions, despite being able

to rationally process information, since they could not identify how they felt about each option.

Many social psychologists (Zajonc 1980) have argued that attitudes to social and political issues result from emotional processes to a greater extent than cognitive processes, so that when in conflict, attitudes reflect emotion over evaluation (Lavine et al. 1998) albeit to varying extents depending on the individual (Haddock and Zanna 1999) and the type of attitude (Kempf 1999). Indeed, attitudes have been argued to include a cognitive component (beliefs), an affective component (feelings), and a behavioural component (intentions) (Breckler 1984), meaning that attitudes entirely free of cognition may be possible. The emotive approach (see Brader and Marcus 2013) is also supported by evidence on the effect of motivated reasoning and biases (Ajzen 2001), so that, for example, Burdein, Lodge and Taber (2006) find evidence of motivated scepticism of dissonant information. Despite all this, Gilens (2001) shows that facts do matter, having a large effect on stated policy preferences.

The determinant of which emotion one feels is a complex combination of one's current circumstances and feelings, the nature of the stimuli, and one's deep-seated values, narratives, worldview, and 'self' (Dennison 2020a). However, we do know that an individual's emotions can be changed via contagion (Hatfield et al. 1993); explanation of the causes and implications of stimuli (Ross 1977) particularly as it relates to personal need-fulfilment (Izard 2013); self-management, often dictated by social norms (Hochschild 1979); and narratives and sense-making (Weick et al. 2005) and beyond. Moreover, the determinants of emotions depend greatly on the theoretical approaches one takes regarding whether cognition precedes emotion or vice versa, or whether both are functions of some broader self-concept (Izard 2013: 30–39).

Overall, we know that the emotional system is a fundamental component of how we gain, make sense of, and retain information about our world (Bless et al., 1996; Rieger et al. 2022) and acts as a vital source of information affecting our judgements and choices (Bower 1981) so much so that when emotions and cognition clash, it is often emotions that prevail (Loewenstein, et al. 2001).

4. Emotion-based communication

How are emotions used in communication and what is effective emotion-based communication? How does this differ from the *appeal to emotion* logical fallacy? Empirical studies have shown that communicators that use emotions are more likely to motivate audiences and persuade them (Salama and Aboukoura 2018). Researchers have also sought to measure and test how commercial advertisements evoke emotion (Allen, Machleit and Marine 1988) building on the classifications outlined above. Hasford, Hardesty and Kidwell (2015) show how consumers use emotions as information to help make purchasing decisions and may also spill over to other decisions. Emotions are particularly vital to persuasive strategic communication because activating them has been shown to over-ride identity-based concerns, lead to deeper consideration of information, and lead people to engage in personal rather than political or ideological reasoning (Schwarz 2010; Bolsen, Palm and Kingsland 2019; Feldman and Hart 2018).

Probably, the most tested form of strategic emotion-based public policy communication is climate change communication, which is considerably more developed and its effects more verified than the understudied emotion-based migration communication. It has been described as a ‘booming industry alongside more established “communication enterprises”, such as health communication, risk communication, and science communication’ (Nerlich, Koteyko and Brown 2010: 97). Climate change communication is akin to migration policy communication in that both are concerned with a single issue that is relatively novel and which information, persuasion, and behavioural motivation are all likely to be relevant. However, the former has seen so much study that academics have been left asking ‘what more is there to say?’ (Ballantyne 2016; Moser 2016: 345; Chapman, Lickel and Markowitz 2017).

Smith and Leiserowitz (2014) show that people’s emotions when prompted to think about climate change (e.g. hope, worry, interest) explain half of the variance in support for climate policies—more even than socio-demographics (see also Ojala (2012), on hope and engagement; and Meijnders, Midden and Wilke (2001), on fear and consideration of solutions). Indeed, Wong-Parodi and Feygina (2021) found that strong negative emotional reactions to learning about climate impacts—via emotive stories about arctic warming and polar animals—made conservative respondents as accepting of climate change and willing to engage in climate action as liberals. Furthermore, Arikan, Melek and Gunay (2022) show that presenting climate change-related threats as diffuse and uncertain elicits greater levels of anxiety, while stories that provide a specific target to blame induce anger, and those that underlined the potential of technology and efficacy of human efforts to solve climate change-related issues elicit greater levels of hope. However, on the topic of climate change research, van der Linden et al. (2017) argue that ‘culture [including emotion] versus cognition is a false dilemma’ and that the two must be used together.

One of the most used emotions in communication is fear, usually elicited via the presentation of threats, which indeed has been shown to have strong persuasive effects (Tannenbaum et al. 2015, for review), though can have unintended effects including reactions against the message, the source, and the scale of the problem. Because of these adverse (‘boomerang’) reactions to fear-based campaigns, researchers have experimented with efficacy-only, hope-centred campaigns that focus on individual or collective potential to solve problems (Roser-Renouf et al. 2014). Regarding climate change, these have, however, been shown to be more effective on liberals or moderates than conservatives (Chadwick 2015; Feldman and Hart 2016), highlighting that though hope may be useful in encouraging action amongst those already in agreement, it may be less useful in changing minds. Though Feldman and Hart (2018) show that news and text images that elicited fear increased support for climate change policies, especially amongst conservatives.

Beyond climate change communication, the notion that fear-based messages lead to avoidance, denial, and helplessness rather than positive action is supported by findings from the health communication literature which show that provoking fear without offering solutions produces maladaptive coping mechanisms (Brosch 2021) shown to be comparable to populist political attitudes, threats posed by global transformations, and global governance solutions (Dennison and Turnbull-Dugarte 2022). On the other hand, offering overly hopeful messages has been argued to lead to complacency (Brosch 2021). Messages offering positive stories still must emphasise goal-congruence (and so also

value-congruence), importance, and feasibility. In response to this, [Nabi, Gustafson and Jensen \(2018\)](#) and [Nabi \(2015\)](#) show that the use of ‘emotional flow’ whereby a fear-based message is used to change minds, which is immediately followed by a hope-based message to encourage action, is more powerful than just one of the emotions for topics as diverse as climate change and the use of sunscreen to avoid skin cancer ([Nabi and Myrick 2019](#)).

Furthermore, negative and positive emotional communication has been linked with loss- and gain-based frames, respectively: for example, ‘Stopping immigration threatens our prosperity’ versus ‘Immigration upholds our prosperity’, with gain-based frames having been argued to be more effective ([Davis 1995](#); [de Vries, Terwel and Ellemers 2016](#)). Loss-based frames have been argued to have the disadvantage of being more likely to have reactive, ‘boomerang’ effects ([Cho and Sands 2011](#); [Quick et al. 2015](#)) and be more likely to contradict deeply held world beliefs and values ([Feinberg and Willer 2011](#)). Moreover, rather than there being right or wrong frames, emotions mediate the relationship between frames and attitudinal or behavioural effects in controversial social issues ([Lecheler, Schuck and de Vreese 2013](#); [Lecheler, Bos and Vliegenthart 2015](#); [Kühne and Schemer 2015](#)).

The narrative has been shown to be a vital component of eliciting emotion ([Damasio 1994](#); [Cooper and Nisbet 2016](#)) by moving away from abstract concepts to immediate, personal effects and so removing ‘psychological distance’ and heightening character identification and ‘transportation’ while reducing counterarguing in abstract terms ([van Laer et al., 2014](#); [van der Linden, Maibach and Leiserowitz 2015](#); [Dennison, 2021](#)). Storytelling done by down-to-earth and relatable characters have been shown to be especially effective ([Baldwin and Lammers 2016](#)). When [Gustafson et al. \(2020\)](#) compared the effects of a North Carolina sportsman’s personal account of how climate change has already affected the places he loves, it was shown to affect the climate change beliefs and risk perceptions of political moderates and conservatives, with the effect resulting from feelings of worry and compassion.

Several studies show that emotions mediate the effects of media frames on immigration attitudes ([Brader, Valentino and Suhay 2008](#); [Esses, Medianu and Lawson 2013](#); [Lecheler, Bos and Vliegenthart 2015](#); [Matthes and Schmuck 2017](#)) via enthusiasm positively and anger negatively in the case of [Lecheler, Bos and Vliegenthart \(2015\)](#). [Theorin \(2021\)](#) randomly exposed individuals in six EU countries to one of the four fictional articles focusing on: a single citizen’s negative experiences of immigration; a single citizen’s positive experiences of immigration; official information from a researcher about the negative implications of immigration for society as a whole; or official information from a researcher about positive implications of immigration for society as a whole. The emotional and positive frames were shown to be the most impactful.

Conversely, [Theorin et al. \(2021\)](#) expose participants to a variety of fictional tweets—some with a negative message on immigration, some with a positive one, and some in ‘episodic’ (or narrative) format and some in thematic (or informative) format—showing that none of the four types has a statistically significant effect on attitudes to free movement. [Chkhaidze, Buyruk and Boroditsky \(2021\)](#) exposed participants to one of the four versions of a passage about an increase in immigrants in one town. Each version included all identical facts and figures and differed in only a single word at the beginning of the passage, describing the increase in immigrant labour as either an ‘increase’, a ‘boost’, an

'invasion', or a 'flood'. This change had a large effect on participants' attitudes to the increase in immigration and the predictions about its effects on the economy (see also [Dennison 2022a](#)).

Finally, whereas emotion-based communication can be thought of as a tactic to make a logical argument more resonant by showing its importance and relevance, it should not be confused with the appeal to emotion fallacy—arguing that something *is* true because of its emotional content. This highlights the limits of the idea that communicators should use 'emotions, not facts' and instead should use both.

The above conceptual and theoretical considerations regarding the nature of emotions and findings from studies of communication in other fields lead directly to several practical recommendations:

- (1) Use emotions in communication to make one's messages more resonant and impactful on both attitudes and behaviours, supporting broader policy objectives via persuasion.
- (2) Choose the desired emotional reaction according to the desired physiological and behavioural reaction using existing psychological schema, one of which this article analyses with 32 separate emotions and physiological reactions.
- (3) Narratives, personal-based messages, and aesthetics can all be used to create emotional resonance and reduce psychological distance.
- (4) Different frames have different emotional reactions: for example diffuse versus specific; gain-based versus loss-based; threat versus no-threat; the need for action versus the need for no action.
- (5) Emotion-based messaging using negative emotions (doom, fear, pity, sadness, shame, guilt, anger) should be combined with solutions to avoid reactive, maladaptive, or 'boomerang' effects.
- (6) The impact of emotions can be further enhanced (or diminished) by the order in which different emotions are evoked: this is known as 'emotional flow'.
- (7) The intensity of emotions can also matter: for example, intense surprise is amazement, whereas low-intensity surprise is distraction.
- (8) Avoid thinking in terms of false dichotomies such as 'culture versus cognition'—the two must be used in unison. Use emotions as a tactic to enhance one's message, which should be simultaneously based on facts, values, identities, and efficacy.
- (9) Do not confuse emotion-based communication—a tactic to make a logical argument more resonant by showing its importance and relevance—with the appeal-to-emotion logical fallacy, which argues that something *is* true because of its emotional basis.
- (10) Emotion-based communication in the field of migration remains relatively novel and untested—communicators can take lessons from other fields such as corporate communications, health communications, and climate change communication.

Given the relative scarcity of migration-related studies of emotion-based communication, and the relatively limited number of emotions studied in general, as well as the lack

Table 2. Thirty-two emotions and the physiological and behavioural reactions caused by evoking them

| Emotion | Physiological reactions (with examples of behavioural reactions to basic emotions) |
|---------------------------------------|--|
| Basic emotions | |
| Joy | Connect (e.g. join, contact, meet, converse) |
| Sadness | Withdraw (e.g. turn inwards, avoid, be passive) |
| Fear | Feel small (e.g. retreat, submit, plead) |
| Anger | Feel big (e.g. confront, assert, impose, dismiss) |
| Anticipation | Examine (e.g. observe, consider, compare) |
| Surprise | Jump back (e.g. hurry, defend, react) |
| Disgust | Reject (e.g. remove, distance, separate) |
| Trust | Embrace (e.g. accept, support, celebrate) |
| Primary dyad | |
| Love (joy + trust) | Connect and embrace |
| Submission (trust + fear) | Embrace and feel small |
| Awe (fear + surprise) | Feel small and jump back |
| Disapproval (surprise + sadness) | Jump back and withdraw |
| Remorse (sadness + disgust) | Withdraw and reject |
| Contempt (disgust + anger) | Reject and feel big |
| Aggressiveness (anger + anticipation) | Feel big and examine |
| Optimism (anticipation + joy) | Examine and connect |
| Secondary dyad | |
| Guilt (joy + fear) | Connect and feel small |
| Curiosity (trust + surprise) | Embrace and jump back |
| Despair (fear + sadness) | Feel small and withdraw |
| Unbelief (surprise + disgust) | Jump back and reject |
| Envy (sadness + anger) | Withdraw and feel big |
| Cynicism (disgust + anticipation) | Reject and examine |
| Pride (anger + joy) | Feel big and connect |
| Hope (anticipation + trust) | Examine and embrace |
| Tertiary dyad | |
| Delight (joy + surprise) | Connect and jump back |
| Sentimentality (trust + sadness) | Embrace and withdraw |
| Shame (fear + disgust) | Feel small and reject |
| Outrage (surprise + anger) | Jump back and feel big |

Continued

Table 2. Continued

| Emotion | Physiological reactions (with examples of behavioural reactions to basic emotions) |
|------------------------------------|--|
| Pessimism (sadness + anticipation) | Withdraw and examine |
| Morbidity (disgust + joy) | Reject and connect |
| Dominance (anger + trust) | Feel big and embrace |
| Anxiety (anticipation + fear) | Examine and feel small |

of a general theory of how emotions link to physiological reactions, it is worth expanding on the logic of Plutchik's eight basic emotions and their physiological reactions to each of the 24 'emotional dyads'. In [Table 2](#), we see these combinations with examples of resultant behaviours that are likely to result from each physiological reaction and are likely to form part of migration policy objectives.

[Table 2](#) therefore acts as a guide of which emotions to use when aiming for distinct behavioural outcomes. For example, because it leads individuals to embrace, support, celebrate, and accept, the emotion of trust is likely to most strongly enhance persuasive campaigns to seek to increase support for groups or individuals. Similarly, if we wish to motivate participation, then joy is likely to be an effective emotion, because it leads to connection, while anticipation, which triggers examination, is likely to best support efforts to raise awareness. More complex objectives include a combination of these. Both more and less intense versions of these feelings can be found in [Table 1](#).

Moreover, migration communication campaigns—the broad umbrella of communication that contributes to migration management and realities at all stages—will have varied objectives that determine the correct emotion to use based on the desired physiological reaction. At least three considerations are of note: (1) the migration domain; (2) stakeholders; and (3) the use of emotions by migrants themselves. Although migration is best viewed as a single phenomenon, rather than the false dichotomy of immigration and emigration ([Sjaastad 1962](#); [Leloup 1996](#)), it is inevitably viewed from multiple perspectives in each domain (e.g. asylum and labour migration). Given the universal nature of emotions, evoking each emotion should have a predictable physiological reaction, but how that emotion is evoked will be greatly different and how emotion, cognition, and physiology relate to behaviours requires, above all, careful theorising that will vary by domain. Similarly, stakeholders will vary according to their objectives and their reasons for evoking emotions, for example, humanitarian communication ([Ongenaert and Joye 2019](#)) and migration deterrence campaigns are highly varied ([Musarò 2019: 629](#); [Cappi and Musarò 2022](#)) with stated aims not necessarily in alignment with actual aims ([Oeppen 2016](#)). Indeed, a recent blossoming of critical and media studies of migration communication campaigns focus on their motivations and aesthetic contents, including in terms of emotions ([Bishop 2020](#); [Williams 2020](#); [van Dessel 2023](#); [Williams and Coddington 2023](#)) but lack robust testing of their claims. While experiments on the impact of migration communication campaigns tend to be more robust in their measurement of the impact of

such campaigns on migrant self-reported propensities, perceptions, and knowledge (Molenaar and Jucker 2021; Pagogna and Sakdapolrak 2021; Tjaden and Dunsch, 2021; Dennison 2022b; Tjaden and Gninafon, 2022) but pay little attention to the actual content, including emotional, of such campaigns undermining theoretical generalisability. Finally, scholars utilising both approaches have largely overlooked the migration communication campaigns that focus on reducing xenophobia, negative attitudes, and misperceptions amongst host populations, despite such campaigns often being produced by the same international and national organisations, often as part of the same programmes, and possibly being more numerous, and the use of emotions therein. Finally, a further form of migration communication is that done by migrants themselves, including as storytellers (Bishop 2022), for which the function of communication may exist beyond the purely strategic ‘inform’, ‘persuade’, and ‘motivate’ triad (Rice and Atkin, 2000).

5. Discussion

Emotions are regularly cited as vital components of effective strategic communication. However, until this article, there was relatively little guidance about how emotions should be used in communication. Emotions are vital to persuasion because attitudes have a cognitive (thinking) component and an emotional (feeling) component. Moreover, eliciting emotions causes involuntary but predictable physiological and behavioural reactions.

This article showed how emotions can be used in communication to make one’s messages more resonant and impactful on both attitudes and behaviours, supporting policy objectives via persuasion. Communicators should choose the desired emotional reaction according to the desired physiological and behavioural reaction using existing psychological schema, one of which this article analyses with 32 separate emotions and physiological reactions. Eliciting unsuitable emotions may have adverse reactions from audiences. Communicators can use this article’s recommendation and framework to ensure that the emotions, and physiological and desired behaviours of their campaigns are aligned and thus effective.

Narratives, personal-based messages, facial expressions and body language, and aesthetics can be used to create emotional resonance and reduce psychological distance. Frames, ordering (‘emotional flow’), intensities, and combinations of certain combinations can also be used to elicit different emotions with predictable outcomes. Emotions should be used to make one’s argument more resonant but the argument should not be simply based on the emotional reaction—the ‘appeal to emotion’ logical fallacy. Indeed, for emotion-based communication to work, it should also use facts, values, identities, and efficacy. However, emotion-based communication in the field of migration, although widely advocated, is still largely untested—communicators should test and use impact assessments and evaluation for different approaches (Dennison 2020b) including by domain, stakeholder, and that of migrants themselves, but also can take lessons from other fields such as corporate, health, and climate change communications.

Given the strong indication from the literature that attitudes are emotionally based—and thus qualitatively nuanced far beyond a single spectrum of affect—researchers should consider, first, how to describe such ‘emotion-attitudes’ to various objects of interest.

This would see attitudes to policies, issues, groups, and actors measured in nuanced ways far beyond ‘positive’ and ‘negative’ but the extent to which a range of emotions are associated with the object. Secondly, how can such ‘emotion-attitudes’ be used to improve our explanatory capacity regarding a range of human thoughts and behaviours? In the world of immigration, how can, for example, our policy preferences or migration intentions be better explained by these more nuanced ‘emotion-attitude’ components of affect? This may reflect and predict individuals being capable of having multiple nuanced and varied beliefs and perceptions about an object. Finally, following the description and explanation, and building on the recommendations above, research should consider which interventions may affect such ‘emotion-attitudes’ and, conversely, test emotion-based communication using experimental designs.

Notes

1. Leading to the online ‘Atlas of Emotions’ promoted by the Dalai Lama: <http://atlasofemotions.org/>

Funding

This work was supported by the EUROMED Migration V Programme, funded by the European Union (EU) and implemented by the International Centre for Migration Policy Development (ICMPD) and the Leverhulme Trust [grant number ECF-2021–342].

Conflict of interest statement. None declared.

References

- Ajzen, I. (2001) ‘Nature and Operation of Attitudes’, *Annual Review of Psychology*, 52: 27–58.
- Allen, C. T., Machleit, K. A. and Marine, S. S. (1988) ‘On Assessing the Emotionality of Advertising Via IZARD’s Differential Emotions Scale’, in Houston, M. J. (ed.) *NA - Advances in Consumer Research*, pp. 226–31. Provo, UT: Association for Consumer Research.
- American Psychological Association (2022) ‘Dictionary of Psychology’, <<https://dictionary.apa.org/>> accessed 3 Oct 2022.
- Arikan, G., Melek, G. and Gunay, D. (2022) ‘Emotions in Climate Change Communication: An Experimental Investigation’, *Communications*, 47/2: 307–17.
- Baldwin, M. and Lammers, J. (2016) ‘Past-Focused Environmental Comparisons Promote Proenvironmental Outcomes for Conservatives’, *Proceedings of the National Academy of Sciences of the United States of America*, 113/52: 14953–57.
- Ballantyne, A. G. (2016) ‘Climate Change Communication: What Can We Learn from Communication Theory?’, *WIREs Climate Change*, 7/3: 329–44.

- Barrett, L. F. and Russell, J. A. (2015) *The Psychological Construction of Emotion*. New York: Guilford Press.
- , Lewis, M. and Haviland-Jones, J. M. (2016) *Handbook of Emotions*. New York: Guilford Press.
- Bishop, S. C. (2022) *A Story to save Your Life: Communication and Culture in Migrants' Search for Asylum*. New York: Columbia University Press.
- (2020) 'An International Analysis of Governmental Media Campaigns to Deter Asylum Seekers', *International Journal of Communication*, 14: 23.
- Bless, H., Schwarz, N. and Kimmelmeier, M. (1996) 'Mood and Stereotyping: Affective States and the Use of General Knowledge Structures', *European Review of Social Psychology*, 7/1: 63–93.
- Bolsen, T., Palm, R. and Kingsland, J. T. (2019) 'Counteracting Climate Science Politicization with Effective Frames and Imagery', *Science Communication*, 41/2: 147–71.
- Bower, G. H. (1981) 'Mood and memory', *American Psychologist*, 36/2: 129–48.
- Brader, T. and Marcus, G. E. (2013) 'Emotion and Political Psychology', in Huddy, L., Sears, D. O. and Levy, J. S. (eds) *The Oxford Handbook of Political Psychology*, pp. 165–204. Oxford: Oxford University Press.
- , Valentino, N. A. and Suhay, E. (2008) 'What Triggers Public Opposition to Immigration? Anxiety, Group Cues, and Immigration Threat', *American Journal of Political Science*, 52/4: 959–78.
- Breckler, S. J. (1984) 'Empirical Validation of Affect, Behavior, and Cognition as Distinct Components of Attitude', *Journal of Personality and Social Psychology*, 47/6: 1191–205.
- Brosch, T. (2021) 'Affect and Emotions as Drivers of Climate Change Perception and Action: A Review', *Current Opinion in Behavioral Sciences*, 42: 15–21.
- Burdein, I., Lodge, M. and Taber, C. (2006) 'Experiments on the Automaticity of Political Beliefs and Attitudes', *Political Psychology*, 27/3: 359–71.
- Cappi, V. and Musarò, P. (2022) 'Awareness Campaigns to Deter Migrants: A Neoliberal Industry for Symbolic Bordering', in Dastyari, A., Nethery, A. and Hirsch, A. (eds.) *Refugee Externalisation Policies*, pp. 171–88. Abingdon, UK: Routledge.
- Chadwick, A. E. (2015) 'Toward a Theory of Persuasive Hope: Effects of Cognitive Appraisals, Hope Appeals, and Hope in the Context of Climate Change', *Health Communication*, 30/6: 598–611.
- Chapman, D. A., Lickel, B. and Markowitz, E. M. (2017) 'Reassessing Emotion in Climate Change Communication', *Nature Climate Change*, 7/12: 850–52.
- Chkhaidze, A., Buyruk, P. and Boroditsky, L. (2021) Linguistic Metaphors Shape Attitudes towards Immigration. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 43. Retrieved from <https://escholarship.org/uc/item/1xf1t3vv>.
- Cho, H. and Sands, L. (2011) 'Gain- and Loss-Frame Sun Safety Messages and Psychological Reactance of Adolescents', *Communication Research Reports*, 28/4: 308–17.
- Cooper, K. E. and Nisbet, E. C. (2016) 'Green Narratives: How Affective Responses to Media Messages Influence Risk Perceptions and Policy Preferences about Environmental Hazards', *Science Communication*, 38/5: 626–54.
- Damasio, A. R. (1994) 'Descartes' Error and the Future of Human Life', *Scientific American*, 271/4: 144.

- Davis, J. J. (1995) 'The Effects of Message Framing on Response to Environmental Communications', *Journalism & Mass Communication Quarterly*, 72/2: 285–99.
- de Vries, G., Terwel, B. W. and Ellemers, N. (2016) 'Perceptions of Manipulation and Judgments of Illegitimacy: Pitfalls in the Use of Emphasis Framing when Communicating about CO2 Capture and Storage', *Environmental Communication*, 10/2: 206–26.
- Dennison, J. (2020b) 'How to Perform Impact Assessments: Key Steps for Assessing Communication Interventions' <https://www.icmpd.org/file/download/48479/file/How0to0Perform0Impact0Assessments_0Key0Steps0for0Assessing0Communication0Interventions5E258059D.pdf> accessed 16 Jan 2023.
- (2021) 'Narratives: A Review of Concepts, Determinants, Effects, and Uses in Migration Research' *Comparative Migration Studies*, 9/1: 50.
- (2022a) 'A Review of Experimental Evidence of How Communication Affects Attitudes to Immigration', *Comparative Migration Studies*, 10/1: 35.
- (2022b) 'How Migrant Resource Centres Affect Migration Decisions: Quasi-Experimental Evidence from Afghanistan, Bangladesh, Iraq and Pakistan', *International Migration*, 61/4: 104–19.
- and Turnbull-Dugarte, S. (2022) 'Populist Attitudes and Threat Perceptions of Global Transformations and Governance: Experimental Evidence from India and the United Kingdom', *Political Psychology*, 43/5: 873–92.
- (2020a) 'A Basic Human Values Approach to Migration Policy Communication', *Data & Policy*, 2: e18.
- Douclevff, M. (2013) 'Mapping Emotions on The Body: Love Makes Us Warm All Over' <<https://www.npr.org/sections/health-shots/2013/12/30/258313116/mapping-emotions-on-the-body-love-makes-us-warm-all-over>> accessed 16 Jan 2023.
- Ekman, P. (1972) 'Universals and Cultural Differences in Facial Expressions of Emotion' in Cole, J. (ed.) *Nebraska Symposium on Motivation, 1971*, Vol. 19, pp. 207–82. Lincoln, NE: University of Nebraska Press.
- Ellis, L., Hoskin, A. W. and Ratnasingam, M., eds (2018) 'Personality and Behavioral Factors', in *Handbook of Social Status Correlates*, pp. 75–118. Cambridge, MA: Academic Press.
- Esses, V. M., Medianu, S. and Lawson, A. S. (2013) 'Uncertainty, Threat, and the Role of the Media in Promoting the Dehumanization of Immigrants and Refugees', *Journal of Social Issues*, 69/3: 518–36.
- European Union Agency for Fundamental Rights (FRA) (2022) '10 Keys to Effectively Communicating Human Rights' <https://fra.europa.eu/sites/default/files/fra_uploads/fra-2022-10-keys-communicating-human-rights_en.pdf> accessed 24 July 2023.
- Feinberg, M. and Willer, R. (2011) 'Apocalypse Soon? Dire Messages Reduce Belief in Global Warming by Contradicting Just-World Beliefs', *Psychological Science*, 22/1: 34–38.
- Feldman, L. and Hart, P. S. (2016) 'Using Political Efficacy Messages to Increase Climate Activism: The Mediating Role of Emotions', *Science Communication*, 38/1: 99–127.
- (2018) 'Is There Any Hope? How Climate Change News Imagery and Text Influence Audience Emotions and Support for Climate Mitigation Policies', *Risk Analysis*, 38/3: 585–602.

- Frijda, N. and Mesquita, B. (2000) 'Beliefs through Emotions', in Frijda, N., Manstead, A. and Bem, S. (eds) *Emotions and Beliefs: How Feelings Influence Thoughts (Studies in Emotion and Social Interaction)*, pp. 45–77. Cambridge: Cambridge University Press.
- Gilens, M. (2001) 'Political Ignorance and Collective Policy Preferences', *American Political Science Review*, 95/2: 379–96.
- Glore, G. and Gasper, K. (2000) 'Feeling is Believing: Some Affective Influences on Belief', in Frijda, N., Manstead, A. and Bem, S. (eds) *Emotions and Beliefs: How Feelings Influence Thoughts (Studies in Emotion and Social Interaction)*, pp. 10–44. Cambridge: Cambridge University Press.
- Gu, S. et al. (2019) 'A Model for Basic Emotions Using Observations of Behavior in *Drosophila*', *Frontiers in Psychology*, 10: 781.
- Gustafson, A. et al. (2020) 'Personal Stories Can Shift Climate Change Beliefs and Risk Perceptions: The Mediating Role of Emotion', *Communication Reports*, 33/3: 121–35.
- Haddock, G. and Zanna, M. P. (1999) 'Cognition, Affect, and the Prediction of Social Attitudes', *European Review of Social Psychology*, 10/1: 75–99.
- Harmon-Jones, C., Bastian, B. and Harmon-Jones, E. (2000) 'A Cognitive Dissonance Theory Perspective on the Role of Emotion in the Maintenance and Change of Beliefs and Attitudes', in Frijda, N., Manstead, A. and Bem, S. (eds) *Emotions and Beliefs: How Feelings Influence Thoughts (Studies in Emotion and Social Interaction)*, pp. 185–211. Cambridge: Cambridge University Press.
- Hasford, J., Hardesty, D. M. and Kidwell, B. (2015) 'More than a Feeling: Emotional Contagion Effects in Persuasive Communication', *Journal of Marketing Research*, 52/6: 836–47.
- Hatfield, E., Cacioppo, J. T. and Rapson, R. L. (1993) 'Emotional Contagion', *Current Directions in Psychological Science*, 2/3: 96–100.
- Hochschild, A. R. (1979) 'Emotion Work, Feeling Rules, and Social Structure', *American Journal of Sociology*, 85/3: 551–75.
- ICMPD (2020) Communication on Migration: Rebalancing the Narrative to Strengthen Local Governance. <https://www.icmpd.org/file/download/53202/file/TLR%2520Seville_EN_Final.pdf> accessed 24 July 2023.
- Izard, C. E. (2013) *Human Emotions*. New York: Springer Science & Business Media.
- (1977) *Differential Emotions Theory*. Boston, MA: Springer.
- Kempf, D. S. (1999) 'Attitude Formation from Product Trial: Distinct Roles of Cognition and Affect for Hedonic and Functional Products', *Psychology and Marketing*, 16/1: 35–50.
- Kühne, R. and Schemer, C. (2015) 'The Emotional Effects of News Frames on Information Processing and Opinion Formation', *Communication Research*, 42/3: 387–407.
- Lavine, H. et al. (1998) 'On the Primacy of Affect in the Determination of Attitudes and Behavior: The Moderating Role of Affective-Cognitive Ambivalence', *Journal of Experimental Social Psychology*, 34/4: 398–421.
- Lecheler, S., Bos, L. and Vliegenthart, R. (2015) 'The Mediating Role of Emotions: News Framing Effects on Opinions about Immigration', *Journalism & Mass Communication Quarterly*, 92/4: 812–38.
- , —, Schuck, A. R. T. and de Vreese, C. H. (2013) 'Dealing with Feelings: Positive and Negative Discrete Emotions as Mediators of News Framing Effects', *Communications*, 38: 189–209.

- Leloup, F. (1996) 'Migration, a Complex Phenomenon', *International Journal of Anthropology*, 11/2–4: 101–15.
- Loewenstein, G. F., Weber, E. U., Hsee, C. K., and Welch, N. (2001) 'Risk as Feelings', *Psychological Bulletin*, 127/2: 267–86.
- Matthes, J. and Schmuck, D. (2017) 'The Effects of Anti-Immigrant Right-Wing Populist Ads on Implicit and Explicit Attitudes: A Moderated Mediation Model', *Communication Research*, 44/4: 556–81.
- Meijnders, A. L., Midden, C. J. and Wilke, H. A. (2001) 'Communications about Environmental Risks and Risk-Reducing Behavior: The Impact of Fear on Information Processing', *Journal of Applied Social Psychology*, 31/4: 754–77.
- Molenaar, F. and Jucker, J. (2021) 'Mali is my Eldorado' *The Effectiveness of EU-funded Information Campaigns on Migration. ADMIGOV Paper related to Deliverable 6.4*. The Hague: Clingendael Institute.
- Moser, S. C. (2016) 'Reflections on Climate Change Communication Research and Practice in the Second Decade of the 21st Century: what More is There to Say?', *WIREs Climate Change*, 7/3: 345–69.
- Murray, P. N. (2013) 'How Emotions Influence What We Buy', *Psychology Today* <<https://www.psychologytoday.com/us/blog/inside-the-consumer-mind/201302/how-emotions-influence-what-we-buy>> accessed 3 Oct 2022.
- Musarò, P. (2019) 'Aware Migrants: The Role of Information Campaigns in the Management of Migration', *European Journal of Communication*, 34/6: 629–40.
- Nabi, R. L. (2015) 'Emotional Flow in Persuasive Health Messages', *Health Communication*, 30/2: 114–24.
- and Myrick, J. G. (2019) 'Uplifting Fear Appeals: Considering the Role of Hope in Fear-Based Persuasive Messages', *Health Communication*, 34/4: 463–74.
- , Gustafson, A. and Jensen, R. (2018) 'Framing Climate Change: Exploring the Role of Emotion in Generating Advocacy Behavior', *Science Communication*, 40/4: 442–68.
- Nerlich, B., Koteyko, N. and Brown, B. (2010) 'Theory and Language of Climate Change Communication', *Wiley Interdisciplinary Reviews: Climate Change*, 1/1: 97–110.
- Oeppen, C. (2016) 'Leaving Afghanistan! Are You Sure?' European Efforts to Deter Potential Migrants through Information Campaigns', *Human Geography*, 9/2: 57–68.
- Ojala, M. (2012) 'Hope and Climate Change: The Importance of Hope for Environmental Engagement among Young People', *Environmental Education Research*, 18/5: 625–42.
- Ongenaert, D. and Joye, S. (2019) 'Selling Displaced People? A Multi-Method Study of the Public Communication Strategies of International Refugee Organisations', *Disasters*, 43/3: 478–508.
- OSCE (2021) 'Perceptions and Realities: Towards a De-polarized Public Debate on Migration' <<https://www.osce.org/files/f/documents/5/1/499987.pdf>> accessed 30 Sept 2022.
- Pagogna, R. and Sakdapolrak, P. (2021) 'Disciplining Migration Aspirations through Migration-Information Campaigns: A Systematic Review of the Literature', *Geography Compass*, 15/7: e12585.

- Plutchik, R. (1980) 'A General Psychoevolutionary Theory of Emotion', in Plutchik, R. and Kellerman, H. (eds) *Emotion: Theory, Research, and Experience: Vol. 1. Theories of Emotion*, pp. 3–33. New York: Academic.
- Quick, B. L. et al. (2015) 'Prospect Theory, Discrete Emotions, and Freedom Threats: An Extension of Psychological Reactance Theory', *Journal of Communication*, 65/1: 40–61.
- Rice, R. E. and Atkin, C. K. (2000) *Public Communication Campaigns*, 3rd edn. Newbury Park, CA: Sage.
- Rieger, M. O., Wang, M., Huang, P. K., and Hsu, Y. L. (2022) 'Survey Evidence on Core Factors of Behavioral Biases', *Journal of Behavioral and Experimental Economics*, 100: 101912. Doi: [10.1016/j.socec.2022.101912](https://doi.org/10.1016/j.socec.2022.101912).
- Roser-Renouf, C., Maibach, E. W., Leiserowitz, A. and Zhao, X. (2014) The Genesis of Climate Change Activism: From Key Beliefs to Political Action. *Climatic Change*, 125, 163–178.
- Ross, L. (1977) 'The Intuitive Psychologist and His Shortcomings: Distortions in the Attribution', *Advances in Experimental Social Psychology*, 10: 173–220.
- Saitarli, V. (2019) 'Emotion: The Super Weapon of Marketing and Advertising', *Forbes Magazine* < <https://www.forbes.com/sites/forbesagencycouncil/2019/11/04/emotion-the-super-weapon-of-marketing-and-advertising/>> accessed 30 Sept 2022.
- Salama, S. and Aboukoura, K. (2018) Role of Emotions in Climate Change Communication. In: Leal Filho, W., Manolas, E., Azul, A., Azeiteiro, U., and McGhie, H. (eds) *Handbook of Climate Change Communication: Vol. 1. Climate Change Management*. Cham: Springer. https://doi.org/10.1007/978-3-319-69838-0_9.
- Salovey, P. and Mayer, J. D. (1990) 'Emotional Intelligence', *Imagination, Cognition and Personality*, 9/3: 185–211.
- Scherer, K. R. (2005) 'What Are Emotions? And How Can They Be Measured?', *Social Science Information*, 44/4: 695–729.
- Schwarz, N. (2010) 'Feelings-as-Information Theory', in Lange, V., Kruglanski, P. A. and Higgins, E. T. (eds) *Handbook of Theories of Social Psychology*, pp. 289–308. London: Sage.
- Sharif, H. (2019) 'Communicating Effectively on Migration: Recommendations and Policy Options', Resoma: Research Social Platform on Migration and Asylum. Policy Option Brief: December 2019.
- Shaver, P. et al. (1987) 'Emotion Knowledge: Further Exploration of a Prototype Approach', *Journal of Personality and Social Psychology*, 52/6: 1061–86.
- Sjaastad, L. A. (1962) 'The Costs and Returns of Human Migration', *Journal of Political Economy*, 70/5, 80–93.
- Smith, N. and Leiserowitz, A. (2014) 'The Role of Emotion in Global Warming Policy Support and Opposition', *Risk Analysis*, 34/5: 937–48.
- Szakács, J. and Bognár, E. (2021) 'The Impact of Disinformation Campaigns about Migrants and Minority Groups in the EU', In-Depth Analysis: Requested by the INGE committee. European Parliament <[https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/653641/EXPO_IDA\(2021\)653641_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2021/653641/EXPO_IDA(2021)653641_EN.pdf)> accessed 30 Sept 2022.
- Tannenbaum, M. B. et al. (2015) 'Appealing to Fear: A Meta-Analysis of Fear Appeal Effectiveness and Theories', *Psychological Bulletin*, 141/6: 1178–1204.

- Theorin, N. (2021) 'How News Frames Affect Immigration Attitudes: Perceptions and Emotions as Underpinning Mechanisms?' in Strömbäck, J., Meltzer, C. E., Eberl, J.-M., Schemer, C. and Boomgaarden, H. (eds) *Media and Public Attitudes toward Migration in Europe. A Comparative Approach*, pp. 190–208. Abingdon, UK: Routledge.
- et al. (2021) 'Does News Frame Affect Free Movement Attitudes? A Comparative Analysis', *Journalism & Mass Communication Quarterly*, 98/3: 725–48.
- Tjaden, J. and Gninafon, H. (2022) 'Raising Awareness about the Risk of Irregular Migration: Quasi-Experimental Evidence from Guinea', *Population and Development Review*, 48/3: 745–66.
- Dunsch, F. A. (2021) 'The Effect of Peer-TO-Peer Risk Information on Potential Migrants—evidence from a Randomized Controlled Trial in Senegal', *World Development*, 145: 105488.
- United Nations (2018) 'A/RES/73/195 Global Compact for Safe, Orderly, and Regular Migration' <<https://documents-dds-ny.un.org/doc/UNDOC/GEN/N18/451/99/PDF/N1845199.pdf?OpenElement>> accessed 30 Sept 2022.
- van der Linden, S., Maibach, E. and Leiserowitz, A. (2015) 'Improving Public Engagement with Climate Change: Five "Best Practice" Insights from Psychological Science', *Perspectives on Psychological Science*, 10/6: 758–63.
- et al. (2017) 'Culture versus Cognition is a False Dilemma', *Nature Climate Change*, 7/7: 457.
- van Dessel, J. (2023) 'Externalization through "Awareness-Raising": The Border Spectacle of EU Migration Information Campaigns in Niger', *Territory, Politics, Governance*, 11/4: 749–69.
- van Laer, T. et al. (2014) 'The Extended Transportation-Imagery Model: A Meta-Analysis of the Antecedents and Consequences of Consumers' Narrative Transportation', *Journal of Consumer Research*, 40/5: 797–817.
- Weick, K. E., Sutcliffe, K. M. and Obstfeld, D. (2005) 'Organizing and the Process of Sensemaking', *Organization Science*, 16/4: 409–21.
- Welcoming America (2018) 'Stand Together: Messaging to Support Muslims and Refugees in Challenging Times' <<https://www.welcomingrefugees.org/sites/default/files/documents/resources/Stand%20Together%20Toolkit.pdf>> accessed 30 Sept 2022.
- Williams, J. M. (2020) 'Affecting Migration: Public Information Campaigns and the Intimate Spatialities of Border Enforcement', *Environment and Planning C: Politics and Space*, 38/7–8: 1198–1215.
- and Coddington, K. (2023) 'Deterring Transnational Migration: Public Information Campaigns, Affective Governmentality, and the Family', *International Feminist Journal of Politics*, 25/2: 201–22.
- Wong-Parodi, G. and Feygina, I. (2021) 'Engaging People on Climate Change: The Role of Emotional Responses', *Environmental Communication*, 15/5: 571–93.
- Zajonc, R. B. (1980) 'Feeling and Thinking: Preferences Need No Inferences', *American Psychologist*, 35/2: 151–75.