Emotion norms in engineering education – more diverse than expected

Johanna Lönngren
Umeå University, Sweden, *johanna.lonngren@umu.se*

Katerina Pia Günter
Umeå University, Sweden, *katerina.gunter@umu.se*

Somayeh Ebrahimi Nejad Rafsanjani
Umeå University, Sweden somayeh.ebrahimi@umu.se

Maria Berge
Umeå University, Sweden, *maria.berge@umu.se*

Abstract

Engineering education has long been described as characterized by cultural norms that value rationality over emotions. Norms that devalue emotions are problematic because they can hinder engagement with value-laden issues, such as ethics and sustainability, and they may disproportionately impact students from minoritized populations. While previous research has shown that these norms exist in specific contexts, we lack knowledge on how widespread and dominant they are across contexts. We address this gap by describing a systematic and critical review of the literature on emotion norms in engineering education, asking: (1) What is the extent of the existing literature about emotion norms in engineering education? (2) What is known about emotion norms in engineering education?

Based on a Scopus search and systematic screening process, we identified 18 publications describing empirical studies on emotion norms in engineering education. Here, we describe preliminary results from our abductive analysis of seven papers. **The reviewed publications do not describe one coherent emotion norm across all engineering education**. Rather, emotion norms appear to be highly context- and community-specific. This finding supports previous research stating that some social groups are more adversely impacted by emotion norms than others. However, identifying variations in emotion norms can also open possibilities for change.

Keywords: emotion norms, rationality, systematic review, engineering education

1 Introduction

> *"Historically, the social institution which we call the profession of engineering has … largely functioned as a haven and a refuge for intellectually gifted emotional misfits. The system of engineering education, in turn, has actually functioned mainly as a filter and a pipeline which selects individuals who are emotionally disturbed in a certain standard way, and funnels them into the so-called engineering profession" (Mortensen, 1975).*

> *"Engineers should use their emotions in order to develop morally responsible technologies. This requires a new understanding of the competencies of engineers: they should not be unemotional calculators; quite the opposite, they should work to cultivate their moral emotions and sensitivity, in order to be optimally engaged in morally responsible engineering"(Roeser, 2012).*

As the above quotes illustrate, the stereotypical engineer has long been depicted as unable to feel emotions and interact with others. Examples from Western popular culture include Mr. Spock in Star Trek and engineering humor (Riley, 2008) about engineers who lacks social skills and can't think of anything but calculations, let alone having emotions. Engineering education research also tends to describe engineering education cultures as valuing technical rationality, while emotions – along with other "soft" or "social" issues – are frowned upon at best (see also, e.g., Boler, 1999; Faulkner, 2007; Lönngren et al., 2021; Ottemo et al., 2021). Research has also shown that stereotypes that devalue emotions can hinder engineering students' engagement with value-laden issues, such as ethics and sustainability (Holmén & Lönngren, 2025; Lönngren et al., 2020), due to the intimate connection between emotions and values. Moreover, in educational cultures where displaying emotions is perceived as a weakness, minoritized students are likely to be disproportionally punished for displaying what they feel and may be forced to exert higher levels of emotional labor than others (Boler, 1999; DeCuir-Gunby et al., 2009; Huff et al., 2021; Pradell, Parmenter, Galliher, & Berke, 2024).

But is this stereotypical image really true? Is there solid empirical evidence to back this claim or are we as engineering education researchers simply reproducing existing stereotypes? In a mixed-methods study with 200 engineering students from a higher education institution in Canada, Guntzburger et al. (2019) did *not* find convincing evidence for this claim. While students in their study stated that one should not let

emotions affect one's judgment, they also said that emotions could potentially be important for ethical risk management. Similarly, Lönngren et al. (2021) found evidence of students struggling to reconcile conflicting norms according to which emotions were both problematic and important for engineering problem solving.

To better understand the reasons for such ambivalent findings about the role of emotions in engineering education, we conduct a systematic and critical review of the literature on emotion norms in engineering education. We address two research questions:

RQ1. What is the extent of the existing literature about emotion norms in engineering education?
RQ2. What is empirically known about emotion norms in engineering education?

For this study define *emotions* as short-lived, but intense and immediate responses to specific situations. Emotions are complex, multi-componential phenomena involving physiological changes, subjective experience of physiological changes, cognition about the experience, motivation to act in a certain way, and embodied expression (Scherer, 2005; Shuman & Scherer, 2014). As such, emotions are interactional (i.e., people respond with and to others), contextual (i.e., people respond within and to specific physical and social contexts), continuously evolving (i.e., changing gradually rather than abrupt), and diverse (i.e., widely varying). Emotions serve as rich information for people as they engage and make meaning in the worlds (e.g., personal, cultural, professional) around them.

Our definition of *emotion norms* is based on Hochschild's (1979, 1983) seminal work in the sociology of emotions, where *emotion norms* refer to social rules about who should feel and display what emotions in which situations. Hochschild (*ibid.*) described two types of emotion norms: First, *feeling rules* are norms about what emotions someone from a given social group should (not) feel (and how) in a given socio-cultural-material context. For example, Secules et al. (2021) identified the following feeling rule in their analysis: "allowing deeply felt experiences of stress is not acceptable in the male engineering student's social world. It is an example of engineering students' defined social rules that they share a set of 'right' ways to deal with stress" (p. 873). Second, *display rules* are norms about what emotions someone from a given social group should (not) express (and how) in a given socio-cultural-material context (Hochschild, 1979, 1983). For example, Secules at al. (ibid.) suggested that "men likely experience more extreme emotions than they revealed" (p. 875). Our definition of emotions norms does not include beliefs or assumptions people may have about what emotions engineering students are likely to experience, not does it include information regarding the prominence (frequency or strength) of certain emotions among engineering students.

2 Methods

Most of the previously conducted empirical research on emotion norms in engineering education consists of in-depth qualitative studies. Therefore, we employ an approach to systematic reviews that is particularly useful for reviews of qualitative research: Meta-synthesis systematic reviews aim to "synthesize qualitative studies on a topic in order to locate key themes, concepts, or theories that provide novel or more powerful explanations for the phenomenon under review" (Siddaway et al., 2019, p. 756). Our review proceeds through three stages: (1) scoping and database searching; (2) abstract screening and full text screening; (3) in-depth review. An overview of our search and screening process is shown in Figure 1.

2.1 Scoping and database searching

The overall focus of our review is on publications describing empirical research that combines three thematic foci: emotions, norms, and engineering education (Figure 2). To develop our search query, we used the SPIDER tool for qualitative evidence synthesis (Cooke et al., 2012), which outlines important dimensions to consider in designing a database search for systematic reviews. Our application of the tool is outlined in Table 1. To identify suitable search terms related to emotions and engineering education, we took inspiration from a recent systematic review on emotions in engineering education (Lönngren et al.,

2024). To identify search terms related to norms, we read publications on identity in engineering education (Hatmaker, 2012; Matusovich et al., 2011; Morelock, 2017; Patrick & Borrego, 2016; Rodriguez et al., 2018; Tonso, 2014), social identity (Jenkins, 2014), and the sociology of emotions (Schrock & Knop, 2014; Stets & Trettevik, 2014; Turner, 2009) and extracted a total of 99 search terms. The full search query is provided in Appendix 1. We performed our search Scopus on 7 January 2025, searching in title, abstract, and author key words. After removing duplicates and conference publications, we obtained 249 unique publications.

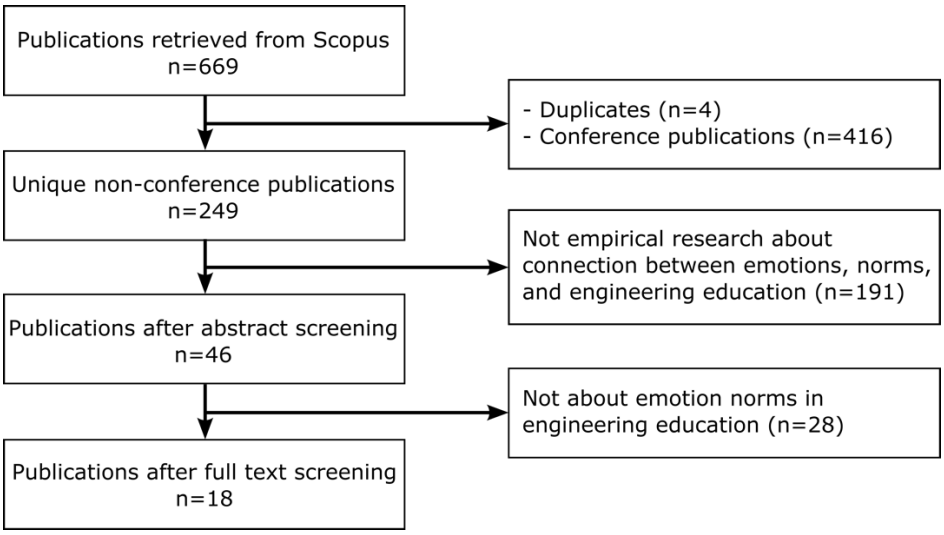

Figure 1. Overview of the search and screening process

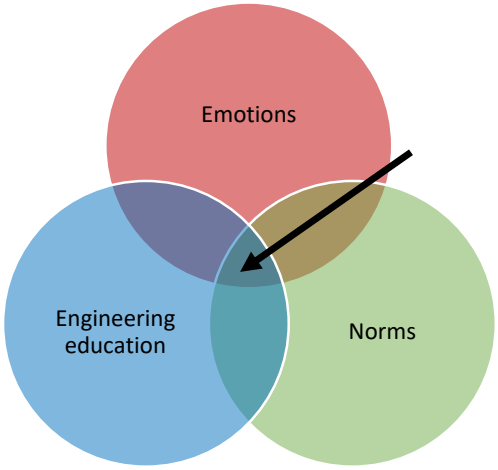

Figure 2. The overall thematic focus for the review lies at the intersection of emotion, norms, and engineering education

2.2 Abstract screening and full text screening

The purpose of abstract screening was to remove publications that do not describe empirical studies and/or do not deal with the intersection of our three thematic foci: emotions, norms, and engineering education. The purpose of full text screening was to ensure that retained publications focus specifically on *emotions norms*, excluding publications that combined the concepts emotions and norms in other ways. For example, several of the publications deal with emotions that are caused by norms in engineering education, such as masculinity norms, but they do not deal with norms about what emotions are considered appropriate in an engineering education context. For both abstract and full text screening, we used detailed codebooks that are available upon request. Each publication was screened independently by two authors and inconsistencies were resolved by discussions among all authors.

Table 1. SPIDER tool applied for our study

SPIDER dimension	Focus of our study	Terms and parameters for database search
Sample and context	people involved in engineering education	"engineering educat*" **OR** "technology educat*" **OR** "engineer* student*" **OR** "engineer* facult*" **OR** "engineer* instruct*"
Phenomenon of Interest	emotion norms (feeling rules, display rules)	(emoti* **OR** affective **OR** feeling*) **AND** ([see Appendix 1])
Design of research	all theoretical frameworks and research approaches	N/A
Evaluation	all types of outcomes	N/A
Research types	all empirical	[selected through screening]
Publication type*	peer reviewed, not conference papers, English language	[automatically filtered in Scopus, selected through screening selected through screening]

*not originally part of the SPIDER tool, but it is standard procedure to define this before searching.

2.3 In-depth review

For this paper, we conducted in-depth review for seven (Cech & Waidzunas, 2011; DeCuir-Gunby et al., 2009; Martin et al., 2020; Miller et al., 2023; Ottemo et al., 2023; Pradell, Parmenter, Galliher, Berke, et al., 2024; Wolfe & Powell, 2022) of the 18 included publications. The analysis for the in-depth review proceeded in four steps:

The aim of the first step was to identify excerpts describing findings from original empirical analysis providing insights about emotion norms in engineering education. Two authors independently coded each of the seven papers line-by-line, deductively applying Hochschild's (1979, 1983) original distinction between *feeling rules* and *display rules.* However, we encountered excerpts that we clearly identified as emotion norms, but that were neither feeling nor display rules. Rather, they were norms about what emotions someone from a given social group should (not) talk about (and how) in a given socio-cultural-material context. To account for these norms, we developed a third code: *talk-about rules*. Due to our focus on empirical findings, most of the coded excerpts were found in the results, discussion, and conclusion sections of the reviewed publications.

In the second step, we compared the coding results for each publication across the two independent coders, resolving inconsistencies through discussion and continuously nuancing our understanding of the different types of emotion norms. These discussions also sensitized us to the rich contextual information that some of the studies provided and that could provide insights for a more nuanced understanding of emotion norms in engineering education.

In the third step, we systematically mapped the contextual information for each coded excerpts, including the context in which an emotion norm was identified, the person(s) for whom the norm applied, the (types of) emotions for which it applied, what those emotions could be about (the objects of emotion), and which other person(s) in whose presence the norm applied. To ensure consistency, we rephrased all identified emotion norms in a standardized sentence format. For example, we identified the following display rule in empirical findings presented in DeCuir-Gunby et al. (2009):

> In engineering education in a United States context [context], women professors of color [person(s) for whom the norm applies] should not display assertiveness [(type of) emotion] about their rights [object of emotion] in front of their colleagues [other person(s)].

Finally, we analyzed across all emotion norms we identified, highlighting similarities and differences in emotion norms and the conditions under which they applied.

3 Results

3.1 The extent of the existing literature about emotion norms in engineering education

Our results show that the extent of the literature describing empirical studies about emotions norms in engineering education is very limited. We only found 18 publications matching our inclusion criteria and, of those, only five substantially focused on emotion norms. This is surprising, considering the strong discourse in the field stating that engineering education is characterized by strict emotion norms. Further, in our initial search, we retrieved almost twice as many conference publications compared to journal articles. Again, this is surprising (in a broader review of the literature on emotions in engineering education, we retrieved approximately as many conference publications as journal articles; Lönngren et al., 2024), and it speaks to a general lack of empirical research on emotion norms in engineering education.

Moreover, as we developed our coding scheme for the line-by-line analysis, we noticed that much of what we initially were tempted to code as emotion norms was *not* based on empirical findings. Rather, we found descriptions of emotion norms in the introduction and background sections of the reviewed publications, reproducing taken-for-granted assumptions about engineering education without adequate support from empirical research. References were often used, but they were primarily references to theoretical or philosophical publications (e.g., Roeser, 2012). For example, Hess et al.'s work (2021) was based on the (implicit) assumption that engineering students need to become more empathetic and attuned to their emotions. The authors investigated if a course concerning ethical issues in biomedical engineering practice would change the students' emotion regulation for the better, assuming it was not good from the start.

In other publications, we found implicit evidence of emotion norms, primarily in quotes from research participants that were not explicitly analyzed by the authors. In other words, the empirical data underlying several of the reviewed publications clearly contained valuable information about emotions norms in engineering education, but the authors did not focus on those norms in their analyses. For example, in Cech's and Waidzuna's study (2011) on lesbian, gay, and bisexual (LGB) students' experiences of engineering education, one student said: "You don't talk about your feelings, you don't talk about the world and what's happening in it, you don't talk about [...]. Really, we're just doing the technical stuff" (p. 11). Another student explicitly reiterated the image of the stereotypical engineer as unemotional: "But, I don't think I am a stereotypical engineer, either. The stereotypical engineer is good at math, not that emotional, really logical, they're just personally inept at times" (*ibid*., p. 18).

In summary, we found very little intentional, empirical research on emotion norms in engineering education. Hence, there may not be enough research to support the widely reproduced, general claims about emotions being taboo in (all) engineering and engineering education.

3.2 RQ2: What is empirically known about emotion norms in engineering education?

We found some statements of emotion norms in engineering education which were presented as general claims. In these cases, information about contextual factors was largely missing, which may lead readers to assume that the emotion norms are applicable across broad populations (e.g., all engineering students), for all types of emotion(s) and emotion objects, and irrespective of who else is present. For example, in Cech's and Waidzunas's (2011) study, one of the respondents formulates the norm that engineering students at their institution should not feel or display strong emotions: "The stereotypical engineer[ing student] is good at math, not that emotional, really logical, they're just personally inept at times" (p. 18). Figure 3 illustrates this emotion norm (the colors in this and the following figures are chosen to match the color-coding of contextual factors in the example sentence above).

The above excerpt provides an example of a claim to a general emotion norm, but many of our other coded excerpts paint a much more complex picture; contextual factors could vary independently from each other,

with wide-reaching implications for social dynamics in engineering education contexts. In the following sub-sections, we present examples that illustrate different ways in which emotion norms could vary across contexts, social groups, emotions, and emotion objects.

Figure 3. Illustration of emotion norms for engineering students at a major research university in the Western United States, based on data presented in Cech and Waidzuna (2011).

1.1.1. Emotion norms can differ for persons from different social groups

The findings presented in Cech's and Waidzunas's (2011) study do not only illustrate a monolithic understanding of emotion norms in engineering education (Figure 3), they also illustrate how talk-about rules could differ for persons belonging to different social groups and different objects of emotion, even within the same educational institution (Figure 4).

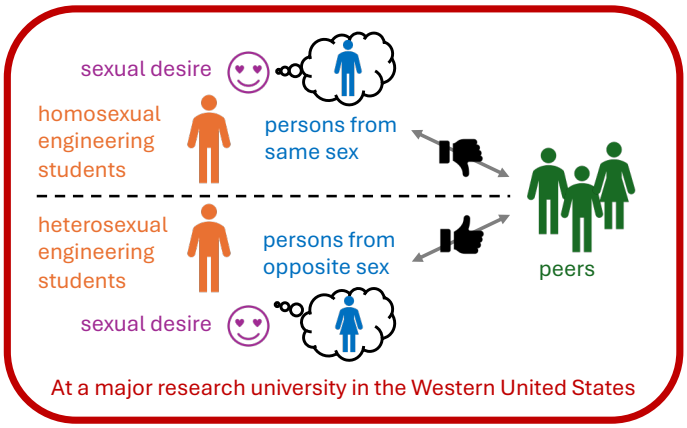

Figure 4. Illustration of differences in emotion norms for homosexual and heterosexual engineering students at the same institution, based on data presented in Cech and Waidzuna (2011).

For heterosexual students in the study, it appeared to be unproblematic to talk about sexual desire towards persons from the opposite sex. Homosexual students, on the other hand, expressed that they could not talk about their desire towards persons from the same sex:

> "People are accepting [of me as a gay man] up to a point. They're fine with you being gay, but they don't want you to talk about having a boyfriend. They're fine in the abstract, but let's just not go there. And the fact that they talk about their girlfriends in the lab I find kind of hypocritical."

1.1.2. Emotion norms can differ depending on who else is present

Findings from Miller, Castaneda, and Alemán (2023) illustrate how the persons one interacts with matter for emotion norms: female faculty recount how tenured male professors would not allow engineering students to display sadness (crying) in their presence. Instead, they would call on a non-tenured female professor to deal with the crying student (Figure 5). In other words, it was okey for students to cry in front of a non-tenured female professor, but not a tenured male professor:

> "This week, yet another engineering student in crisis. I gesture for Arielle to sit down across from me. She plops herself down on the chair and drops her backpack on the floor beside her. Tears start

streaming down her face. I pass her a box of tissues from my desk. Is this why Johnny passed her off? Because she's crying?"

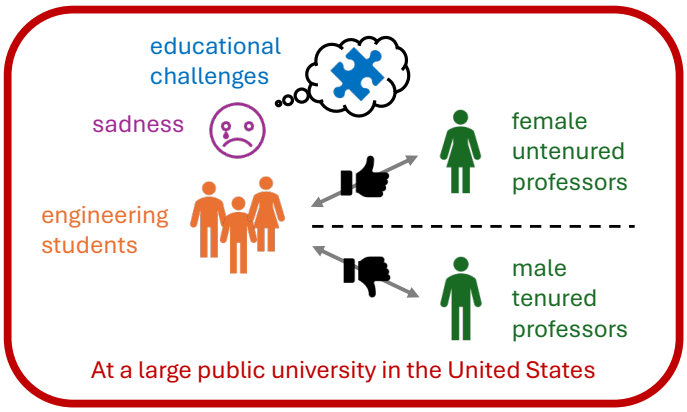

Figure 5. Illustration of differences in emotion norms for engineering students depending on who else is present in the situation, based on autoethnographic findings presented in Miller, Castaneda, and Alemán (2023).

1.1.3. Emotion norms can differ for different emotions and emotion objects

In addition to variation in emotion norms depending on who is involved in an interaction, Ottemo et al.'s (2023) study shows how different emotion norms can apply to different emotions and emotion objects (Figure 6): passion for technology and making things is to be expected in the context of a makerspace in Sweden; on the other hand, truly passionate makers do not and should not care too much about other people and their opinions:

> "That there was a relation at MakerClub between being passionate about technology and not being so attentive to or concerned with what other people think was also something hinted at by Anders, who suggested that: 'If you are interested in something and interested enough, you do not care much about the others, what they think'".

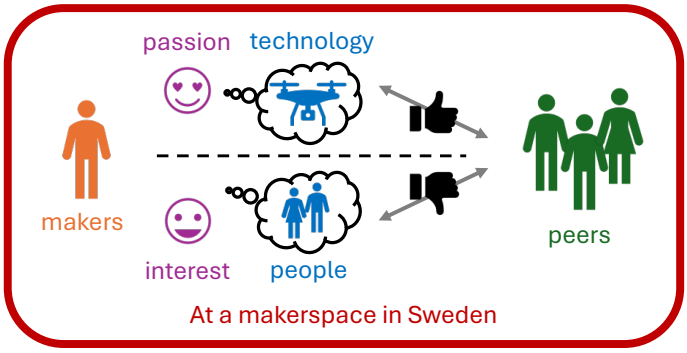

Figure 6. Illustration of different emotion norms at a makerspace in Sweden that apply for different emotions and emotion objects, based on data presented in Ottemo et al. (2023).

1.1.4. Emotion norms can differ between contexts

Finally, Miller, Castaneda, and Alemán (2023) also provide evidence that emotion norms can differ between contexts. In the context of their autoethnographic collaboration involving three engineering educators, they experienced that they could display vulnerability in the face of their gendered teaching experiences:

> "One of the things that was so striking to me in our early conversations was how vulnerable and open you both were."

The quote above illustrates surprise about the possibility for such vulnerability, showing that they did not feel that they could not display such vulnerability outside of their close circle, in other contexts within the same educational institution (Figure 7).

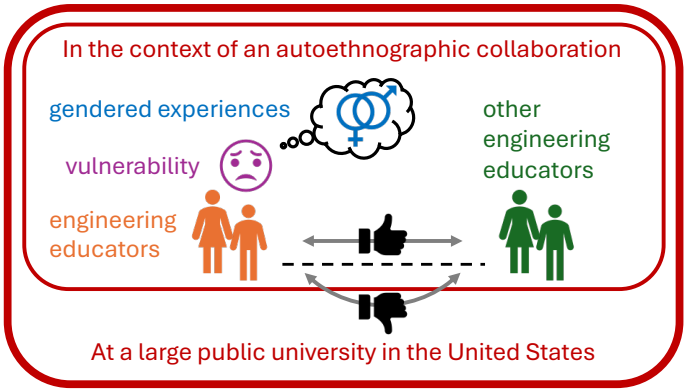

Figure 7. Illustration of differences in emotion norms for engineering educators at a large public university in the United States, inside and outside of an autoethnographic collaboration, based on findings presented in Miller, Castaneda, and Alemán (2023).

4 Discussion

The findings from our preliminary analysis clearly show that much more research is needed to develop a nuanced and well-grounded understanding of emotion norms in engineering education. We observed that, how emotions can be displayed and talked about, depends on *who* is displaying and talking, as well as *who* is receiving that information, and *in what contexts* the respective interaction takes place. In other words, emotion norms are *situated*, they can neither be disconnected from the people involved nor from the context in which they are enacted (Zembylas, 2005). Using an identity lens, it further becomes clear that emotions are deeply entwined with processes of social recognition and misrecognition along intersecting identity axes of oppression (e.g., gender, race, class; Avraamidou, 2020). Several of the reviewed studies (e.g., Cech & Waidzunas, 2011; Miller et al., 2023) provide first insights into the complexities of identity negotiations vis-à-vis emotion norms and a better understanding of what emotions are considered "normal" and for whom. Future research should continue on this track, leveraging social constructivist and sociological theories of emotions (for an overview of such theories, see, e.g., Lively, 2024; Mesquita & Parkinson, 2024) and intersectional identity frameworks (e.g., Avraamidou, 2020) to move beyond purely personal narratives of emotion norms and emotion-based identity formation in engineering education and to instead recognize the broader social and political implications of these narratives. This shift will allow for a deeper understanding of how social recognition and emotions influence systemic inequalities and how they can contribute to social change. To support such research, we offer an analytic framework for studying emotion norms as situated, intersectional phenomena (Figure 8). The framework outlines three aspects of emotion norms – *social identities*, *emotions*, and *emotion objects* –that interact within an *immediate social context* in which people interact in various ways. The immediate context is, in turn, situated within *wider social contexts*, each of which comes with its own social norms, structures, and practices. Recent work (published after our database search), complements our framework with a hierarchical model of emotion norms and empirical evidence of "various combinations of nested, context-dependent, and partly conflicting norms that guide [computing] educators' emotion display" (Grande et al., 2025, p. 1).

Future research should also take measures to avoid the unintentional reproduction of harmful narratives of engineering education as an emotion-free zone, populated by "unemotional calculators" (Roeser, 2012). Some researchers have begun to problematize monolithic descriptions of emotion norms in engineering education, demonstrating a more nuanced and reflexive approach. For example, Huff et al. (2021) suggested that we should not fall into the trap of reproducing an emotion norm according to which shame

is an undesirable emotion in engineering education: While shame is unlikely to lead to productive outcomes for students' learning and well-being, reiterating that shame is bad will not prevent minoritized students from feeling it, it will only lead to them feeling ashamed even of their shame.

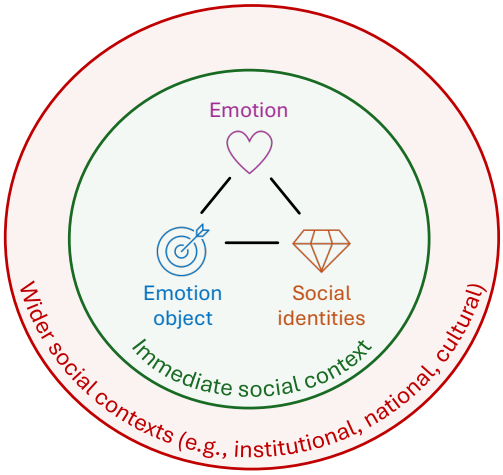

Figure 8. Analytic framework for studying emotion norms in engineering education as situated, intersectional phenomena.

Another insight from our analysis is that several publications dealt with emotion norms that neither fit the category of *feeling rules* nor that of *display rules*. Rather, they were norms about what emotions someone from a given social group should (not) talk about in a given socio-cultural-material context and how (e.g., norms related talking about desire, Cech & Waidzunas, 2011). To account for these norms, we need to expand Hochschild's (1979, 1983) conceptualization of emotion norms by introducing a third category, *talk-about-rules*. This conclusion is in line with previous research on emotional positioning, showing how engineering students negotiate who is allowed or expected to express and/or talk about what emotions in a specific interactional context (Lönngren et al., 2021; Lönngren & Berge, 2024).

5 Conclusion

In research as well as popular culture, engineering education has long been described as characterized by cultural norms that value rationality over emotions (e.g., Boler, 1999; Faulkner, 2007; Lönngren et al., 2021; Ottemo et al., 2021; Riley, 2008; Roeser, 2012). However, preliminary findings from this systematic literature review suggest that there is very little empirical evidence supporting such descriptions. In fact, the reviewed publications clearly illustrated how emotion norms can differ across social identities, contexts, and types of emotions. Much more empirical research will be needed to better understand the complex situated and intersectional nature of emotion norms in engineering education. Social constructivist and sociological theories of emotion, and intersectional frameworks of identity will be particularly valuable for future research, preventing unintentional reproduction of harmful and exclusive narratives about emotions in engineering education.

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7 Appendix: Search string used for database searching

(TITLE-ABS (emoti* OR affective OR feeling*) OR AUTHKEY (emoti* OR affective OR feeling*)) AND

(TITLE-ABS ("engineering educat*" OR "technology educat*" OR "engineer* student*" OR "engineer* facult*" OR "engineer* instruct*") OR AUTHKEY ("engineering educat*" OR "technology educat*" OR "engineer* student*" OR "engineer* facult*" OR "engineer* instruct*")) AND

(TITLE-ABS (“affective econom*” OR “emotional econom*” OR “micro-economic*” OR microeconomic* OR micropolitic* OR “micro-politic*” OR {capital} OR {exchange} OR circulat* OR discourse* OR discursive OR cultur* OR storyline* OR negotiat* OR “figured world*” OR “cultural world*” OR identit* OR positioning* OR identification* OR {norm} OR {norms} OR {normative} OR {normality} OR ideolog* OR “moral field*” OR {power} OR {prestige} OR authority OR privilege* OR “social status” OR “status symbol” OR “social structur*” OR hierarch* OR segragati* OR stratification OR structuration OR “in-group*” OR “out-group*” OR “rites of passage” OR “social field*” OR habitus OR habituation OR socialis* OR socializ* OR reproduc* OR “social class*” OR {race} OR racial* OR gender* OR sexualit* OR ethnic* OR intersectional* OR minorit* OR disabilit* OR queer OR masculin* OR feminin* OR discriminat* OR inequal* OR marginali* OR stereotyp* OR prejudic* OR conformity OR “ideal type*” OR “labelling process*” OR “labeling process*” OR “role model*” OR “type of person” OR “role configuration” OR “framing rule*” OR dramaturg* OR script* OR {display} OR “role tak*” OR “role-tak*” OR “symbolic interaction*” OR ritual* OR symbolization OR symbolisation OR symbolism OR attribution OR “expectation state*” OR “verificat*” OR selfhood OR personhood OR alienat* OR reflexiv* OR “self-categori*” OR “self-identi*” OR “self-image” OR “sense of self” OR “self-perception” OR “feeling rule*” OR “display rule*” OR “emotion rule*” OR “emotion work” OR “emotional lab*” OR “emotion management” OR “emotional management”) OR AUTHKEY (“affective econom*” OR “emotional econom*” OR “micro-economic*” OR microeconomic* OR micropolitic* OR “micro-politic*” OR {capital} OR {exchange} OR circulat* OR discourse* OR discursive OR cultur* OR storyline* OR negotiat* OR “figured world*” OR “cultural world*” OR identit* OR positioning* OR identification* OR {norm} OR {norms} OR {normative} OR {normality} OR ideolog* OR “moral field*” OR {power} OR {prestige} OR authority OR privilege* OR “social status” OR “status symbol” OR “social structur*” OR hierarch* OR segragati* OR stratification OR structuration OR “in-group*” OR “out-group*” OR “rites of passage” OR “social field*” OR habitus OR habituation OR socialis* OR socializ* OR reproduc* OR “social class*” OR {race} OR racial* OR gender* OR sexualit* OR ethnic* OR intersectional* OR minorit* OR disabilit* OR queer OR masculin* OR feminin* OR discriminat* OR inequal* OR marginali* OR stereotyp* OR prejudic* OR conformity OR “ideal type*” OR “labelling process*” OR “labeling process*” OR “role model*” OR “type of person” OR “role configuration” OR “framing rule*” OR dramaturg* OR script* OR {display} OR “role tak*” OR “role-tak*” OR “symbolic interaction*” OR ritual* OR symbolization OR symbolisation OR symbolism OR attribution OR “expectation state*” OR “verificat*” OR selfhood OR personhood OR alienat* OR reflexiv* OR “self-categori*” OR “self-identi*” OR “self-image” OR “sense of self” OR “self-perception” OR “feeling rule*” OR “display rule*” OR “emotion rule*” OR “emotion work” OR “emotional lab*” OR “emotion management” OR “emotional management”)