‘A language we understand’: Students’ perceptions of emojis, memes and gifs in higher education teaching.

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Abstract

Emojis, memes and gifs are visual representations of emotions, concepts and pop culture references, and are being increasingly used within higher education teaching and communication. We know that emojis, memes and gifs are typically viewed positively within primary and secondary school contexts. However, an understanding of higher education students’ perceptions around lecturer’s emoji, meme and gif use remains unknown. To explore this, we thematically analysed ten one-to-one semi-structured interviews conducted with U.K. higher education (HE) university students (M_{age}= 20.6 years; 8 female). Primary themes of communication and learner experience arose from the data. Students identified emojis, memes and gifs as positive with regards to lecturer personability, as well as aiding attention and understanding of learning content. Students highlighted that emojis, memes and gifs could be associated with unprofessionalism, which may impact attention. These findings are important in adding to the pedagogical debate around the use of visual stimuli and digital communication within HE teaching, as well as supporting HE educators’ considerations around using emojis, memes and gifs within their own practice.

Keywords: emojis, memes, gifs, engagement, communication, learner experience.

Introduction

Visual stimuli are adopted widely within education settings (McBrien et al., 2022; Miller, 2015; Renninger & Bachrach, 2015). As well as eliciting positive arousal (Lai et al., 2016) and enhanced content retention (Perelle, 1975), visual stimuli are associated with a positive increase in engagement (Ulbig, 2010). Within a digital age, digital visual stimuli have evolved into a form of communication. In particular, the use of emojis, memes and gifs has become a popular way to communicate digitally. Emojis are ‘a graphic symbol/ideogram that represents not only facial expressions, but also concepts and ideas’ (Kralj Novak et al., 2015, p. 2; please see Figure 1 for an example). Gifs and memes, although similar, differ from emojis in that they ‘implicitly borrow from other texts and references to convey a new message’ (Wagener, 2021, p. 832) via a still image (meme; please see Figure 2 for an example) or a short,

animated image related to pop culture (gif; please see Figure 3 for an example). Emojis, memes and gifs are being increasingly used within a digital educational context, such as on PowerPoint slides (Hart-Davis, 2016) and within emails and direct messages (Crombie, 2020). Although this is associated with enhanced engagement in children (Kamei & Harriott, 2021; Pulley, 2020), consideration of the role emojis, memes and gifs may play within higher education (HE) settings remains unexplored.

Figure 1. An example of emojis presenting different graphic symbols of expressions, concepts and ideas.

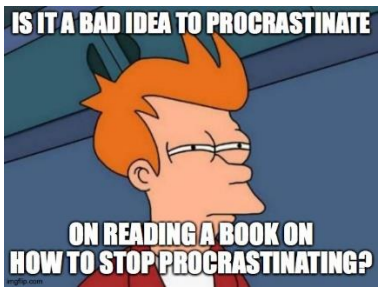

Figure 2. An example of a meme combining pop culture reference (a still image from the show 'Futurama') with a user edited caption comparing the best way to procrastinate.

Figure 3. An example of frame from a gif (recurring moving image/video clip) depicting a pop culture reference with a related caption.

HE students face potential barriers to degree completion. As well as financial and living difficulties, learning experience poses one such potential barrier (Nisbet et al., 2017). One element of the learning experience is the relationship with HE teaching staff (Jairham & Kahl, Jr, 2012). We know that the relationship between student and educator is hugely impactful across education (Felten & Lambert, 2020) and this is no exception within the HE context (Garvett, 2022). Through a literature review of the impact of student-staff relationship upon learning experience, Hagenauer and

colleagues (2022) identified the quality of this relationship as highly important. In support, Hill and colleagues (2003) identified through focus groups that the relationship quality between student and lecturer strongly shaped perceptions of degree quality, which is evidenced as a predictor of engagement (Ali & Hassan, 2018). An influential factor upon the student-lecturer relationship is connectedness (Alshahrani et al., 2017). Krause and Coates (2008) argue that a high sense of connectedness increases engagement; this is further supported by Howson and Weller (2016). Additionally, Giles (2008) claims that connectedness to lecturers is associated with academic outcomes. Ross and colleagues (2014) extend considerations of connectedness by theorising it as an indicator of care; connecting with a lecturer suggests their care of the students' learning. Garvett (2022) supports this by suggesting that lecturers who connect with students are perceived by students as more genuine and empathic and we know that these are indicators of care (Cash & Moffitt, 2021; Meyers et al., 2019). In fact, feeling cared for ("I feel part of a community of staff and students") and respected ("Staff value students' views and opinions about the course") comprise important predictors of student satisfaction within the National Student Survey (NSS; Office for Students, 2022). Fostering positive student-staff relationships is therefore important for students' own learning experiences as well as how they perceive the overall quality of their course and institution.

Expressing interests that align with students' own interests can foster connectedness (Stone & Springer, 2015), but this may be difficult if a developmental divide exists. The majority of HE students are aged 18-24 years, developmentally considered 'emerging adults' (HESA, 2022; Sawyer et al., 2018), whereas the majority of academic staff are aged above 31 years (HESA, 2015). During emerging adulthood, individuals are rapidly developing social, emotional, financial and physical independence (Sawyer et al., 2018). Students and staff are therefore likely to be in developmentally different stages with differences in interests. In addition, the traditional role of a lecturer is widely embedded within concepts of historic, hierarchical institutions and elitism (Simister, 2011); this can be very intimidating for students and enhance feelings of misalignment with their lecturers (Holley & Dobson, 2008; Farr-Wharton et al., 2018). Kitto and Higgins (2003) suggest digital communication can address this misalignment. As students are predominantly of a generation where they have been born and raised immersed in technology, engagement with digital communication is likely a prevalent interest. Educators who prioritise student learning are more likely to seek opportunities to connect with students (Schwartz, 2019). Thus, lecturers may engage with digital communication with the aim of fostering feelings of connectedness with their students (Costa et al., 2018). Representations of pop culture interests, emojis, memes and gifs may be an effective tool (Alsaif et al., 2019).

In an attempt to connect with students, however, HE staff may misjudge the appropriateness of their online interaction (Bazarova & Choi, 2014). Communicating visually can cause greater room for misinterpretation; if perceived as inappropriate for

the context, communication can be perceived as over-disclosing: misjudging the audience and revealing inappropriate information (Bazarova & Choi, 2014; Van Kleef et al., 2012). In fact, over-disclosing is associated with unprofessionalism (Archer et al., 2015). We know that students expect professionalism within a HE context. Wiranto and Slamento (2021) identified professionalism as the highest indicator of student satisfaction. Doiron (2018) identified emojis as a risk of emotional disengagement; for example, responding to a students' query with a 'thumbs up' emoji may be perceived by the student as unprofessional. In this instance, student-staff connectedness would be negatively impacted. Especially when we consider the generational divide between HE staff and students, it is possible that staff may inadvertently over-disclose through emojis, memes and gifs, when communicating with students online, subsequently impairing connectedness and student engagement.

The use of emojis, memes and gifs may be useful as a tool for learning. It is widely evidenced that visual stimuli can benefit memory (Penolazzi et al., 2010) and comprehension (Dolphin, 1987; Samuels, 1970). A lesser volume of research evidences this within a HE context (Clarke III et al., 2006; Roberts, 2019). When considering the visual nature of emojis, memes and gifs, it may be beneficial to incorporate these within digital learning content to benefit the learning process. In fact, Mahaffey (2021) presented a positive relationship between the use of emojis and students' memory recall. In extension, Holtgraves and Robinson (2020) suggest that emojis support content comprehension. In HE, where online learner content can be complex, the use of emojis may thus aid the learning process. As argued by Pekrun (2014), emotions and learning are intertwined. The ability to comprehend and recall content strengthens engagement (Wang & Kang, 2006; Zhang et al., 2020). In fact, Bayne (2008) highlights that the use of visual stimuli can enhance collaboration between students and educators. Therefore, emojis, memes and gifs could engage students due to their assistance in the learning process.

Alternatively, using emojis, memes and gifs may be interpreted as unprofessional due to trivialising content (Bok, 2020), which may come across as patronising. We know that expectations of learning experiences and outcomes change in the transition from school to university (McLaughlin & Mills, 2009) with a particular focus upon the quality of learner content (Taylor, 2000; Zimmerman, 2002). In fact, Veytia-Bucheli and colleagues (2020) identified that the use of emojis can be perceived as informal when communicating with peers about HE learning. If students may feel this way towards their own peers, it could be that they are even less likely to value the use of these by staff.

Research focus

On the one hand, the use of emojis, memes and gifs in online HE teaching may engage students. These visual stimuli may foster feelings of connectedness with teaching staff

as well as making online learning content more memorable, both of which are evidenced as benefitting learning experience overall. On the other hand, the use of emojis, meme and gifs in online HE teaching may disengage students. In particular, students may perceive these visual stimuli as informal and unprofessional, especially when associated with over-disclosing or inappropriate online communication. Importantly, an understanding of this within a HE context is currently lacking within the literature. Developing a better understanding will aid HE teaching staff in utilising a range of visual stimuli when teaching and communicating digitally with students. Further, this study provides an important foundation for further research considering the role that emojis, memes and gifs may play within HE.

This study aims to explore students' perceptions of emojis, memes and gifs within a UK HE setting via one-to-one semi-structured interviews. Using a thematic analysis, key themes will be deduced to aid in understanding how students perceive the use of these visual stimuli. These findings will assist HE teaching staff in utilising visual stimuli effectively when interacting with students.

Methods

Participants

Ten one-to-one semi-structured interviews were conducted with university students from two separate universities based in the South of England (participants from one London based university N= 8). Participants were approximately 21 years of age (M_{age}= 20.6 years, SD= 1.06) and all fell within the developmental stage of 'emerging adulthood' (aged 18-24 years, Sawyer et al., 2018); eight participants identified as female and two participants identified as male. The majority of participants were in their third year of undergraduate study (N=5), with three participants in their second year of undergraduate study and two participants in their first year of undergraduate study. Psychology was the most popular subject of study (N=4), with two participants studying Law, two participants study Computer Science, one participant studying Business Management and Marking and one participant studying Film, Television and Digital Production. Participants' cultural background included Asian (N=7), North African (N=1), White Caucasian (N=1) and Mixed (N=1). Three participants were born and raised in the U.K., five participants were second-generation British and two participants were international students (neither born nor raised in the U.K.). Manning and Roy (2007) state that those born in Britain are likely to align themselves with the British identity; this is relevant to our study as it suggests that the symbolic meaning behind emojis, memes and gifs is unlikely to be confounded by cultural differences. We closely considered the international students' responses and did not identify any obviously differing perceptions to the rest of the participants and so maintained their data for the analysis. Participants were opportunistically sampled through online

advertisements published on the second author's public social media (Instagram, Twitter and Reddit) and the first author's email account.

Ethical approval was provided by the first author's higher education institution. Following the expression of interest, participants were emailed an informed consent sheet and invited to arrange a time and date for the interview. Seven interviews took place in-person and the remaining three interviews took place online via MS Teams. All interviews were conducted by the second author: a female undergraduate research assistant. Importantly, the first author, a female post-doctoral teaching associate, did not conduct the interviews to mitigate biasing students' perceptions.

Measures

In line with considerations of academic rigour within qualitative participant-led data, interview questions comprised a semi-structured design through a flow chart (De Wet & Erasmus, 2005; Levitt et al., 2017). Using a flow chart also allows for a more dynamic conversation between researcher and participant (Appendix A; Bachiochi et al., 2004; Hayes et al., 2022).

Participants were asked whether they mostly used Apple or Android operating system; we asked this as the visual design of emojis, memes and gifs slightly varies between Apple and Android operating systems and thus could impact the participants' own personal engagement with emojis, memes and gifs (Franco & Fugate, 2020; please see Figure 4 for an example). Participants were then asked which type of digital device they mostly use for educational purposes (e.g., attending online lectures); this was important to note as engagement with emojis, memes and gifs can differ depending on the device (e.g., viewing a gif on a smaller screen may be less clear than viewing the same gif on a larger screen; Polys et al., 2007). Participants were also asked which subject they study and in which year they are currently studying in, as well as whether they were an international or home student. We asked this as we know perceptions of learning can differ between year of study (Ahmed et al., 2018), disciplines (Entwistle & Tait, 1995) and location (Montgomery, 2010).

Figure 4. An example of how the visual design of emojijs slightly differs between an Apple and Android device; on the left is a smiley emoji that would appear on Apple operating systems (iemoji.com, 2023); on the right is a smiley emoji that would appear on Android operating systems (EmojiTerra, 2023).

Initially, questions were designed in order to gage involvement with online learning specifically (e.g., “have your lecturers/tutors used emojis, memes and/or gifs within online learning?”), however, participants naturally discussed in-person HE teaching (such as in-person lectures) where lecturers utilised emojis, memes and gifs. Please see Appendix A for the original version of our flow chart. We recognised that the use of emojis, memes and gifs is not limited to the online environment alone and so proceeded to analyse themes across both in-person and online settings. Participants were asked how frequently they engaged with both online and in-person HE learning and whether their lecturers/tutors used emojis, memes and gifs. Depending upon the participants' answer, questions were either centred around their own experience of emojis, memes and gifs or their perception of a friend's experience. All participants within our sample had experience of emojis, memes and gifs within HE learning and so questions regarding a friend’s experience were not utilised.

We know that within qualitative methodology it is important to provide space that allows participants to explore, share or clarify their own thoughts or views in a way that is unguided by the researcher (Clark, 2010; Isaacs, 2014). We ensured to prioritise this space by inviting participants to share any anecdotes regarding the use of emojis, memes and gifs in HE teaching at the end of the interview.

Procedure

To ensure academic rigour, the procedure of this study followed the COnsolidated criteria for REporting Qualitative studies (COREQ) guidelines (Tong et al., 2007). The COREQ guidelines comprise a 32-item checklist outlining best practice for conducting qualitative research; categories within this checklist include ‘research team and reflexivity’, ‘study design’ and ‘analysis and findings’. Prior to data collection, ethical approval was obtained in accordance with the first author’s university research ethics guidelines. This study was also conducted in compliance with the ethical guidelines of the British Psychological Society.

All interviews took place in April 2022 and were conducted by the second author; a female undergraduate research assistant. The second author completed training in qualitative methodologies and analysis, as well as training in the conducting of one-to-one semi-structured interviews. Before data collection, the second author completed a pilot interview and received feedback from the participant and first author. The feedback included ways to prevent the conversation from departing from the main topic by reaffirming participants answers and drawing back the structured questions for a more direct conversation. Participant feedback was positive and reinforced practices followed from the COREQ guideline. Participants were informed that the interviewer was an undergraduate research assistant working in collaboration with the first author; a female post-doctoral teaching associate.

Interviews took place during U.K. workday hours (9am-5pm GMT). Seven interviews took place in-person and three took place online. The in-person interviews were conducted in a quiet room within a university library and the online interviews were conducted via MS Teams. Both in-person and online interviews were conducted to meet the travel needs of participants. Interviews averaged at 10 minutes in length (SD= 0.12 minutes). Each interview was recorded using a digital recording device that was placed on a table between the participant and the researcher for the in-person interviews or next to the computer speakers for the online interviews. Participant consent for the interviews to be recorded was gained both physically (consent letter) and verbally (agreeing on the recording). All recordings were immediately transferred to an encrypted Dropbox for Business folder only accessible by the authors and deleted from the digital recording device. When transcribing, all identifiable data that could void anonymity was recorded as '[BLANK]'. All participants received a written and verbal debrief at the end of the interview and were invited to ask questions.

Design and analysis

The second author transcribed the recordings verbatim into Microsoft Word documents which were then imported into NVivo software (released in March 2020) for analysis. The first author then checked the transcriptions for potential inconsistencies (e.g., phrasing that sounded inaccurate); no evidence of this was found. In accordance with Clarke and Braun's (2015) framework, an inductive thematic analysis approach was adopted to 'elicit and interpret semantic patterns within relevant context' (Hayes et al., 2022, p. 347). Within NVivo codes were ascribed which were formed independently within each transcript to avoid the premature formation of themes (Clarke & Braun, 2015). These initial codes were then compared across transcripts by the first author who identified emerging themes (Clarke & Braun, 2015). Thematic maps were formed to assess these themes visually (Hayes et al., 2022). The second author then further analysed these themes and repeated the process of identifying emerging themes to ensure consistency and homogeneity (Clarke & Braun, 2015). The research team then discussed and agreed the final themes.

Results

Following an inductive thematic analysis, two main themes arose from the data: communication, and learner experience (Figure 4).

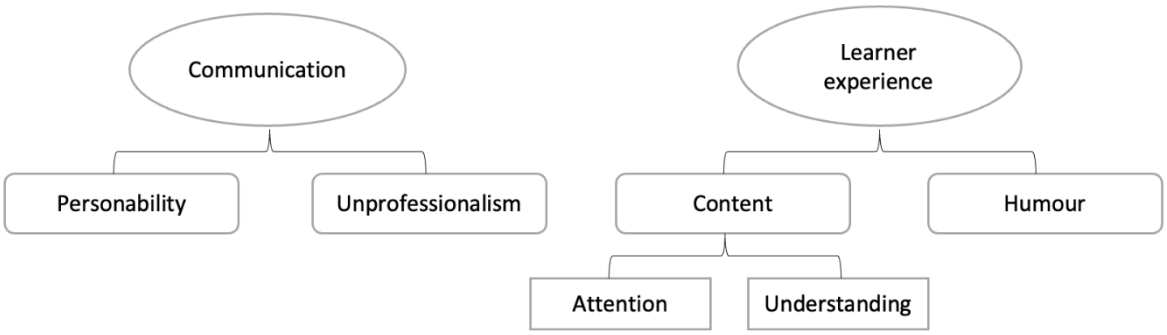

Figure 5. Themes derived from an inductive thematic analysis. Primary themes are presented within ovals: communication, and learner experience. Secondary themes are presented in rounded rectangles: personability, unprofessionalism, content, and humour. Tertiary themes are presented in rectangles: attention, and understanding.

Communication

Personability

Students recognised emojis, memes and gifs as an "*effort to make [lectures] more personable*" (Participant 2, 3rd Year Computer Science), with the motivation of the "*professors to seem more human and more on our level"* (Participant 4, 2nd year Business Marketing and Management). Students viewed this motivation as driven by staff aiming to "*meet you at your level*" (Participant 10, 2nd Year Psychology) due to students being a "*younger demographic, a younger audience*" (Participant 1, 3rd Year Film, Television and Digital Production). The use of emojis, memes and gifs was explained as important "*to this generation*" as "*a language we understand*" due to "*using a lot of social media and use a lot of emojis and stuff*" (Participant 9, 2nd Year Psychology); thus, students appreciated the use of emojis, memes and gifs as they "*bring it down to like our level and our comfortableness and how we are as a generation*" (Participant 3, 3rd Year Computer Science). Humour arose as important for strengthening personability further:

> "*one of our lecturers had used a few gifs and it became pretty funny, we all came together in a lecture hall and we managed to engage with the lecturer*" (Participant 7, 1st Year Computer Science).

As well as a tool to "*communicate with people our age*" (Participant 10), students felt that emojis, memes and gifs fostered "*less of a teacher-student relationship and more of a learner-learner relationship*" (Participant 10, 2nd Year Psychology). Subsequently, this made staff "*more approachable*" (Participant 9) and "*less intimidating*" (Participant 3, 3rd Year Law), which fostered the likelihood of students "*coming and asking for help in the future*" (Participant 9, 2nd Year Psychology).

Overall, students were positive about the use of emojis, memes and gifs in relation to personability, however, this was only the case where usage was perceived as authentic. If staff were seen as "*overdoing*" (Participant 7, 1st Year Computer Science) the use of emojis, memes and gifs, which did not match their "*teaching style*" (Participant 8, 3rd Year Psychology), students reported this as inauthentic:

> "*she in general was very monotonous and boring in her explanation of lectures so that might have played a role into why we disliked her smiley faces*" (Participant 7, 1st Year Computer Science).

Further, this was seen to impair how students viewed the generational difference between themselves and staff:

> "*He used a bit too many emojis like you know old people use technology and they don't know which emoji to use*" (Participant 5, 1st year Law).

Unprofessionalism

Students outlined the risk of the student-staff relationship becoming "*too casual*" (Participant 4, 2nd Year Business Management and Marketing): "*like if the lecturer started talking about their personal life*" (Participant 3, 3rd Year Law). Becoming "*too comfortable with the lecturer*" (Participant 3, 3rd Year Law) was viewed by students as problematic as it "*removed the professionalism of the university"* (Participant 2, 3nd Year Computer Science). For example, using emojis, memes and gifs when informing students about assessments was seen as too informal:

> "*like if there's a presentation that's quite serious or its in preparation for something important then it makes it less professional*" (Participant 1, 3rd Year Film, Television and Digital Production).

This would subsequently impair the student-staff relationship: "*everyone took it really poorly*" (Participant 2, 3rd Year Computer Science).

Learner experience

Content: Attention

Emojis, memes and gifs were viewed as effective in "*minimising the loss of attention*" (Participant 6, 3rd year Psychology) especially during long lectures where it was easy to "*zone out*" (Participant 8, 2nd Year Psychology). In fact, students outlined that lectures could be viewed as a "*very boring learning environment*" (Participant 7, 1st year Computer Science), but that the use of emojis, memes and gifs helped in "*catching attention*" (Participant 5, 1st year Law) and "*taking a break from the formal*

side of the learning" (Participant 3, 3rd Year Law). This was vocalised as particularly important during long lectures:

> "*so like rather than sitting through a lecture for 2 hours, I feel like it centres that focus back to the learning*" (Participant 3, 3rd Year Law).

Due to the moving feature of gifs, one participant acknowledged how they could be more useful for grabbing attention than an emoji or a meme: "*they can dig more deep than* [stationary] *emojis*" (Participant 8, 2nd Year Psychology). However, they could potentially be more distracting than emojis or memes as they impacted students' ability to "*focus on what would come up next*" instead daydreaming about "*what the sound was earlier*" while watching the gif (Participant 8, 2nd Year Psychology).

Students did report that the use of emojis, memes and gifs could "*sometimes make it distracting*" (Participant 1, 3rd Year Film Television and digital production). Students recognised that lecturers were trying to "*make it a little bit more exciting*" (Participant 1, 3rd Year Film Television and digital production), but in the process this could result in "*focusing on the gifs rather than the information*" (Participant 10, 3rd Year Psychology). At times, the use of emojis, memes and gifs could be viewed as "*not really needed*" (Participant 1, 3rd Year Film Television and digital production) and "*tedious*" (Participant 7, 1st Year Computer Science):

> "*my professor was using gifs and emojis and memes to describe everything in every phrase and at one point I was like we got the point*" (Participant 5, 1st Year Law).

Content: Understanding

Emojis, memes and gifs were viewed as helpful in explaining and consolidating learning: "*they're just more like communicable in that way and easier to understand*" (Participant 8, 2nd Year, Psychology). Regarding explaining learning, students felt that emojis, memes and gifs could "*add another layer of meaning*" (Participant 2, 3rd Year Computer Science) to topics than just text. For example, they were helpful in explaining definitions or concepts:

> "*they actually give us a cue to understanding the meaning behind the term*" (Participant 8, 2nd Year Psychology).

Students also reported that emojis, memes and gifs were useful for visual learners. When discussing whether emojis, memes and gifs were engaging, Participant 5 (1st Year Law) stated:

> "*everyone grasps knowledge differently but for me when I see a lot of words put together then I wouldn't really understand […] but with visuals and graphics or something, I think that's how I understand better*".

Humour

In regard to consolidating learning, students reported memes and gifs as helpful for applying their learning: "*like I actually understand this joke because of the content I've learnt*" (Participant 7, 1st Year Computer Science). This was especially the case where the student "*connected*" (Participant 8, 2nd Year Psychology) with the emoji, meme or gif, as this assisted their recall: "*when you think back, you feel the same emotion you felt the first time*" (Participant 8, 2nd Year Psychology).

In being rooted in connections made with student's university experience, humour regarding memes and gifs presented itself in two ways. Firstly, students reported to have found "*a comic about procrastinating writing research papers… [as] …heavily relatable*" suggesting the intended joke was perceived as a form of catharsis for "*monotony and boring side of the work*" (Participant 2, 3rd Year Computer Science). Students recognised aliteracy puns made in reference to their learnt content: "*hypothesis hippopotamus and I think it's a bit of a joke*" (Participant 10, 2nd Year Psychology). Humour also extended to pop culture references unrelated to educational content yet an example of pop culture reference of student's childhood: "*few futurama gifs were thrown around*" (Participant 10, 2nd Year Psychology).

Students also outlined use of humourous emojis as ineffective, particularly if students "*don't really get*" (Participant 7, 1st Year Computer Science) the nature of the joke. If the lecturer was perceived as "*trying to be funny but it didn't work out*" (Participant 6, 3rd Year Law) students would feel "*disconnected from the lecturer*" (Participant 2, 3rd Year Computer Science). This was particularly the case where the lecturer was perceived as being "*sarcastic*" (Participant 7, 1st Year Computer Science):

> "*he then put a smiley face […] he was sending it in a context of like…like…go stuff yourself*" (Participant 2, 3rd Year Computer Science).

Students reported that staff "*have to have a balance"*" (Participant 5,1st Year Law Student) when using emojis, memes and gifs comedically.

Discussion

Within an evolving digital society, teaching is incorporating a range of technological tools to foster student engagement. Within our findings we see that digital pedagogy is expanding in HE, particularly via the use of emoijs, memes and gifs. As we expected, students (aged 18-24 years) view emojis, memes and gifs in HE teaching positively; this is due to the benefits of developing personability of the lecturer as well as strengthening the learner experience. Although, students do acknowledge the challenges of unprofessionalism as well as the potential distractions from learning. Importantly, HE teaching staff and policymakers should consider our findings and how

emojis, memes and gifs can be successfully incorporated within HE pedagogical approaches especially for a digitally connected generation.

Our findings contribute to literature regarding student-staff relationships as a mechanism for engaging students (Jainham & Kahl, Jr., 2012). In particular, our findings extend the importance of connectedness (Alsanhnani et al., 2017). Previous literature suggests that connecting with students breaks down the traditional student-teacher hierarchy (Simister, 2011; Garvett, 2023). Our study supports this, particularly in relation to our findings around humour. Furthermore, building upon Ross and colleague's (2014) conceptualisation of connectedness as a form of care, our findings highlight personability of the lecturer as a positive outcome of using emojis, memes and gifs. Students reported emojis, memes and gifs as a medium for staff to connect with students, breaking down intergenerational barriers. Students appeared to appreciate this and particularly valued members of teaching staff who did so. This evidence of caring about students as a digitally connected generation could potentially lead to further engagement in learning and subsequent positive academic outcomes (Giles, 2008); we cannot surmise this from our findings, but our findings do present an interesting foundation for further considerations of student-staff connectedness and academic outcomes.

Strengthening the student-staff relationship using emojis, memes and gifs may also align with our findings regarding the learner experience. Our findings extend current research showing that, as well as emojis (Holtgraves & Robinson, 2020; Mahaffey, 2021), memes and gifs also aid the learning process. Students reported emojis, memes and gifs as supporting understanding and attention during learning. Where personability of the lecturer is also fostered by emojis, memes and gifs, it could be that students are even more likely to pay attention to learning. When we also consider the formality of HE teaching (which our participants repeatedly reported as boring), utilising emojis, memes and gifs to foster personability and to maintain attention may have a positive outcome upon learning and academic outcome. Again, we cannot conclude this from our findings alone, but it would be interesting to consider the long-term outcomes of emojis, memes and gifs upon academic outcome via personability and the learner experience.

Despite the positive perceptions of emojis, memes and gifs, students do report challenges. In particular, unprofessionalism was perceived as a risk. We know that students expect high quality education when transitioning to university (McLaughlin & Mills, 2009) and this is often associated with a sense of formality (Briggs & Hall, 2012; Sander et al., 2000). Where teaching is perceived as too informal and the relationship with staff too casual, students express disengaging with the learning process. These findings relate to those of Pham and colleagues (2022) who theorised students' expectations and disengagement via perceived academic quality; their findings illustrated that where students perceived academic quality as low, they were more likely to disengage with learning. Staff who came across as unprofessional may be

perceived as having an overall informal approach to teaching and particularly when we consider the investment of attending university (i.e., financial, emotional, Nel et al., 2009), this may be interpreted by students as low academic quality and subsequently disengage.

Our findings also highlight that students find emojis, memes and gifs particularly distracting when they feel they have been overused. Linking back to Pham and colleagues (2022), students may perceive the overuse of emojis, memes and gifs as indicative of low academic quality. In fact, when we consider students' expectations of formality (Briggs & Hall, 2012; Sander et al., 2000), the overuse of emojis, memes and gifs may be viewed as juvenile. Our findings did highlight that important periods of the academic year were not viewed as favourable times to use emojis, memes and gifs (e.g., assessment periods). Students may expect a more formal approach to learning during important periods of the academic year (i.e., assessment periods) and so the use of a potentially juvenile teaching method may clash with students' expectations. In turn, this may disengage students from learning.

Limitations and future directions

Our study is novel in its focus upon exploring digital visual stimuli in HE. Future research should continue to explore emojis, memes and gifs as tools within HE, particularly as our findings show that they are being used within a HE context. It would be interesting to investigate the quantitative relationship between emojis, memes and gifs and student engagement in order to determine whether students' perceptions actually map onto their behaviours and outcomes.

Our findings should also be considered by educational policymakers; for example, policies around the design of lecture content and online communication between students and staff should consider the role of emojis, memes and gifs. It would be useful for staff to be supported in their understanding of how emojis, memes and gifs may be perceived by students; educational policymakers can aid this by utilising our findings within guidance written for staff.

Despite the application of these findings, there are some limitations to consider. The majority of our participants were recruited from one UK-based HE institution. We know that experiences of teaching vary across institutions (Crozier et al., 2008). Our findings recognise that emojis, memes and gifs are being used by staff at the two HE institutions that our participants represent but this may not be the case at other institutions. Future research could address this by interviewing a larger, more institutionally diverse, sample and comparing perceptions. This would be useful in understanding whether staff are using emojis, memes and gifs more broadly across HE and whether students' perceptions are similar across institutions.

Although we did enquire as to which operating systems participants used and which digital devices they used for educational purposes, we did not see any related themes or subthemes. Franco and Fugate (2020) found that participants responded differently to emojis from different operating systems, particularly in relation to the emotions they associated with them. Further, Polys and colleagues (2007) found that screen size and interaction level informed how participants perceived the attractiveness of visual stimuli. We therefore thought that this may inform student perceptions of emojis, memes and gifs. Within our main flow chart of questions we did not make any explicit links between participants' responses and operating systems or digital devices and this may explain why no themes or subthemes arose relating to this. It would be useful for future research to explore whether operating systems and digital devices inform students' perceptions of online visual stimuli more explicitly.

It would be interesting for future research to also explore the context of the teaching practice. Participants referred to the use of emojis, memes and gifs within higher education teaching, however, we did not enquire specifically into the nature of this teaching; for example, whether it was small or large-group teaching. Gaining further information about the nature of the teaching could provide more context around students' perceptions.

Conclusions and recommendations

Immersed within a digital society, students (aged 18-24 years) engage with emojis, memes and gifs in everyday communication. Our study aimed to take an exploratory approach at developing an understanding of how students may perceive lecturers' use of emojis, memes and gifs within a HE context. Our findings highlight that lecturers are using emojis, memes and gifs. Importantly, our findings show that students recognise the use of emojis, memes and gifs within HE teaching and that their perceptions of this are both positive and negative. Students perceive lecturers' use of emojis, memes and gifs as positive when they present the lecturer as more personable. In fact, where the use of emojis, memes and gifs are associated with humour, students not only viewed the lecturer as more personable but also felt more engaged with the learning content. Students also felt that the use of emojis, memes and gifs were a helpful learning aid particularly for more dense learning content. On the other hand, students did highlight that when overused emojis, memes and gifs could be viewed as unprofessional or a distraction from the learning content. Problematically, this can lead to disengaging with learning.

Importantly, our study highlights that there are both positive and negative associations with lecturers' use of emojis, memes and gifs. Although our study is exploratory in nature and presents some initial findings in a very new area of research, we do suggest some preliminary recommendations. In particular, we recommend that lecturers do not shy away from using emojis, memes and gifs within their teaching and online

communication with students. We do, however, recommend that lecturers avoid including too many instances of these, especially memes and gifs, as this can be particularly disengaging for students. Lecturers should reflect upon the appropriateness of their emoji, meme and gif use; for example, including a gif when discussing something students may perceive as serious is not recommended. More broadly, we recommend that future research build upon the foundation of this study and that HE lecturers and policymakers consider the role of emojis, memes and gifs within HE teaching and communication.

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Appendices

Appendix A. The original version of the flow chart used for the interviews. Participants responses spanned both in-person and online higher education learning.