An Interpretative Phenomenological Analysis of the Barriers to the Use of Humour in the Teaching of Childhood Studies

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The above article was first published online on May 10, 2017. The methodology section has been corrected to accurately reflect the sampling technique employed in this study. The revised version is published in this issue.

In the original publication, it was noted that the sample was determined by certain criteria, including gender, years of teaching experience, and previous professional career. However, having reflected back on the process, this was not the case. Whilst it was ensured that participants had at least six years of teaching experience in higher education, the fact that the sample was dominated by female academics from a wide range of backgrounds was inevitable given the ‘make-up’ of the population under investigation, and was not something that was specifically planned for.

ABSTRACT

Whilst pedagogical humour is a common teaching strategy employed by educators across compulsory education systems, a review of the extant literature expounds that it is a tool largely neglected by instructors throughout higher education. As such, this study sought to discern the perspectives of educators concerning the barriers to the use of humour in the teaching of Childhood Studies. Semi-structured interviews were carried out with five educators on the BA (Hons) Childhood Studies programme at a Yorkshire-based post-1992 university. Verbatim transcripts of the interviews were analysed using interpretative phenomenological analysis (IPA).

Respondents believed that an academic’s personality held a significant bearing upon their pedagogy, and therefore their use of classroom jocularity. Educators claimed that whilst pedagogical humour did have its benefits, it was also capable of causing offence, distracting from course content, and making students feel uncomfortable. Consequently, educators generated situated understandings of when and where they were permitted to employ pedagogical humour, and what form said humour should take; they were cautious not to overuse humour, and were also less likely to draw upon it when teaching emotive or distressing content, and when teaching groups of students they were less familiar with. Educators also noted that they were less likely to draw upon pedagogical humour in the lecture theatre, despite university-wide pressure for instructors to produce more interactive lectures.

Keywords: Humour; Pedagogy; Higher Education; Childhood Studies; Interpretative Phenomenological Analysis (IPA)

Introduction

Humour in education

Humour is considered to be a valuable pedagogic tool across much of the education sector; yet this has not always been the case. Historically, the dynamic between pedagogue and student was a solemn one (Bryant, Comisky, & Zillman, 1979); as recently as the 1990s, the use of humour throughout education was “elusive at best, and flat out dissuaded by administrators at worst” (Lovorn, 2008, p. 6). However, following the educational paradigm shift of the late 20th century – from a practical focus on teacher-centred instruction to a constructivist, collaborative learner-centred praxis, educators have deviated from traditional means of schooling to explore alternative ways of teaching (Krause, 2014). Indeed, Check (1997) noted that we are now “in an era when a stern, somber attitude in teaching should be passe and a new era of cheerfulness, respect, and a joyful learning presentation be ushered in” (p. 165).

Humour has become a desideratum in educators, and is often cited as an essential characteristic of a ‘good teacher’ (Horng, Hong, ChanLin, Chang, & Chu, 2005). These assertions are not unfounded; whilst the portrayal of humour has been likened to “walking a
tightrope” (Poire & Wilhelm, 2014, p. 27), the literature suggests that when used appropriately, constructively, and in moderation, pedagogical humour boasts a plethora of cognitive, physiological, psychological and social benefits. These include, but are not limited to, facilitating the comprehension and retention of learnt material (Powell & Andreasen, 1985); aiding the establishment and maintenance of positive relationships (Weaver & Cotrell, 1987); assisting in the delivery of sensitive content (Johnson 1990); and enhancing student engagement (Deviney, Crawford & Elder, 2013).

**Humour in higher education**

The notion of academics employing humour through their practice is not revolutionary; Cashin (1985) claimed there was a near consensus throughout academia that a degree of humour enhances the learning experience. Yet, whilst scholars are increasingly advocating the use of pedagogical humour, it remains a tool used sparingly. Indeed, Morrison (2008) posited that there is a frequent ‘humour paradox’ in educational establishments, wherein educators are open about their appreciation of pedagogical humour, but are often reluctant to, or even uncomfortable in, portraying it through their practice.

There is a dearth of literature regarding the reasons behind the limited use of humour in higher education. Morreall (1989) asserted that the ‘non-serious’ nature of humour may lead its presence in academia to be considered unethical, irrational and irresponsible, whilst Deiter (2000, p. 20) argued that many educators across the tertiary sector judge the use of humour as “frivolous, undignified and demeaning to the profession”. The very essence of humour is antithetical to the traditionally pensive characterisation of teaching and research throughout higher education; Strong (1983) posited that neither in style nor content does humour fit the disciplinary norm, adding that its problematic reception may be traced to its academic oddity. As such, it comes as no surprise that “academic institutions generally do not enjoy reputations as breeding grounds for humour” (Black & Forro, 1999, p. 166).

**Research aims**

Pedagogical humour has been studied in the teaching of a range of topics across the tertiary sector, including medicine (Ziegler, 1998), history (Halula, 2013), statistics (Friedman, Halpern & Salb, 1999), and TESOL (Olajoke, 2013). Yet, to date, there is an absence of research conducted into the use of humour in the teaching of Childhood Studies. Further, the literature regarding the use of humour in higher education is “still not sufficiently developed, especially when it comes to teachers’ issues and perspectives” (Nasiri & Mafakheri, 2015, p. 29). As such, this study seeks to explore educators’ discourses regarding the barriers to the use of humour in the teaching of Childhood Studies.

**Methodology**

This study employed interpretative phenomenological analysis (IPA) as its methodological framework (cf. Smith, Jarman & Osborne, 1999). IPA is anchored in phenomenology – the “study of human experience and the way in which things are perceived as they appear to consciousness” (Langridge, 2007, p. 10), and draws upon the fundamentals of hermeneutics – “the practice or art of interpretation” (Dallmayr, 2009, p. 23) – and idiography – a concern for “the particular and the individual” (Smith, Harre & Van Langenhove, 1995, p. 59).

Through its two complimentary commitments – ‘giving voice’ and ‘making sense’, IPA provides a platform to attain an ‘insider perspective’ (Larkin, Watts, & Clifton, 2006). To do so, IPA dictates the requirement for a double hermeneutic: the participant makes sense of their personal and social world; the researcher attempts to interpret the respondent’s meaning making (Smith & Osborn, 2008). IPA recognises that the influence of the researcher’s own perceptions makes it impracticable to gain access to the exact experiences of another, completely or directly; the objective is, therefore, to obtain a description which is as ‘close’ to the participant’s view as is possible. Yet, IPA is more than a ‘simply descriptive’ methodology; the researcher must provide an interpretative account of what it means for respondents to hold such discourses, within their particular context.

Shaw (2001, p. 48) asserted that IPA is particularly suitable for investigations where the concern is for the “uniqueness of a person’s experiences, how experiences are made meaningful and how these meanings manifest themselves within the context of the person both as an individual and in their many cultural roles”. Thus, IPA is fitting for the novelty, complexity, and subjectivity saturated in humour, teaching, and learning related investigation, and for the generation of a rich and nuanced understanding of the barriers to the use of humour from the viewpoint of those facing them – the academic teaching staff.

**Participants**

Generally, IPA researchers seek to generate a purposive, fairly homogeneous sample, thus enabling investigators to capture detail on a specific group of individuals who have experienced a particular phenomenon. As such, members of academic staff with teaching responsibilities on the BA (Hons) Childhood Studies course at a Yorkshire-based post-1992 university were invited to participate.
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Having purposively identified this population, I elected to only invite educators who had at least six years of teaching experience across higher education to participate; this was to ensure that participants had sufficient acquaintance with teaching across the tertiary sector to produce the in-depth, rich responses required for IPA. Thus, the sample was homogeneous in that they had all taught in higher education for at least six years; they all had the same academic rank - Senior Lecturer; they all taught on the same course - BA (Hons) Childhood Studies; and they all worked at the same institution - a Yorkshire-based post-1992 university.

I invited four female and one male academic to take part in the study, all of whom agreed to participate. Participants were between 35 and 65 years of age, and emanated from a range of professional backgrounds, including primary education, educational management, and social work. Whilst critics have asserted that small sample sizes limit the representativeness of research findings, IPA is very cautious about general claims; it favours the meticulous analysis of cases, rather than jumping to generalisations (Smith & Osborn, 2015). In embracing its idiographic commitment, smaller, more concentrated samples are commonly utilised - in IPA research, less is more (Reid, Flowers & Larkin, 2005). The concern is for quality, not quantity; Hefferon and Gil-Rodriguez (2011) wrote that “fewer participants examined at a greater depth is always preferable to a broader, shallow and simply descriptive analysis of many individuals” (p. 756). Indeed, larger sample sizes may result in the loss of “potentially subtle inflections of meaning” (Collins & Nicolson, 2002, p. 626).

Methods and data collection

Smith, Flowers and Larkin (2009) posited that IPA is best suited to a data collection approach which will “invite participants to offer a rich, detailed, first person account of their experiences” (p. 56); semi-structured interviews were therefore employed during this study – they are considered the “exemplary method for IPA” (Smith & Osborn 2008, p. 57). An interview schedule was devised prior to data collection containing open-ended, non-directive questions; the schedule was used with caution – it acted as a guide and did not restrict lines of conversation. As IPA recognises participants as the experiential experts (Eatough, Smith & Shaw, 2008) respondents were prompted to “find their own voice, develop their own themes, and analyse their own experiences in ways that made sense to them” (Garrod, 1997, p. xv) – my role was to guide, rather than dictate the direction of the interview. This promoted free narrative and detailed responses from participants, and consequently enabled access to and comprehension of their experiential world – a primary aim of IPA (Asghar, 2008). The interviews lasted 40-55 minutes and were audio recorded, allowing full engagement in discussions. Interviews were conducted in an office or classroom with only the participant and I present; this ensured confidentiality and eliminated the possibility that the presence of others may contaminate data. Interviews were later transcribed verbatim with short utterances and gesticulations excluded from the transcript.

Data analysis

IPA “starts with, but should go beyond, a standard thematic analysis” (Brocki & Wearden, 2006, p. 6); it is a “cyclical process where the researcher proceeds through several iterative stages” (Biggerstaff & Thompson, 2008, p. 11). To enable my full immersion in the analysis, transcripts were read whilst listening to audio recordings of the interviews; transcripts were subject to multiple readings, and with each reading the text was annotated. Notes were made regarding any thoughts, observations, and/or reflections relating to participant’s narratives. The use of open annotated coding ensured that themes and distinctive voices emerged from participant’s testimonies, rather than pre-existing notions present in the literature. Notes were later transformed into emergent themes. When material within an individual’s narrative was contrary to that of other participants, earlier transcripts were, first of all, revisited to the ensure that something important had not been missed. Only then would a contrasting theme be posited. Emergent themes were organised into sub-themes according to conceptual similarities, and subsequently compiled into master themes, providing “a composite portrayal of experience” (Denovan & Macaskill, 2012, p. 10).

Findings

Whilst all participants claimed to employ humour in their practice, they did elucidate a number of barriers to its portrayal in the teaching of Childhood Studies. The main themes emergent from participant’s testimonies were:

- Personality
- The lecture
- Not knowing students
- Module content
- ‘You can overdo it’

Personality

Participants maintained that lecturer’s personalities held a significant bearing upon their pedagogy, and therefore their use of classroom humour. Indeed, a mass of literature has asserted that educator personality is amongst the leading contributors to, and
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predictors of, teaching styles (Walla, 1988; Cano, Garton & Raven 1992; Zhang, 2007). This theme contains the sub-themes: ‘dry’ academics, and teaching persona.

‘Dry’ academics

The notion of lecturers being ‘serious’ or ‘dry’ individuals was a reoccurring theme within participant’s testimonies. Sarah noted that some individuals are simply ‘dry’, and that this is a common characteristic of those who teach across higher education, whilst Lauren suggested that some educators viewed their role as merely a deliverer of information, rather than producer of an entertaining discourse:

Some people just prefer to deliver the information and that is their role. Some people would say that ‘we are not here to be friends’ or ‘we are not here to be entertainers’ and I can understand that. But I think everyone has their own approach.

Sophie held that as pedagogy is highly influenced by the educator’s personality, those who are ‘serious’ are less likely to draw upon humour as a pedagogical tool:

...because so much of it [teaching] is about your personality, people who are similar to me – prone to liking a laugh and light-hearted – use it [humour]. But then a lot of academics are quite serious and it would be hard to imagine them having a joke in a session. I do not think they want to be perceived as serious – they are just serious.

These notions echo traditional stereotypes of educators across higher education; Ziegler (1998) wrote that lecturers are generally considered “quiet, intelligent, [and] knowledgeable but rather dull” (p. 344), whilst Shatz and LoSchiavo (2005) posited that students have low expectations of instructors, before they even enter the classroom – they expect lecturers to be boring.

Teaching persona

Cheryl suggested that as a sense of humour is not a constant – what is considered humorous in one context may not be in another, educators may elect against portraying humour in the classroom, despite being jocular in nature. She believed that rather than being ‘dry’ or ‘serious’ individuals, some educators curtail their use of humour in the classroom in favour of a more formal approach to teaching. In doing so, educators generate a teaching persona:

I think some of them [educators] are different outside the classroom. I think of some colleagues who you may go out with on a night out and they are the life and soul of the party and they have loads of funny stories to share, but in front of the students they are deadly serious and it is a completely different role.

Steve gave a clear example of how this works in practice, noting that he consciously adapts his teaching style – reducing the levels of humour in seminars – to ensure students do not take advantage of his light-hearted nature:

I wonder whether because of the image I project of myself, other people take the piss a bit.... That is my personal dilemma - am I too light-hearted? So to balance it out – I would not use humour in the same way in a seminar.

The lecture

There are a lot of parallels between being a lecturer and a stand-up comedian....as soon as you walk in and you stand at the front, you have the power. (Steve)

You do feel you are just doing stand-up in a way as you are just standing there and everyone is listening. (Cheryl)

Whilst comparisons were made between lecturing and stand-up comedy, the lecture was paradoxically considered a major barrier to the portrayal of humour. This theme contains the sub-themes: lack of confidence, and lack of interaction.

Lack of confidence

Educators considered the lecture as an “artificial situation” (Sophie) or a “performance” (Steve), whereby lecturers are “very much...talking at a group – passing on information” (Sarah). There has always been a sense of ‘performance’ in university lecturing: “the panoptic architecture of the lecture theatre – indeed the term ‘theatre’ itself – prefigures a degree of performativity within the task of lecturing” (Tait, Lampert, Bahr & Bennett, 2015, p. 1). However, participants did not appear to hold confidence in displaying humour in their ‘performances’; Cheryl argued that it is very easy for humour to “flip against you” when teaching in front of large groups, whilst Sophie also displayed a lack of confidence in her ability to successfully use pedagogical humour:

It is very easy to make a bad joke...I would not particularly look to make jokes in a lecture because I think you have a really high risk of looking a prat.

Sarah conceded that she did not have the confidence to consider herself as humorous, adding that she “does not think that her opinion counts for much” regarding what is and is not funny in the lecture theatre. Despite congenitally displaying inequitable balances of power, Foucault asserted that the lecture makes visible said power relations, thus neutralising them, exposing both the educator and their intentions (Simon, 1971). As such, Berk (1998) discerned that many instructors are reticent to use humour through fear of embarrassment and lack of confidence in their ability to make students laugh.
Educators asserted that they were open to students introducing humour into the classroom – providing it was appropriate. Yet, as the lecture is primarily a one-directional flow of dialogue, respondents recognised that audience participation is limited. Consequently, participants claimed that they were less likely to introduce humour into the lecture as the opportunity for interaction is restricted; Sarah posited that it is “very hard to interact with a whole lecture theatre”, whilst Steve held that students often attend lectures expecting to behave passively, further limiting the opportunity for humour. Indeed, Norrick (2009) noted that humorous episodes are not only reliant upon the source – in this instance the lecturer, but are also compounded by elements pertaining to the recipient. Therefore, not only is the lecturer required to be open to an interactive and humorous discourse for it to occur, but also the student.

Participants noted that there was university-wide pressure for educators to produce more interactive lectures. However, Sarah was dubious concerning the feasibility of ‘interactive lectures’:

For me, this is not easy; whilst my seminars are generally interactive, my lectures are not. This is something I am going to have to think about over the summer. I am not sure how I will be able to interact with large groups all at the same time without losing control.

Respondents noted that such pressure was likely to lead them to adapting their practice; whilst participants were generally unsure as to whether they were more likely to draw upon greater levels of pedagogical humour as a result, Lauren did assert that humour was one of the methods she may look to in an attempt to maintain students engagement over long periods of time. She did concede, however, that two hours – the length of lectures – was a long time to remain humorous for.

Not knowing students

Participants noted that they were less likely to employ pedagogical humour when they were unfamiliar with the students. Sarah maintained that in smaller classes, where instructors know their students better, not only are educators more comfortable drawing upon humour, but so are the students:

With seminar groups though, you can get to know them more on an individual level – get a feel for what they are like. You can then introduce humour more often with them, once you get to know them. I think students are more comfortable and confident with you once they get to know you too, so they are probably more likely to introduce humour within seminars too.

Further, Steve noted that when educators are more familiar with students, there are more topics which can be laughed at. The literature demonstrates a strong connection between levels of trust, confidence, and comfort in relationships, and the use of humour: Dean and Gregory (2004) reported that there must be some connection between individuals before they feel the freedom to introduce humour, whilst Tanay, Roberts and Ream (2012, p. 2137) held that trust is a “pre-requisite to ensure humour results in beneficial outcomes”. Indeed, Sophie noted that when she did not know all the students in her class, she was cautious in her use of humour to ensure that there were no negative outcomes:

When you have a class of 25-30 students you do not know everybody, particularly in the beginning. Some of the students are shy and lack confidence, and I have to be careful not to make them feel uncomfortable. I do not want to embarrass them, or make them feel not at ease, so that curtails me.

Lauren also noted this concern, adding that “you have to build that rapport” before using humour as “you do not want to offend”.

Module content

Participants held that their use of humour was contextually dependant – both in time and place. Lauren noted that whilst some educators do draw upon humour when teaching ‘serious’ topics, she would refrain from doing so. Cheryl posited that it is not always possible to use humour in teaching as certain topics are less accommodating of jocularity than others:

...sometimes it is really not appropriate to the subject matter. I think that some modules I would not add humour into many of the things. Like policy – like how do you make that funny? I probably could but I would have to really think about it. Or safeguarding, that would be inappropriate a lot of the time. It is just about engaging in the right way, and it is not always possible.

Whilst module content can be overtly humorous (Macagnone, 2013), educators recognised that many topics studied across Childhood Studies – such as childhood and loss, looked after children, and safeguarding – may be considered distressing for students. Educators noted that they must take extra care when considering the employment of humour relating to sensitive content, as some students may deem it inappropriate.

In contrast, Steve argued that there is nothing that one cannot laugh at, adding that ‘gallows humour’ may aid in the teaching of more serious topics:

Even the most dreadful things, there are still things that people crack jokes about. Some of them may seem really awful, but actually there is humour in everything...Maybe it is not appropriate for the more serious things, but then you have gallows humour, that could help.
Steve did warn, however, that gallows humour is a risky strategy, noting that the “big thing [with gallows humour] is recognising that not everyone has the same sense of humour”; he concluded that educators must be sufficiently aware of their students’ personalities and perceptions of humour before drawing upon it.

‘You can overdo it’

Participants asserted that when considering the use of humour, they ensured that they did not lose sight of their overarching remit to educate. Educators expressed that their role is not to entertain, but rather to “provide students with the best education possible” (Sarah).

...if you see really good stand-up you think maybe you could do more of that, and then you think no, as you are a lecturer. It is not meant to be entertainment – it is something quite serious. (Cheryl)

Respondents suggested that following the tuition fee rises of 2012, there are unprecedented levels of pressure to ensure the provision of high quality education; as such, participants held that humour must not be used excessively, adding that educators must ensure they have ‘that balance’ between amusing students, and the efficient and effective delivery of lesson content.

Whilst I do use humour and I want my students to like my lectures or seminars, they are there to learn and I am there to teach. We cannot forget our roles – it has to be productive. Especially now students are paying so much money to attend university, we must provide them with the best education possible. It is not my role to stand at the front and make jokes; like I said, it has to be productive. (Sarah)

Immoderate classroom humour can increase student boredom and frustration (Lei, Cohen & Russler, 2010), create an undisciplined, overly playful environment (Stroud, 2013), and even be perceived as a moment of self-indulgence or narcissism on behalf of the educator (Ketabi & Simin, 2009). As such, educators held that ‘appropriate’ humour does not only pertain to the type of humour used, its intentions, and the context in which it is portrayed, but also its regularity.

**Limitations and further research**

**Student perspectives**

In excluding students from this study, it was possible to glean a richer, more in-depth understanding of academics’ discourses concerning the barriers to the use of humour in the teaching of Childhood Studies. Yet, the burgeoning interest in student-centred learning across higher education has led student voice to hold greater pertinence in where, when, and how they are taught (Wright, 2011; McLinden, 2013). Indeed, the inclusion of student evaluations as a ‘key’ metric in the imminent Teaching Excellence Framework (TEF) is likely to hold further transformative power concerning higher education pedagogy. As such, student perceptions of humour are crucial to its prevalence in the classroom; after all, should pedagogical humour take a more active role throughout higher education, it should be for the betterment of students’ educational experience. Further research is therefore required; additional research would not only enable the investigation of student perspectives, but would also provide the opportunity to discern whether the discourses of students differ from the educator’s perceptions of student discourses.

**Conclusion and recommendations**

This investigation has explored the perspectives of educators concerning the barriers to the use of humour in the teaching of Childhood Studies. Participants reported they were cautious not to overuse humour, and were less likely to make jokes in the lecture theatre, when teaching emotive or distressing content, and when teaching groups of students they were less familiar with; they did, however, remain open to a humorous discourse. Carver (2013, p. 33) posited that there is a need to prevent “over-cautiousness from limiting the potential for teachers to create an enjoyable learning climate which rewards share humour, risk and spontaneity”; this study offers an alternative stance: rather than being limited by ‘over-cautious’ educators, classroom humour is not reliant solely upon its source. Whilst participants noted that an academic’s personality held a significant bearing upon their levels of classroom humour, they also alluded to the role both students and the institutions themselves play in fashioning pedagogy. Pedagogical humour is not a one-way linear communication, but rather a reciprocal process which is shaped by all those it touches – “humor has no essence; it is inserted into the dynamics of social life and its contents and form reflect social relations, power distributions, and changes in both” (Dwyer, 1991, p. 1).

The challenge for educators across higher education is to ensure that classroom jocularity remains appropriate and positive in the eyes of all students, be that in its form, frequency or context. Yet, the subjectivities which invariably accompany not only humour, but also teaching and learning practices, lead what is considered ‘appropriate’ humour to be in itself, often limited. As such, humour should be pursued carefully. This is not to dissuade instructors from drawing upon pedagogical humour – a mass of literature affirms that it can be a positive force in the classroom; however, we must remember that whilst humour can be an “important spice to use in teaching” (Atherton, 2013, p. 1), not all palates are receptive to all forms of spice. Given their role as co-creators of classroom humour, further recommendations regarding its use across higher education are unwise without first procuring the views of students.
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Biographies

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References


doi: https://doi.org/10.5860/crl.60.2.165


doi: https://doi.org/10.1080/03060460500834536


doi: https://doi.org/10.1249/jpaap.v1i1.42


doi: https://doi.org/10.1080/00187267909378339


doi: https://doi.org/10.1177/135910530200700561


doi: https://doi.org/10.24022/tegp.v2i1.1937


doi: https://doi.org/10.1017/S1478951504040192


doi: https://doi.org/10.1002/berj.3019


doi: https://doi.org/10.3402/egp.v2i1.1937


doi: https://doi.org/10.1002/berj.3019


doi: https://doi.org/10.1177/00187267910440040101


doi: https://doi.org/10.1177/0886260508314932


doi: https://doi.org/10.1017/CBO9780511896613.002


doi: https://doi.org/10.1111/j.1470-6431.2005.00445.x


doi: https://doi.org/10.1080/038012900160605


Stroud, R. (2013). *The Laughing EFL Classroom: Potential Benefits and Barriers.* *English Language Teaching, 6*(10), 72-75. doi: https://doi.org/10.5539/el.v6n10p72


