Journal of Research in Innovative Teaching & Learning

Leveraging neuroscience to enhance students’ compassion, spirituality, and social justice awareness
Guest Editor: Marilee Bresciani Ludvik

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Welcome to this special issue of the *Journal of Research in Innovative Teaching and Learning* (*JRIT&L*). With this special issue, we invite you to explore just a few ways in which neuroscience research can inform how we design and assess innovative teaching and learning opportunities. Why did we select translational neuroscience as a topic of inquiry? It comes as no surprise that many who hold us accountable for high-quality student learning and development are not necessarily criticizing students’ ability to pass tests that measure specific content knowledge. Rather the criticism surrounds lack of evidence of what the National Academics of Sciences refers to as inter- and intra-personal skills (Herman and Hilton, 2017). Intentionally cultivating these skills such as positive future self, conscientiousness, attention regulation, emotion regulation, reflective learning, self-control, openness, effortful control, sense of belonging, academic self-efficacy, and prosocial goals and values have historically been rather elusive as scholars explore their nuances and the many ways in which they can be taught and effectively measured. What was once thought to be fixed, neuroscience research is demonstrating as quite malleable (Zelazo *et al.*, 2016). And yet, it appears we have only begun to scratch the surface of what is possible.

What we are understanding from neuroscience research is that the students’ ability to demonstrate crystallized intelligence (e.g. facts) and fluid intelligence (e.g. executive functions, inter- and intra-personal skills) are indeed intertwined (Zelazo *et al.*, 2016; Bresciani Ludvik, 2016). We do not know for sure how much we need to develop fluid intelligence skills sets so that crystallized intelligence is utilized within context and done so accurately and effectively. What is apparent is that, as educators, we need to ensure that our students have opportunities to learn and demonstrate adequate ability in both areas. Intertwined as crystallized and fluid intelligence appear to be, many of us continue to design the learning and development opportunities for students to acquire crystallized and fluid intelligence separately or ignore fluid intelligence acquisition all together. Could that be why there is a lack of evidence to share with stakeholders who hold us accountable for high-quality student learning and development, which includes inter- and intra-personal skills?

In this issue, you will read about some very specific ways in which some of these inter- and intra-personal skills are being nurtured and measured. These skill sets particularly that of pro-sociality – referred within as compassion – along with other skill sets are introduced in the following manuscripts in various ways. To cover all of the skills that employers are requesting more evidence of would require additional special issues (Organisation of Economic Cooperation and Development, 2013; Hart Research Associates, 2013). As such, we invite you to explore the following questions as you read these manuscripts and consider how applicable their findings and recommendations are to your role within your organization:

1. Which of these skills (or learning and development outcomes) align with our organizational values?

2. How might we explore whether and in what ways we are providing our students with opportunities to learn and then demonstrate these skill sets?
How might we apply the findings and recommendations published within this issue to our organization?

With whom would I need to collaborate to pilot some of these approaches?

With whom do I need to collaborate to gather evidence of the pilot’s success or failure?

How might I want to share with JRIT&L what we discovered from adopting and adapting what we found in this special issue or submit for publication our innovative work?

Following your read of this issue, we would appreciate hearing from you about what was of interest and what you found innovative and perhaps even inspiring. We do hope you find this issue useful to your own practice. If so, please let us know how it was. Enjoy!

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References


Compassion on university degree programmes at a UK university
The neuroscience of effective group work

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Abstract

Purpose – The purpose of this paper is to explore the neuroscience that underpins the psychology of compassion as a competency. The authors explain why this cognitive competency is now taught and assessed on modules of different degree subjects in a UK university.

Design/methodology/approach – The paper is divided into first, an exploration of recent psychology and neuroscience literature that illuminates the differences, and relationship, between empathy and compassion for safety building in teams. Within that, the role of oxytocin in achieving social and intellectual rewards through the exercise of cognitive flexibility, working memory and impulsive inhibitory control (Zelazo et al., 2016) is also identified. The literature findings are compared against relevant qualitative data from the above university, so far, nine years of mixed methods action research on compassion-focussed pedagogy (CfP).

Findings – These are that the concept and practice of embedding compassion as an assessed cognitive competency in university group work is illuminated and rationalised by research findings in neuroscience.

Research limitations/implications – The limitations of the study are that, so far, fMRI research methods have not been used to investigate student subjects involved in the CfP now in use.

Practical implications – The paper has implications for theory, policy and practice in relation to managing the increasing amount of group work that accompanies widening participation in higher education (HE).

Social implications – The social implications of what is outlined in the paper pertain to student mental health, and academic achievement; to policy and practice for HE curriculum design across subjects and disciplines; and for the HE remit to serve the public good.
Originality/value – A review of this kind specifically for student assessed group and its implications for student academic achievement and mental health has not, apparently, been published.

Keywords Assessment, HE, Compassionate, Intelligent group work, Micro skills

Paper type Conceptual paper

Introduction
Duhigg (2016) reports on a study by Google of 180 teams amongst its 55,000 employees. The purpose was to identify the key feature(s) of the “perfect” team. What factors defined the most resilient and best-performing teams in the company? Starting in 2012, the multi-million dollar study, Project Aristotle, could find no common variables, no patterns or key features of the most resilient and innovative teams, except for one lead. All teams seemed to have their own internal “norms of team behaviour”. Project Aristotle directed its attention to investigating the behavioural norms of the company’s outstanding teams. It was found that in these teams, members made each other feel safe, and it was two safeness-building behaviours in particular that seemed to “raise the collective group intelligence” (Duhigg, 2016). The first one was that members shared speaking time together equitably. Second, they were “skilled at intuiting how others felt based on their tone of voice, their expressions and other nonverbal cues” (Duhigg, 2016). At the same time, in other teams, it was found that “collective intelligence declined” where either or both of these “norms” were not in place “even if, individually, all the members were exceptionally bright” (Duhigg, 2016). In particular, over talking – monopolising – in team discussions by one or two members “hobbled” the collective thinking processes (Duhigg, 2016).

In student group work in higher education (HE) too, the collective intelligence can be reduced when an individual, wittingly or unwittingly, monopolises. At the same time, instrumentally helped by the monopoliser, other students may contribute very little to the group’s efforts to think together. No matter how much both behaviours can turn out, in students’ private narratives, to be resented (Gilbert, T., 2012) both behaviours can become “norms” in a group, particularly in the individualistically competitive environment of an increasingly, neoliberal HE sector. Both of these behaviours demonstrate major communicative difficulties within teams. They block the group’s access to the multiple perspectives that feed collective intelligence building.

Students’ use of compassionate micro skills in HE team work
In the UK’s University of Hertfordshire, students on some degree modules in some departments – the Humanities, Business and Computer Science – are assessed on their individual use of the micro skills of compassion. Compassion is understood in very similar terms in neuroscience (Colonello et al., 2017; Klimecki et al., 2014; Weng et al., 2013; Immordino-Yang et al., 2009), psychology (Gilbert, 2005, 2017a; Bates, 2005); and, anthropology (Spikens, 2017; Goetz et al., 2010; Feather, 2006) to mean the noticing of distress or disadvantaging of self or others and a commitment to reduce or prevent it. This is not the same as empathy although the neural circuitry for empathy may be recruited into that for compassion, as discussed below.

Training in compassion-based micro skills for task focussed, face-to-face student group work is provided in a short workshop at the beginning of a participating module[1] (Gilbert, T., 2012, 2016a, b, 2017b) (see also three examples of the micro skills: Table A1). Each of the skills, or techniques, is theoretically underpinned and evidence based, yet they are not intended to be prescriptive or inflexible. They are simply to help students practise and demonstrate, on the hoof, the rapid cognitive processing that keeps the group optimising the learning and social experiences of all its members. Many of these skills are non-verbal. An example is the compassionate management of one’s own and others’ eye gaze in the group – inclusive, excluding or avoidant eye gaze (Gilbert, T., 2017b). The whole repertoire of group micro skills overall, derived from the cross-disciplinary scholarship on compassion, has been assembled through action research over a number of
years. So far, \((n = 830)\) students and \((n = 15)\) tutors have been involved in the studies (Gilbert, 2012, 2016a, b; 2017a, b, 2018). A typical application of these assessed skills is in small, research-based discussion groups in seminars or tutorials: each student presents an article he/she has selected from his/her independent reading, and then joins a critical discussion of it with the whole group, usually of about four students. The reading will often be on a tutor-agreed topic, e.g., from the previous lecture.

Overall, in contrast to control groups, the compassion-focused pedagogy (CFP) described above, appears to have had three effects (Gilbert, T., 2012, 2016a, b; 2017b).

The first is an apparently enhanced social interconnectivity between students, including in relation to student interculturalising processes (Zapata-Barrero, 2013; Cantle, 2011). This was evident from micro-ethnographic analysis of films of assessed student discussions; loosely structured student interviews and focus groups; surveys; and from field note observations of in-class control and intervention group discussions.

The second effect, again in contrast to control groups, appears to have been in relation to learning experience. Data for this came from the above interviews and focus groups (students \((n = 34)\); teaching staff \((n = 12)\); external examiners \((n = 3)\)) and from analysis of assessment feedback and external examiners’ reports.

The third effect appears to have been related to academic performance. Statistical analysis of this was carried out at the host university and blind, at the Royal Veterinary College, University of London, for a participating module of \((n = 38)\) business students (Gilbert, T., 2016a, b). This was repeated when a statistical analysis of academic performance was carried out at the host university and blind at the University of Hertfordshire for a participating module of \((n = 220)\) computer science students (Gilbert, 2018) (in this case, the CFP was embedded under the auspices of the Social Experience and Emotionally Intelligent Learning research project run in the Computer Science department by Doolan).

Findings replicated in both departments were that there was no statistically significant evidence of a BME attainment gap, whereas in the controls for each department the attainment gap was similar to the UK HE national average[2]. The Business and Computer Science departments both have notable diversity of students with large numbers of BME students on their modules. The host university’s proportion of BME students (including international students) is approximately 50 per cent compared to white local students, partly explained by its proximity to London.

This paper draws on a neuroscience perspective on how and why embedding even brief, evidence-based training of students on the theoretically informed micro skills of compassion, for their use in assessed group work, seems to be associated with the above effects. It draws on qualitative data from the above research to help illuminate this exploration. First, a brief context is set for a key issue that the research has sought to address.

The individual vs the group
In HE’s wider context, Chickering (2010) points to an increasing neo-liberalisation of the HE sector that seduces and pressurises students into normalising the notion of private enterprise, and competitive individualism at the expense of other priorities. One of these neglected priorities says Chickering, is HE’s primary remit: to serve the public good. At the same time, HE encourages students to become leaders through competitive individualism (Marturano et al., 2010), and to do this can mean being not just different, but better than others in some respect. Self-esteem depends on this (Kingston, 2008; Neff, 2003).

Self-esteem: striving for failure
Self-esteem – the measuring of oneself in some aspect of performativity, against the performance of others (Neff, 2003) – adds to the problematic nature of many students’ experiences of HE. Self-esteem is a poor substitute for deliberative, measured, self-compassion
Self-compassion and its cognitive implications

Self-compassion calls on incisive cognitive work to be done so that irrationalities in assessing the self can be identified, quarantined and dismantled. It is illogical to offer words of encouragement and support to a friend who is feeling inadequate and then unquestioned abuse to oneself when in the same situation. Many students do both. The point of self-compassion is to notice, to pin down and interrogate such anomalies, not normalise them. A high-achieving student in the host university for the above studies, was upset that she had left a planned paragraph out of her latest third-year history essay. As was usual for her, the essay had been graded as a 1st – the highest achievement band – but she was crying in the academic skills tutor’s office. She was stupid, she said; she wanted to kick herself. Her tone when she spoke to/about herself in this way was hostile and cold. At the same time, she could not be encouraged to share the experience of her human mistake with her friends for their support, because this would make her feel worse she said. Despite efforts to reduce her anxiety and repair her self-esteem, she left the office still upset and self-critical.

Self-esteem is irrational and unsustainable (Neff, 2003). One can be overtaken as the smartest, the best looking, the most talented, the thinnest, the fastest (whatever the chosen measure of performance is) at any moment. In a sample of (n = 103) students of a university in London, Kingston (2008) identified that those who were high academic achievers and had related high self-esteem were, surprisingly, at greater risk of not completing their degrees than many of their peers who were not such seasoned academic achievers. In her survey and interview-based study, Kingston found these high-achieving students tended to seek maintenance of their high self-esteem from what she terms, external loci of control: tutor feedback, exam and coursework results, for example. They tended not to value fellow students for validation or support. In particular, Kingston found that they were the most likely to drop out, compared to those of their fellow students who turned, not just to tutors, but to their peers too for reassurance and validation (Leahy, 2005) during their programmes.

Additional literature from clinical psychology cites other problematic linkages with self-esteem. Two of them – narcissism (Bushman and Baumeister, 1998) and prejudice (Aberson et al., 2000) – have direct implications for HE seminar interactions, for example, through monopolising (Yalom and Leszsz, 2005), and stereotyping and other heuristic thinking (Pitner and Sakamoto, 2005), respectively.

In his model of three types of affect regulation, P. Gilbert (2005, 2017a) suggests that purposeful, thoughtful, deliberative self-compassion (with warm, not harsh tone and intention towards the self) stimulates a self-soothing system in the brain. This helps mediate the two other systems in his model: the drive system[3] (associated with dopamine); and, most importantly, the threat system. Without the mediating effect of the (trainable) self-soothing system, the brain can enter into loops of oversensitivity to threat from which it cannot escape (Gilbert, P., 2005, 2017a). In the current climate of HE (Chickering, 2010), this can lead to excessive rumination on potential to fail, and then to anxiety and depression. As for the student described above, this can be underpinned by a sense of being unconnected to others or to their (often shared) distress.

Students often do not feel safe when they are encouraged to invest so much of their identity in their personal social performance and academic achievement. Neff et al. (2007) share a common finding of Rude et al.’s (2004) study, and with studies by Sillars et al. (1997)
and Stirman and Pennebaker (2002). All three studies of people’s self-talk, identified that “the use of first person plural pronouns and social references is linked to lower levels of depression and better relationships, while the use of first person singular pronouns is linked to elevated suicide rates” (Neff et al., 2007, p. 7). They conclude: “[…] these results suggest that the psychological benefits of having a more interdependent self-concept are far-reaching” (p. 145). Thus, Goetz et al. (2010) highlight a need for more research on the “appraisals, experience, displays and physiology of compassion” (p. 364).

This supports educationalists, from Vygotsky to Cozolino (2013), who identify affect as a core mediator of learning processes. Indeed, “The minutest emotion affects learning” (Kingston, 2008). Fear and aggression are powerful mediators of the flight/freeze/flight paradigm of emotions that are motivated by the need to protect personal safety. Training students’ attention-regulation skills, by focussing them on others’ social experiences, learning and academic achievement in groups could also help their regulation of these negative emotions around personal safeness.

Safeness and cognitive load
In this regard, like P. Gilbert (2005, 2017a), Cozolino (2013) also emphasises: “The neural circuitry that assesses the environment for danger also serves as the infrastructure of attachment circuitry in social animals” so that safeness and learning “have evolved as interdependent processes” (p. 241). This is critical to this paper. He explains why, in biological terms (pp. 74-92), when people do not feel safe, cognitive processing cannot be made available for learning to take place: the brain is otherwise engaged in monitoring outside risks and potential dangers. Overall, it appears that safeguarding personal self-esteem could impede the development of Neff et al.’s (2007) notion of an interdependent self-concept and thus the cohesion of the discussion group as a single, thinking organism.

Self-compassion, compassion that is received from others or compassion that is given can stand down the brain’s ever on duty threat system (Gilbert, P., 2017a) through the release of the neuropeptide oxytocin (Gilbert, P., 2016, 2017a Depue and Morrone-Strupinsky, 2005). This leads to a greater sense of safeness which in turn further down regulates the threat system:

When children and adults feel safe, they are more creative in their problem-solving, more integrative in their thinking (Gilbert, P., 2005, p. 22).

Helpful to understanding the cognitive processes involved in such thinking (which is free of distractions from attending to social or other anxiety) is a review by Zelazo et al. (2016) of current research on attention-regulation skills. From a number of studies, they identify these skills as being dependent on: cognitive capacity (the ability to think in flexible ways); working memory (the ability to recall information and apply it to the purposes of a current situation); and, impulsive inhibitory control (IIC) (the ability to resist enacting behaviours that are based on impulse or habit). These three capacities, which they refer to as executive functions, are important components of effective compassion in task focussed group work because all of them “are involved in conscious goal-directed problem solving” (Zelazo et al., 2016, p. 2). We now discuss the first two executive functions together, and then the third. The functions are explored in relation to students’ compassionate management of their group work.

Cognitive flexibility and working memory for empathy in compassionate groups
Empathy can arise from affective arousal which is the result of emotional contagion. This can be paralysing, if one is overwhelmed by the distress that one experiences as a result of seeing another in pain or trouble, one is impotent to act to help. Harvard biologist, Robert Sapolsky (2017) explains, “a fair degree of detachment is just what is needed to actually act. Better that, than our hearts racing in pained synchrony with the heart of
someone suffering, if that cardiovascular activation mostly primes us to flee when it all becomes just too much to bear” (p. 551).

This problematic emotional contagion type of empathy is activated by a particular neural circuitry (Gilbert, P., 2017a). But empathy, as a competency not an emotion, that uses Zelazo et al.’s (2016) cognitive flexibility and working memory, depends on a different neural circuitry. In group work, this second type of empathy is a cognitive ability to take others’ perspectives, to think through the variables and potentials of their alternative histories and experiences, how their views have formed and/or the methods, interpretations of subject and the implications and potentials of these, that other people can bring to the table. This processing includes the need to tolerate one’s own or another’s distress in order to remain curious, to learn, to understand. Moreover, through curious enquiry, socratic questioning and open listening, the risk of projecting one’s own feelings and understandings of the world on to others (instead of understanding the other person’s) can be reduced. Projection refers to assuming that what you feel must be the same as what others are feeling. This is not empathy. It is rather like buying a gift for someone, say a picture framing kit, or a vintage toy car collection – on the basis that you would like to have such a gift.

As a competency, deliberative empathy (i.e. not projection, nor emotional contagion) helps in making sense of others (Weick et al., 2005). Lilien et al. (2008) describe such empathy as an organising mechanism that tends to be recruited by compassion. Indeed, empathy is not only critical to noticing distress (the first psychology/component of compassion), and cognitively unpacking it to make sense of it, it is also critical to the second component of compassion: deciding what to do that will be the most helpful and wise (Gilbert, P., 2017a). This depends very much on a working memory that can be applied to a current situation. A simple example may be that is it is not helpful to dive into water to save someone who is drowning and only then recall you cannot swim (Gilbert, P., 2017a). We now discuss the third of Zelaszo et al.’s executive skills for attention regulation: IIC.

Blocks to IIC in the HE learning environment

Block 1: cognitive overload and heuristic thinking

Here, we discuss control of impulsivity which we take to mean: the tendency to take actions without sufficient information or deliberation to optimise the appropriacy, or likely outcomes, of such actions. Failures of empathy play a role here but there may be underlying reasons for that to do with environmentally mediated intentionality and motivation. We refer to a lack of inhibitory control amongst students in their evaluations of different others. It worsens extant communicative barriers between students of diversity who see others as different and therefore separate from themselves (Thornton et al., 2012; Harrison and Peacock, 2010; Turner, 2009).

At the same time, some lack of inhibitory control of heuristic thinking is, perhaps ironically, licenced by attempts in HE teaching and learning to reduce it. For example, on some degree modules in UK, HE students are taught Hofstede’s (1983) theories with the explicit purpose of promoting greater interculturalism and interconnectedness amongst students. Turner’s (2009) account of such an endeavour on her business module in a Scottish university is an interesting example. She was disappointed in the outcome as the title of her article discussing it suggests: “Knowing Me, Knowing You, is there Nothing we can Do”?

Hofstede’s thinking was influenced by Hall’s (1959, 1969) theory of proxemics, according to which, people’s cultures mediate the physical distances they maintain from one another in day-to-day life. Thus, for example, Hofstede concluded that the Japanese routinely observed such distance on the basis of people’s agreed differences in power: power distance. He suggested this to be a key organising characteristic of the Japanese and attributed it to their “mental programming” (p. 76). Yet, it is Japan that is well-known for the practice by train station guards during urban rush hours, of leaning into commuters to push them closer together until they are crammed against each other.
Why is this acceptable in Hofstede’s Japan? People’s codes of behaviour change for many complex reasons, including for the pursuit of this or that resource. Identifying these codes (and their underlying motivations) that can switch behaviours seamlessly, including in groups, is important. It helps explain why accepted social norms in one context can suddenly be exchanged for seemingly conflicting alternatives in order to pursue other rewards (i.e. resources, such as salaries).

Pitner and Sakamoto (2005) suggest that practitioners such as tutors are dealing with increasing numbers of clients (students) and this is steering them into heuristic thinking – a falling back on (we suggest, Hofstedian) stereotypes – to process the identities of their students in the class room. This appears to be what happens amongst students too (Gilbert, T., 2012, 2016a, b). Students are socially navigating their places on often large cohorts whose memberships can be different from module to module. Nevertheless, this social-cognitive load is still not enough to explain the following. It is a field-noted observation of a small group of students in a control group related to the above research on compassion in group work.

**Block 2: affiliative reward processing**

In the first seminar of the module, an international student from central Europe was put into a discussion group of four. He found himself with three male British students and introduced himself to them at once. Even before he had finished, he had locked eye gaze with one student only who was sitting directly opposite him in the group. He maintained this sustained eye contact to the exclusion of the other two students in the group for the rest of the half-hour “group” discussion (Gilbert, P., 2017a). Social anxiety may have initially caused this student to direct his attention to one person only to talk to. However, he quickly took over the “discussion” and monopolised it.

The seminar, like the Japanese commuter train carriage above, is a small space for human interaction by strangers and in any such space, particular behavioural codes can arise and be adopted by the group, sometimes suddenly – for particular rewards. This may have underpinned the seemingly instant decision this student made about who he would direct his attention to, that is, to whom in the group he would affiliate himself, and to whom he would not. Studies of affiliative processes in the brain by neurobiologists are helpful for considering this second block to IIC in monopolisers in student group discussion work.

Depue and Morrone-Strupinsky (2005) investigated the “affiliative domain within the structure of personality” and for this they used Tellegen’s (1982) Multidimensional Personality Questionnaire which identifies two kinds of affiliative behaviour. One is social closeness and this demonstrates co-operation, capacity for warmth and altruism. The second affiliative behaviour is agentic extraversion which demonstrates capacity for boldness, leadership. Depue and Morrone-Strupinsky propose that agentic extraversion can resemble “competitive aggression” (p. 314) which, they note, influences not only the formation of social groups but their cohesion afterwards too. They identified three central neurobiological processes for each of these two types of affiliation: “appetitive and consummatory phases of reward processes and the formation of affiliative memories” (p. 1). In seminar groups, or indeed other student task focussed group work, these processes could be interpreted, according to Depue and Morrone-Strupinsky’s model, as representing first, felt need or desire for certain affiliative bond(s) based on the prospect of reward; next, the process of initiating or being receptive to contact and the reward (or otherwise) that this results in; and third, the creation of memories of the events involved – memories that may be negative, positive or mixed.

It is the first two factors that are of interest in relation to the international student in the UK control group. They appear to have involved the student in rapid, largely unconscious, cost-benefit calculations about his personal affiliation options in the newly
formed group. The neural networks activated here were evolutionarily determined as part of deeper brain motivation systems from earlier times for survival (Gilbert, P., 2005). They are still very much on line as a constant in the human brain via the threat system which is also activated in these older parts of the brain. This is likely to be particularly so when students are (rightly, in our view) allocated into groups where they are not with the familiar friends whose subject-focussed thinking (as well as social responses) may be more predictable to the student.

A key purpose of CfP (including assessment of its group micro skills) is to reset the brain’s processing of cost and benefits in relation to choices of affiliations. This is done through the deployment of reward incentives (degree credit) to initiate interpersonal affiliation processes with as many fellow students in seminars and other group work as possible.

Clearly, in our studies in the host university’s three departments, above, some cognitive flexibility to reframe others in terms of cost-benefit calculations needed to be incentivised by reward (c.f. Depue and Morrone-Strupinsky, 2005). Such flexibility, nurtured by its reward incentive, might also help students strengthen inhibitory control of their otherwise, mainly unconscious, rapid and – in the prevailing private enterprise environment of HE (Chickering, 2010) – heuristic affiliative processing.

Motivating for student group “norms” of compassion
Paul Gilbert (2017a) emphasises that intentional, motivated attention is the first vital component of compassion. Indeed, compassion is “critical to the motivation to alleviate suffering in the immediate context” (Hansen and Trank, 2016, p. 356). It is not clear yet where HE stands in terms of these concepts in relation to its remit for the public good. But, it has been suggested that distress calls are likely to have originally evolved as signals of threat that warned others to run away and so escape the danger of the disease, predators or other danger that was causing the distress calls or signals (Sapolsky, 2017). Compassion evolved later. It brought with it the ability to approach, not run from, distress signals, and to help (Spikens, 2017) The problem is that to a degree, HE encourages students back to this very early evolutionary tendency to run from, or rather leave behind, the distress of others who may be struggling in a competitive environment (c.f. Kingston, 2008). A considerable amount of the qualitative data gathered from the control groups in the compassionate micro skills studies at the host UK university suggested this. For example, students often noted how, in non-CfP seminars, they or others got left behind:

S26: […] it’s just a case of everyone trying to scoop up as many grades as they can and normally people feel the only way to do that is by talking a lot and sort of hogging the spotlight[5].

Interestingly, the negative impact of this on the collective intelligence was also implicitly pointed to quite frequently, as here:

S11: […] some people try to talk over you. So you try to say something, and they’ll cut in, so like you’re finally getting something out, and no one hears; they only hear the other people who talk all the time […] They don’t know the actual answer, they just talk and talk and talk[6].

In a similar vein, Duhigg (2016) reports that in the study of Google teams, above: “As long as everyone got a chance to talk, the team did well. But if only one person or a small group spoke all the time, the collective intelligence declined”.

In contrast where students were offered support in use of the compassionate micro skills of group work (three examples of which skills are shown in Table A1; see also Gilbert, 2016a, b; 2017a, b), there was evidence of the cognitive flexibility needed to focus on subject and on, sustained close observation of the self and others in the group’s internal interactions. For this black male student who scored over 70 per cent in his assessed seminar, including
specifically for his subject-relevant critical thinking performance, these micro skills were key because:

S33: Those things help you to focus […] So I think if it were all taken out, I don’t know how it would have went – for me anyway[8].

These are skills that train students to observe carefully, like micro-ethnographers, what is affecting the group and how:

S24: We were sort of analysing […] I know I was. I was like watching each other. What’s the body language like? How much is [sic] so many people talking[9]?

This attention regulation, also apparently helped to regulate negative emotions. Here, S1 who described herself as an over talker, talked about a change in her feelings of annoyance with fellow monopolisers after use of the micro skills: “I used to grit my teeth”[10]:

S1: But now […] I mostly deal with it by waiting for them to finish their point – “cause I don’t want to cut anyone up[11]”.

This and comments like it suggest increased IIC (c.f. Zelazo et al., 2016). Moreover, she had noticed changes in her fellow monopolisers’ behaviours too: “I notice that they’ve got a reduction in how they’re being as well”[12]. She explained further:

S1: I have noticed that some people are a lot more, um, reflective now to what’s being said, so their contributions are more – because they’re listening to other people – their contributions are a lot more in depth because it’s not just surface anymore[13].

The CfP’s focus on regulation of attention appeared to help monopolisers to speak less and yet contribute more (i.e. of substance). This may have contributed to the statistical results for academic performance related to the CfP research at the host university. It also appears to align with what Google found was raising collective intelligence in their best-performing teams (Duhigg, 2016).

**Rewards, oxytocin and changes to neurobiological affiliation processing**

Recalling Neff et al.’s (2007) findings on the “far-reaching” benefits of “having a more interdependent self-concept” (p. 145), is this student-reported experience of a CfP assessed seminar:

S29: I felt not as one person but I felt as a person within an entity and the entity was my group […] I felt that I was part of the group and I didn’t feel like an individual at that point. It didn’t make me feel like I’m focused on it. It made me feel like we’re all focused on it[14].

Similarly, this ethnic minority female student (S24), talked about two friends (one a white local male (S26), the other Malaysian female (S25)). These three business students were planning to open a business together after university, but:

S24: I mean S26 has been doing my course for a whole year. I’d never noticed him [or] even S25 […] I’d just sit there […] I would miss some of my tutorials [seminars] because I didn’t wanna be there […] I didn’t know anyone there and I felt like no one would speak to me […] in the [CfP] tutorials that we had, it was a whole class: everyone knew each other, everyone was communicating[15].

Note her reference to time in relation to being alone. These BME students, next, talked about their final filmed examined discussion, where: their individual use of compassionate micro skills; and their critical thinking and research skills, were separately assessed. This loss of a sense of self can induce a sense of time quickening when reward centres are activated:

S31: I think it [the examination group discussion] was getting interesting. Time was going a bit too fast.
S32: Cause we was actually forced to stop by one of the lecturers[16].
S33: I actually think we kind of got too excited with the discussion?
“Cause we actually really got into it, really, really got into it[17]“.

Similarly, in a different CfP focus group:

S23 You know, if we choose an interesting subject to talk about we could go on and on, we could push it [the one hour seminar] to two, three hours. Cause that’s how I felt sometimes, “cause I really wanted to[18].

Decety et al. (2012) have conducted neuroimaging research that shows compassionate action to involve activation of reward centres in the brain. This aligns with Depue and Morrone-Strupinsky’s findings on the release of oxytocin in association with the neurobiology of satisfying outcomes of affiliation processes. Similarly, Jensen et al. (2013) found in their study that when physicians believed that they were being effective in reducing a patient’s pain, reward-processing areas involving dopamine were activated in the ventral striatum. This, and the role of oxytocin, suggests why CfP students talked in the ways that they did, about (apparent progressions towards) helping behaviours in their CfP groups, compared to controls (above). Here for example, in Literature, this postgraduate said:

S13: At undergraduate level, um, I often used to get quite annoyed […] when we got people who were so shy that they wouldn’t talk, you’d sort of think, “Well, I want to get something out of this, so I will talk.” And […] you realise, “Well no, we’re also responsible for making sure other people have things to say and want to talk“[19].

The empathy to notice and take the perspective of the other person, mentalising his or her needs (the first component of compassion) can then be followed by informed compassionate action, as happened here for shy undergraduate business student (Y) in his (assessed) research-based discussion group:

S30: I don’t know if you guys noticed but (Y), he found it harder to communicate, but I think when we pushed him throughout the oral presentation […] he just became, he just delivered it all out […] you need someone to kick start you […] who might turn out to be a friend later on […] it comes out […] It comes back […] ideas start flowing […][20].

And in English Literature:

S4: All we had to really think about was that we were helping each other […] if I screwed up completely [someone else] would save me and be like “Oh, well what about this?” […] we stalled […] we stalled. We knew we’d help each other[21].

Overall, this syncing of group members to come to the assistance of a single member may be related to the role that oxytocin again plays as part of the reward system of helping others (Jensen et al., 2013). This can work in subtle communicative ways:

S4 […][we] just sort of look at each other and sort of acknowledge whether or not someone else has got something to say. I think it’s just sort of like a mutual acknowledgment – weird isn’t it[22]?

Further explaining these kinds of syncing are Shahrestani et al.’s (2013) findings that the oxytocinergic system enhances the ability to identify social signals, such as those in other people’s facial expressions. Colonello et al. (2017, p. 111) posit that this is because “the early detection of positive emotions [in others] […] is important to bond formation” and also to “positively reinforce and maintain compassion-focussed behaviour”.

As well as the involvement of oxytocin, this syncing in groups (as experienced above by students such as S29) is also supported by with mirror neurons that d’Pellegrino et al. (1992)
first identified amongst macaque monkeys who showed activation of neurons in the F5 (for monkeys) of their premotor cortices when observing others performing actions. This kind of mirroring of others can also be part of a validating (Leahy, 2005) mechanism, as well as being a helpful empathic tool. Students recruited this to make their transitions from (simply) multicultural to interculturalised group interactions:

S18: [...] to make friends and [...] walk in their skins like, try to see what kind of personality they [are] [...] adapt to them so you can communicate with them[23].

Claims like this were tested by, for example, the arrival of this Muslim female student, below, three weeks late on to a CfP business module. She said:

S28: When I go into seminars I find any other Muslim people there […]. Most of the others, I’m probably not gonna talk to them to be honest [24].

So I was thinking, “Oh my God. What if no-one talks to me?” But as soon as I got into a group I was fine, I was fine. […] I did the research so I was really lucky [sic]. We just got into the discussion and took it from there. It flowed really well [25].

Compassionate training and the neural circuitry
Outside of HE (as yet), because of the brain’s neuroplasticity, it is possible to image the effects of compassionate mind training on the development and enhancement of particular neural circuitry in the brain. Moreover, these changes, as shown by fMRI, may overlap with the neural circuitry of brain processes associated with empathy, but they are also separate and distinct as suggested earlier. Klimecki et al. (2014, p. 1) found increased activity in brain regions associated with empathy for pain when subjects were exposed to empathy training and then shown videos of human suffering. The anterior insula and anterior midcingulate cortex were involved and there was increased negative affect. This could be associated with our earlier discussion of emotion contagion. But, the researchers say, “In contrast, subsequent compassion training could reverse the increase in negative effect”. Compassion training also “increased activations in a non-overlapping brain network spanning ventral striatum, pregenual anterior cingulate cortex and medial orbitofrontal cortex. We conclude that training compassion may reflect a new coping strategy to overcome empathic distress and strengthen resilience” (Klimecki et al., 2014, p. 1).

But without the benefits of fMRI at the disposal of teaching and learning development in HE, it has been important for students to help us evaluate their experiences of possible longer term changes to their behaviours beyond their brief encounters with the compassionate micro skills for group work. We found many had remained alert to opportunities to enhance team experiences in the work place, on other modules, in group job interviews. For example:

S24: I do see a change when we have meetings on some of my modules. If there is something in front of us, if I just quietly move it to the side […] a laptop or a stack of books […] I did notice there was a change in the way the person opposite me was talking to me[26].

Such indication of longer term effects of the CfP are supported by Weng et al. (2013). They have identified that even short-term training in compassion causes changes to activation in the inferior parietal cortex, the dorsolateral prefrontal cortex (DLPFC), and in DLPFC connectivity with the nucleus accumbens. These are areas associated with social cognition and with emotion regulation.

Thus, this raises the question of the degree of students’ receptivity to the notion of such training in HE. Students appeared to be already primed for exposure to the CfP. They seemed already motivated to attend to the problems that caused themselves and/or others to be distressed or disadvantaged by group work interactions. Once aware of how easy this
pedagogy was, to learn and to use, reflections like these below, turned to institutional responsibilities, and this was something of a surprise:

S10: You use your seminar skills, your discursive skills all the time through undergrad and they really never get analysed in any way – you don’t get marked for them and I think it’s probably a failing of University[27].

S14: Half – half – your time in university is spent in the seminar. And you don’t get assessed for that[28].

And elsewhere:

S4: If everyone had [had] the advice and assessments – yeah, assessments on how to get involved and talk their minds, I think we would have benefitted. Looking back on my undergrad, I would have really appreciated people being able to speak up and have discussion […][29].

Conclusion
This paper has explored the notion of attention regulating skills that are supported by the executive skills of cognitive flexibility, working memory and impulse inhibitory control (Zelazo et al., 2016). It has then considered the place of empathy as a valuable cognitive competency in the execution of both psychologies of compassion – to notice distress or disadvantaging of the self and/or others and to act to reduce it. We propose that Zelazo et al.’s executive skills for attention regulation – cognitive flexibility, working memory and impulse inhibitory control – can all be developed by CfP. The allocation of degree credit for filmed (demonstrable/observable) compassion, on the hoof, is one motivation for students to participate. But the strategic, mechanical enactment of compassion was not identified in the available data sets here, nor detected in the interview narratives.

One reason for this may be that this motivation to care (Gilbert, P., 2017a; Sapolsky, 2017) is evolutionarily determined. Human archaeologists like Penny Spikens (2017) are keen to point out, overwhelming evidence has been found in early human remains from hundreds of thousands of years ago, of the globally widespread practice of tender care for the sick, the injured or disabled for often years at a time and through hard times of few resources. Through the development of new technologies in her field, such evidence confirms our brains are evolutionarily primed with the motivation to care for each other and that this is a very old behavioural “norm” – one that makes evolutionary sense for many reasons. Thus, we have not arisen out of a relentless and unmitigated history of violence that has been constructed for us and which therefore, as Spikins points out, can perpetuate itself because of our mistaken conceptions of who we really are. Education, from school to university has a major role to play in reclaiming who we are as a species and what our species can become.

An outline of Google’s Project Aristotle opened this paper. It was Aristotle who proposed that virtues such as compassion could became part of a person’s natural behaviour through practice. Group work is an ideal crucible in which, cost-free, HE can easily develop creative, critical and compassionate graduates who are motivated and equipped to build co-operative, interdependent communities locally and globally. Sapolsky (2017) explains: “The key is neither a good (limbic) heart nor a frontal cortex that can reason you to the point of action. Instead, it’s the case of things that have long since become implicit and automatic – being potty trained; riding a bike; telling the truth; helping someone in need”(p. 552).

There have been nine years of research to date at the University of Hertfordshire on how to get compassionate micro skills taught, practised and assessed on the modern degree curriculum. A key purpose has been to free students to think rationally and integratively, rather than be pre-occupied with their own (perhaps not so much others) social and academic safeness. In this sense, HE might usefully share Google’s curiosity about the psychosocial dynamics of extraordinary teams that have found “how to create psychological safety faster,
better and in more productive ways” to augment their collective intelligence (Duhigg, 2016). Feelings of reasonable safeness in the academic and social milieu of the university campus, nurtured by a sense of warm interconnectedness with others, is now irrefutably relevant to the UK’s currently highest ever levels of anxiety and depression amongst HE students (YouGovUK, 2016). The UK is also facing its highest ever recorded number of student suicides (Office of National Statistics, 2017), most often by hanging. It is unfortunate that the sector has now been left, so far, behind by its sister disciplines in the area of compassion. Indeed, in the corporate world too, while HE dribbles its toes in the sand, Google is joined by IBM, PcW and many other companies investing in ways to accelerate the nurturing of effective in-house team dynamics that attend to safeness in psychosocial processes. But neuroscience is joining with other disciplines to armour teaching staff to assert their own rational action in the HE class room over the concept of compassion, should they so wish, for themselves, their colleagues, their students, their teams.

Notes

1. This training in compassionate micro skills for student group work is now also part of the induction of all new teaching staff to the university (continuing academic and professional development programme).

2. The gap between white local students and black and minority ethnic students in terms of degree attainment (the attainment gap) is currently circa 18 per cent in the host UK university and across the UK Higher Education (HE) sector as a whole. Extensive research on possible causative factors for this gap has been carried out by a number of studies which support the findings of Broeke and Nicholls (2007) that a deficit model fails to explain the gap. From its own findings too amongst 938 BME students, the UK’s National Union of Students (2010) called for anonymous marking across the sector, and more socially integrative pedagogy and an increased level of class room discussion work in which to apply it.

3. The drive system is associated with the big hit, the high score, the big win – temporary euphoria (the release of the neurotransmitter dopamine). It can be associated also with the transitory and externally determined experience of happiness. Happiness, here, is in contrast to sustainable contentment. The latter is cultivated by deliberative, conscious, reasoning processes that manage the self-soothing system. The effectiveness of such soothing self-talk is optimised by a warm and kind tone (Gilbert, P., 2005, 2017a).

4. They define affiliation as “enjoying and valuing close interpersonal bonds and being warm and affectionate” and emphasise that “affiliation is clearly interpersonal in nature” (p. 2).

5. S26, local white male, stage 3, focus group transcript, p. 3, lines 77-78.

6. S3, UG female, stage 2, one-to-one interview transcript, p. 9, lines 252-255.

7. S33, local black male, stage 3, post-assessment focus group 3 transcript, p. 4, lines 101. Also note: oddly, this was S33’s first in any module through his first and second year, so far, in HE.

8. S33, local black male, stage 3, post-assessment focus group 3 transcript, p. 4, lines 106-107.

9. S24, local ethnic minority female, stage 3, post-assessment focus group 2 transcript, p. 4, lines 96-97.

10. S1, stage 1, one-to-one interview transcript, p. 3, lines 67.

11. S1, stage 1, one-to-one interview transcript, p. 3, lines 67-68.

12. S1, stage 1, one-to-one interview transcript, p. 3, lines 64-65.

13. S1, 3rd year female, stage 1, one-to-one interview, p. 1, lines 28-29.

References


Further reading


## Appendix

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<th>Signs of group communication dysfunction to notice</th>
<th>Objective</th>
<th>Compassionate micro skills</th>
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<tbody>
<tr>
<td><strong>Monopolisers</strong>&lt;br&gt;These over-talkers tend to fix eye contact with one person only in the group, often the person directly in front of them (Gilbert, 2016a, b, 2017a, b). Anxiety may be one reason (Yalom and Leszsz, 2005). The person to whom the monopoliser is directing all his/her attention/eye contact is now a colluder in an <em>opair</em> (Bion, 1961); and he/she should notice this.&lt;br&gt;<strong>The colluder</strong> does not act/or acts and the monopoliser does not respond.</td>
<td>To signal to the monopoliser that the group (including the monopoliser) needs other perspectives/input to optimise the quality of group problem solving, analysis and/or criticality on task.</td>
<td>The colluder breaks eye contact with the monopoliser, directing/channelling the over-talker’s gaze to left and right – that is, to all other members in the group, as though the group is a single organism.</td>
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<tr>
<td><strong>Quiet students</strong>&lt;br&gt;Some students do not speak/contribute much to the discussion. For the group to notice, not normalise this; and to create conditions in which the “quiet” student has “something to say and wants to say it” (S4)</td>
<td>Other group members share responsibility to signal to the monopoliser that others also need eye contact so that a more equal spread of participation can be facilitated.</td>
<td>Other group members act non-verbally to break up the dyad. Non-verbal communications field-observed to be effective (Gilbert, 2012, 2016a, b, 2017a, b) include: slight hand waves, tipping sideways of the head towards the colluder, hand extended across the table, reaching and pulling gestures and so on, as group members see fit, until the over-talker’s eye contact becomes inclusive to facilitate participation, (not simply interruption) by others. Group members invite, by name, the quiet student from time to time, e.g., “What do you think, Sam?” also allowing Sam to say, (something like) “Nothing just now” so that the group moves on seamlessly, until Sam is invited again later, e.g., “Sam, do you think that [...] “That is, entry points into the discussion are kept available to all members.</td>
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**Note:** Students are supported in their ability to notice dysfunctional dynamics – what to watch out for.

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Compassionate education from preschool to graduate school

Bringing a culture of compassion into the classroom

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Abstract
Purpose – The purpose of this paper is to make the case for bringing compassion to students in educational settings, preschool through graduate school (PK-20).

Design/methodology/approach – First, the author defines what is meant by “compassion” and differentiates it from the related constructs. Next, the author discusses the importance of bringing compassion into education, thinking specifically about preschool, K-12 (elementary and middle school/junior high/high school), college students, and graduate students (e.g. law, medical, nurses, counselors and therapists-in-training). The author then reviews the scant empirical literature on compassion in education and makes recommendations for future research. In the final section, the author makes specific and practical recommendations for the classroom (e.g. how to teach and evaluate compassion in PK-20).

Findings – While there is a fair amount of research on compassion with college students, and specifically regarding compassion for oneself, as the author reviews in this paper, the field is wide open in terms of empirical research with other students and examining other forms of compassion.

Research limitations/implications – This is not a formal review or meta-analysis.

Practical implications – This paper will be a useful resource for teachers and those interested in PK-20 education.

Social implications – This paper highlights the problems and opportunities for bringing compassion into education settings.

Originality/value – To date, no review of compassion in PK-20 exists.

Keywords Education, Schools, Classroom, Students, Compassion, PK-20

Paper type General review

1. Introduction
Beyond academic learning, schools are playing an increasingly central role in cultivating the necessary social, emotional, and ethical skills required to lead meaningful and successful lives. Over the last decade, there has been great interest in bringing mindfulness to educators and students alike (for reviews, see Meiklejohn et al., 2012; Zenner et al., 2014). Entire books (e.g. Jennings, 2015b; Rechtschaffen, 2016; Hahn and Weare, 2017), journal issues (e.g. Mindfulness, 2016, Volume 7, Issue 1; Childhood Education, 2017, Volume 93, Issue 2), and structured training programs (e.g. Mindful Schools; Learning to BREATHE; MindUP) have been dedicated to the topic of mindfulness and education.

More recently, there has been a wave of interest in social-emotional learning (SEL) more specifically. SEL programs tend to cover the concepts related to five core competencies: self-awareness (skills around identifying emotions, accurate self-perception, recognizing strengths, self-confidence, and self-efficacy), self-management (skills around impulse control, stress management, self-discipline, self-motivation, goal setting, and organizational...
skills), social awareness (skills around perspective taking, empathy, appreciating diversity, and respect for others), relationship skills (skills around communication, social engagement, relationship building, and teamwork), and responsible decision-making (skills around identifying problems, analyzing situations, solving problems, evaluating, reflecting, and ethical responsibility) (Weissberg et al., 2015; Zins et al., 2004).

While a recent meta-analysis that reviewed 82 school-based SEL programs suggests that these programs are effective and the benefits are lasting (Taylor et al., 2017), what is noticeably absent from SEL programs is the important construct of compassion—compassion for oneself, compassion for others (known and unknown, liked and disliked, etc.), and receiving compassion from others. To date, while formal, evidenced-based, secular[1], compassion training programs exist for adults (e.g. Gilbert and Proctor, 2006, 2010; Jazaieri et al., 2013; Neff and Germer, 2013; Pace et al., 2009; for a review, see Kirby, 2016) and data from these programs suggest that compassion can indeed be “taught” these compassion programs have not been widely used in the contexts of children, adolescents, or young adults. Given the links between compassion and emotional intelligence (e.g. Heffernan et al., 2010; Šenyuva et al., 2014), and the links between compassion and connection (instead of loneliness and isolation; for a review, see Seppälä et al., 2013), children, adolescents, and young adults seem to be a germane group to examine the construct of compassion within.

In this paper, I make the case for bringing compassion to students in education settings, PK-20. While important, the focus of this paper is not on teachers or educators (see Jennings, 2015a), but rather specifically focuses on students. In the next section, I define exactly what is meant by the term “compassion” and differentiate compassion from the related constructs. Next, I discuss the importance of bringing a culture of compassion into education, thinking specifically about preschool, K-12 (elementary and middle, junior high, and high school), college students, and graduate students (focusing on those in the helping/service professions). In the following section, I review the empirical literature on compassion in education and make recommendations for future research. Finally, I make recommendations for bringing compassion into the classroom from PK to 20.

2. What is compassion?
Various definitions of compassion have been presented in the literature and the term itself has been met with some controversy (for a review, see Goetz et al., 2010). Some theorists consider compassion to be a distinct emotion (e.g. Darwin, 1871/2004; Lazarus, 1991; Trivers, 1971), a vicarious emotion (e.g. Hoffman, 1981), a variant of love or sadness (e.g. Post, 2002; Shaver et al., 1987; Sprecher and Fehr, 2005), and a combination of a distinct and vicarious emotions (e.g. Batson, 1991).

The word compassion originates from the Latin root com- + pati (to bear, suffer). According to the Merriam-Webster.com (2017) Dictionary, compassion is defined as a “sympathetic consciousness of others’ distress together with a desire to alleviate it” (2017). In general, compassion can be considered to be a multidimensional state rather than a singular construct. Some have suggested that compassion has “two main components: the affective feeling of caring for one who is suffering, and the motivation to relieve suffering” (Halifax, 2012, p. 228). Author and Scholar Jack Kornfield (1993) has described compassion as “the heart’s response to the sorrow” (p. 326).

In this paper, the term “compassion” is referring to four key components. First, compassion involves an awareness of suffering (cognitive component). Second, compassion involves a sympathetic concern related to being emotionally moved by suffering (affective component). Third, compassion includes a wish to see the relief of that suffering (intentional component). Finally, compassion includes a responsiveness or readiness to help relieve that suffering (motivational component). From this perspective, compassion can be thought of as
a complex combination of a cognitive perspective, an affective state, an intention, and motivation, that may eventually give rise to cooperative and altruistic behavior (Jinpa, 2010, 2015; Jinpa and Weiss, 2013).

Differentiating compassion from the related constructs

Although compassion is a seemingly well-known construct, it is actually greatly misunderstood and is often confused with related but distinct constructs (e.g. Shaver et al., 1987). Just as it is important to define what compassion is, it is equally important to define what it is not. To aid in this conceptual clarification, I will briefly review some of these related, other-oriented constructs – empathy, sympathy, pity, personal distress, love, prosociality, altruism, well-wishing – highlighting what they mean and how they are different from compassion.

Empathy. Most commonly, compassion is confused with empathy. Similar to compassion, empathy has no universally accepted definition (Gerdes, 2011). Many suggest that empathy involves multiple components (e.g. Bernhardt and Singer, 2012; Davis, 1994), mostly cognitive and affective components (Eisenberg, 1989). However, unlike compassion, empathy does not include an intention to see the relief of the suffering or a motivation or readiness to act in order to relieve suffering. Frans de Waal (2008) described empathy as the "capacity to (a) be affected by and share the emotional state of another, (b) assess the reasons for the other’s state, and (c) identify with the other, adopting his or her perspective" (p. 281). Some have described empathy as “feeling with” or “feeling as” the other, while in the case of compassion, it is more of a “feeling for” others (Hein and Singer, 2008). In some regard, empathy focuses on sharing another’s emotional state (an emotional resonance of what the other person is feeling), while with compassion there is the recognition of the other person’s emotional state (pain or suffering) while also having one’s own affective experience to that suffering. Furthermore, neural evidence suggests that compassion-related brain networks do not resemble empathy-related brain networks (Klimecki et al., 2014).

Sympathy. Closely related to empathy is sympathy. Similarly, sympathy has been defined in a variety of ways in the past (Wispé, 1986). In fact, through the 1950s, the word “sympathy” was used to describe what we understand today as “empathy” (Escalas and Stern, 2003). Some suggest that for empathy to elicit prosociality it must be transformed into sympathy (Eisenberg, 2007). Sympathy has been defined as an “affective response that consists of feeling sorrow or concern for the distressed or needy other (rather than feeling the same emotion as the other person [as in the case of empathy])” (Eisenberg, 1989, p. 678). Similar to compassion and empathy, sympathy is described to result from cognitive processes (e.g. perspective taking) (Batson, 1991; Eisenberg, 1989). Sometimes sympathy is some sort of an affective state paired with an intention – for example, Bernhardt and Singer (2012) define sympathy as “feelings for someone, generally coupled with the wish to see them better off or happier” (p. 3).

Pity. One “near enemy” of compassion is pity (Jinpa, 2010, 2015). Apparent in the religious perspectives and texts reviewed above as well as in modern day literature, pity is often used to describe a state similar to compassion. Yet, pity actually refers to feeling sorry for, or a sense of concern for someone thought to be inferior or weaker than oneself (Fiske et al., 2002). Pity by definition is rooted in a sense of superiority over someone else. This sense of superiority implies a separation between “me” and “them.” In a sense, pity has a flavor of, “I feel sorry for you, you are so different from me.” Compassion, on the other hand, is quite different – compassion does not consider the object of suffering to be weak or inferior in any way. With compassion, a hierarchy (which by definition creates a division) does not exist.
Personal distress. A second “near enemy” of compassion is personal distress (Jinpa, 2010, 2012). Personal distress has been described as a “self-centered and aversive response in the observer” (Bernhardt and Singer, 2012; Eisenberg and Fabes, 1990). This “self-centered distress is born from empathy with another’s distress” (de Waal, 2008, p. 283). However, compassion is not about one’s distress in response to another’s distress, which is why from a neural perspective, brain regions implicated in compassion are distinct from those associated with personal distress (for a review see Goetz et al., 2010). In children, experiencing personal distress is associated with avoidance of the distressed other or at times, aggressive behavior toward the distressed other (Volling et al., 2008). Compassion on the other hand is the courage to “be with” suffering rather than taking on another’s suffering as one’s own suffering.

Love. Compassion is sometimes used interchangeably with the term “love” (Post, 2002; Shaver et al., 1987; Sprecher and Fehr, 2005). However, compassion is “functionally distinct from love” (Goetz et al., 2010). The two most common forms of love that come up in the literature are the love of a parent to a child (maternal love) and that of romantic love. Yet as pointed out by Goetz et al. (2010), these two forms of love have different core functions (i.e. forming secure bond and attachment with one’s offspring and finding a mate and reproducing). Love is generally associated with positive affect and experiences, which can be contrasted with compassion (not to be confused with loving-kindness; see Hofmann et al., 2011), which is about being open to suffering. While compassion too can be associated with positive affect (e.g. Jazaieri et al., 2014; Klimecki et al., 2014), negative affect is still generally also present (compassion is about suffering, after all). Thus, because compassion likely involves a complex combination of multiple positive and negative emotions, love stands clearly in contrast as a mostly positive emotional state. Furthermore, from a neural perspective, regions implicated in compassion are distinct from those related to love (for a review, see Goetz et al., 2010).

Prosociality, altruism, well-wishing, or kindness. People often confuse compassion with prosociality, acting in a way that benefits others, or altruism, acting in ways that benefits others even when there is a cost to oneself (or at a minimum, no apparent benefit to oneself). Yet compassion itself does not include self-sacrifice of oneself or one’s resources. Instead, compassion involves an openness to experiencing suffering and responding to this suffering with a sense of genuine concern, without any self-referential or negative judgment (Jinpa, 2010).

According to the multidimensional definition of compassion presented earlier, while compassion may give rise to behavior, compassion can (and often does) exist without there necessarily being an immediate, tangible (i.e. prosocial or altruistic) behavior that follows. Lastly, it is also important to note that compassion is not simply wishful thinking, but rather compassion arises from a genuine feeling of care or concern.

Finally, the word “compassion” is often thought to only refer to “self-compassion.” While self-compassion is one important (and well-studied) form of compassion, there are many other forms of compassion including: compassion for others – loved ones, neutral individuals, disliked individuals, receiving compassion from others – from those who you consider to be peers, those who you consider to be “above” or “below” you in the social hierarchy, and witnessing compassion between others. In summary, there can be many “objects” of compassion aside from oneself.

3. The case for compassion in education
Developmentally speaking, “compassionate behavior in adulthood must, in part, stem from the experiences that the individual had as a child” (Volling et al., 2008, p. 162). While parents and family systems are powerful models of compassion for young children, I argue that
Compassion can also be modeled for students within the classroom, beginning with preschool and continuing into graduate school. Although entire books exist on the topic of “preventative mental health at school,” there is consistently no mention of compassion (e.g. Macklem, 2014). In this section, I consider why it is useful and beneficial to cultivate compassion (a “soft” skill) within various stages of PK-20 education. In the following sections, I will briefly describe some of the challenges that exist for students at various stages and make the case for meeting these challenges with compassion.

Preschool students

It was once thought that preschool age children were too developmentally immature to experience various mental health issues. This notion has since been disproven. Even children as young as preschool ages are affected by parental mental health (e.g. Field, 2010; Robinson et al., 2008; Gross et al., 1995). Biologically, newborns can mimic their depressed mothers’ biochemical profiles; for example, infants of depressed mothers have also shown lower dopamine, lower vagal tone, higher cortisol and norepinephrine levels, and greater relative right frontal EEG activation (e.g. Diego et al., 2004; Field et al., 2004; Lundy et al., 1999).

While there is a range in estimated prevalence rates (e.g. Bufferd et al., 2011; Lavigne et al., 2009; Wichstrom et al., 2012), various forms of mental health disorders can arise in the preschool period including attention-deficit/hyperactivity disorder, oppositional defiant disorder, eating disorders, anxiety disorders, posttraumatic stress disorder, sleep disorders, mood disorders, attachment disorders, and autism spectrum disorders (for a review see Luby, 2009). Bufferd et al. (2012) found that “children who met criteria for any diagnosis at age 3 were nearly five times as likely as the others to meet criteria for a diagnosis at age 6” (p. 1157). While the research is not as robust in preschoolers when compared to older children (Egger and Angold, 2006), given the significant influence of mental health in early childhood on subsequent mental health outcomes in adolescents and adulthood, preventative measures to enhance and maintain mental health and well-being beginning at a young age are worthy pursuits.

It has been suggested that children as young as two years old have the cognitive, affective, and behavioral repertoire needed “to alleviate discomfort in others” (Zahn-Waxler et al., 1992, p. 127). Preschool is an age that while personal suffering may be seemingly low, there are still challenges – whether biologically based or within the home environment (e.g. parental mental health issues, food and/or housing instability due to financial challenges, various forms of neglect and abuse). Aside from simply learning about the basic primary emotions, learning about what compassion is, the various forms of compassion, and how to recognize compassion (in oneself and others) in order to lay the groundwork for the years to come is an important consideration for preschool education.

K-12 students

Elementary school students. Amongst adolescents who report anxiety disorders, approximately 50 percent report onset by six years old (Merikangas et al., 2010). Further, 50 percent of mental disorders in adulthood begin before the age of 14 (World Health Organization, 2013). One of the consequences to this is disrupted thinking, learning, and school performance (e.g. Mazzone et al., 2007). One study with over 100 peer-nominated bullies indicated that these students scored lower on “moral compassion” (emotional awareness and conscience concerning moral transgressions) compared to their peers (Gini et al., 2011).

Thus, elementary school can be seen as an opportunity for preemptive compassion intervention. In a large Midwestern suburban school district, 254 elementary school teachers (71 percent teaching in public schools, primarily female (92 percent), Caucasian (61.4 percent), with master’s degrees (61.4 percent)) responded to 24 items on the
Character Education Efficacy Belief Instrument (Milson and Mehlig, 2002). According to the data, 58.3 percent of teachers disagreed with the item: “I sometimes don’t know what to do to help students become more compassionate” (Milson and Mehlig, 2002), meaning that the majority to teachers believe that they can help students foster compassion. An interesting question for future research with teachers would be to identify the specific things teachers are already doing in their classrooms to help their students become more compassionate (and to measure objective outcomes).

When considering compassion training programs for elementary school children, recently a secular cognitive-based compassion training (CBCT) developed at the Emory University has been adapted for children, specifically elementary school children and adolescent youth (Dodson-Lavelle and Negi, 2013; Ozawa-de Silva and Dodson-Lavelle, 2011). In CBCT, the participants progress through eight topics: developing attention and stability of mind, cultivating insight in the nature of mental experience, cultivating self-compassion, 4) developing equanimity, developing appreciation and gratitude for others, developing affection and empathy, realizing wishing and aspirational compassion, and realizing active compassion for others.

Ozawa-de Silva and Dodson-Lavelle (2011) write: “The goal of the CBCT curriculum designed for children is not only to help children generate altruism and engaged compassion but to transform both the school community of children, parents, teachers, staff, and administrators as well as the family unit and foster system into a community of compassion” (p. 12). Aside from the CBCT program, to my knowledge no other formal compassion training programs have been modified and implemented with elementary school children.

Middle school/junior high/high school students. Adolescence is a notoriously challenging time. This is often around the time when questions around identity formation come up – “Who am I?”, “What do others think of me?”, “Am I good enough?” There is often an emphasis on academic performance in order to get into reputable colleges, stressors around peer groups and “fitting in,” not to mention the biological changes that are occurring. Shame, self-criticism, negative self-beliefs, and judgments amongst adolescents are rampant (e.g. Gilbert and Irons, 2009).

According to data from National Comorbidity Survey for Adolescents (Merikangas et al., 2010), a survey with 10,123 adolescents (13-18 years of age in the USA) suggests that anxiety (31.9 percent) and mood (14.3 percent) disorders are common. These prevalence rates are much higher than many major physical conditions that adolescents often experience such as asthma (Akinbami et al., 2009) and diabetes (CDC, 2011). In total, 40 percent of affected youth report more than one mental health disorder in their lifetime, with mood disorders being the most common to co-occur with other disorders (Merikangas et al., 2010). According to the Centers for Disease Control and Prevention, suicide is the second leading cause of death amongst adolescents 15-19 years of age (Heron, 2016).

As noted by Roeser and Pinela (2014), the neural and psychological plasticity during adolescents provides an optimal time to cultivate compassion. Thus, middle school, junior high, and high school may in fact be the most opportune times for intervening with compassion interventions. When considering the different forms of compassion, given the high prevalence of social comparison, evaluation, and negative self-talk in this population (e.g. Roeser and Pinela, 2014), compassion for oneself may be most useful within middle school, junior high, and high school students. As Self-compassion Expert Kristin Neff (2003a) writes: “Adolescent ego-centricism no doubt contributes to increased self-criticism, feelings of isolation, and over-identification with emotions, meaning that self-compassion is likely to be especially needed but especially lacking during this stage
of life” (p. 95). Given adolescents’ developmental needs for purpose and self-transcendence, compassion practices within education settings may be particularly fruitful (Roeser and Pinela, 2014).

**College students**

The college years can represent a developmentally challenging transition into adulthood. Aside from the academic pressures, for many college students this is the first time being away from home, or the first time being tasked with making new friends. Existing literature bleakly suggests that college students are entering more “overwhelmed and more damaged than those of previous years” (Levine and Cureton, 1998, p. 95).

Notably, there has been an increased demand in counseling services in colleges (Kitzrow, 2003). National surveys amongst college counseling centers indicate that both the prevalence and severity of mental health issues with college students seems to be increasing (Gallagher, 2007). While it is unclear whether there have been increases in mental health issues or simply increases in help-seeking behavior among college students, multiple studies indicate that untreated mental health disorders are prevalent in college student populations (e.g. Eisenberg et al., 2007; Kessler et al., 2005; Wang et al., 2004). One study found that of those college students diagnosed with depression, only 24 percent were receiving treatment (American College Health Association, 2008). Other studies found that less than half of those diagnosed with mood disorders and less than 20 percent of those diagnosed with anxiety disorders were receiving treatment (Blanco et al., 2008). When compared to non-college attending peers, college students are significantly less likely to receive treatment for alcohol or drug use disorders (Blanco et al., 2008). Longitudinal studies suggest that mental health issues seem to be persistent throughout college rather than episodic in nature (e.g. Zivin et al., 2009).

College students have many barriers to getting help – lack of time, privacy concerns, stigma, financial constraints, to name a few (e.g. Eisenberg et al., 2009); integrating opportunities for compassion within the college classroom is an important endeavor. Plante and Halman (2016) have provided longitudinal data to suggest that compassion can continue to grow in college students (compassion at college entrance only accounted for 25 percent of the variance of compassion at time of graduation). Furthermore, this longitudinal study showed that various activities and features (e.g. diversity trainings, frequency of religious service attendance, participation in community-based service-learning, political identification, feeling valued as a member of the university community) accounted for an additional 10 percent of the variance in compassion at time of graduation. As highlighted in greater detail in the next section, the majority of compassion research (trait- and intervention-based) has been conducted on college students. It would be fair to conclude that the population that we know the most about with regards to compassion is in fact college students.

**Graduate students**

Over the course of one’s graduate career, “budding professionals learn to suppress the empathy and compassion that once was natural and that may have been their reason for choosing their profession in the first place” (Gerdy, 2008, p. 37). At times, people mistakenly believe that compassion will detract from their ability to perform, making them “weak” or “soft.” Prominent compassion teacher and scholar Salzberg (2002) writes that: “compassion is not at all weak. It is the strength that arises out of seeing the true nature of suffering in the world. Compassion allows us to bear witness to that suffering, whether it is in ourselves or others, without fear; it allows us to name injustice without hesitation, and to act strongly, with all the skill at our disposal” (p. 131). Graduate students experience many stressors including competition, personal stressors
(e.g. moving for school, finding life partners, starting families), financial debt that often accompanies graduate training, trying to find internships and post-graduate employment (or additional training, e.g., post-docs, residency, fellowships, etc.). In the subsections that follow, I briefly consider a few specific groups of graduate students who are training for careers in the helping/service professions – law students, medical students, nursing students, and counselors and therapists-in-training.

**Law students.** Addiction (alcohol and drug abuse) and mental illness (Robinson, 2010), including high rates of depression is pervasive amongst lawyers (Mounteer, 2004). These issues have significant professional costs and often go untreated (Robinson, 2010). Unfortunately these problems do not just affect practicing lawyers, but law students as well. Anxiety, depression, stress, burnout, suicidal ideation are prevalent amongst law students (e.g. Peterson and Peterson, 2009; Jolly-Ryan, 2009). As cited by McKinney (2002), “up to 40 percent of law students may experience depression or other symptoms as a result of the law school experience.” While these symptoms are absent before law school (Benjamin et al., 1986), it has been noted that the law school environment can at times be the opposite of compassionate – authors have cited cultures of bullying, peer intimidation, harassment, and humiliation (e.g. Flanagan, 2007; Glesner, 1990).

Prominent Legal Scholar Karl Llewellyn once said, “compassion without technique is a mess; and technique without compassion is a menace” (Cramton, 1987, p. 510). Yet in general, lawyers have been said to experience “compassion fatigue” due to the value placed on competition, self-sufficiency, rejecting one’s emotional needs, and this often translates into chronic health problems, poor job performance, alcohol and drug abuse, and impoverished relationships (e.g. high divorce rates) (Norton et al., 2015). As described by Gerdy (2008, p. 8), there is often a “perception that lawyers lack caring and compassion.” For example, in a survey, less than 20 percent of the respondents agreed that the phrase “caring and compassionate” was an accurate description of lawyers and 46 percent felt the phrase was not an appropriate description of lawyers. Elizabeth Mertz (2007) studied first-year contracts classes in eight different law schools and found that in these classes students were taught to “think like lawyers” primarily by discounting their own feelings (e.g. empathy, compassion) and moral values and instead thinking in a strictly analytical and strategic way.

Some have called for bringing compassion into first-year law education in order to help “students to realize that empathy and compassion are critical for successful law practice” (Gerdy, 2008, p. 3). Others have written that the “ambition to master critical reading, writing, argument, and reasoning skills met with the ambition to cultivate compassion creates the ideal for what it means to be ‘successful’ in the art of legal advocacy and counseling” (Tollefson, 2003).

Unfortunately, in reality “traditional law school curriculum devotes little emphasis to teaching students about clients or about the role of empathy and compassion in law practice” (Gerdy, 2008, p. 4). A survey given before graduation to 45 third-year law students asked: “To what extent do you feel that your legal education has helped you to understand, appreciate, and experience the importance of the following in law practice?” The majority of the students (68.9 percent) responded that they had little or no meaningful education on “the importance of compassion and empathy” (p. 35). Students reported that they learned the most about empathy and compassion through their work or externship experiences rather than in school (Gerdy, 2008). Further, much of what is written on the topic of compassion and law students or practicing lawyers relates to bringing compassion to one’s clients, and occasionally the topic of cultivating compassion toward opposing counsel is mentioned; however, it is equally important for law students (and lawyers) to learn the skills of cultivating compassion for oneself.
Medical students. While stress and depression amongst entering medical students appears to be low (e.g. Yusoff et al., 2013), psychological distress amongst physicians has been found to originate in the early years of medical school, persisting throughout their careers (Dyrbye et al., 2006). Stress and depression amongst medical students is not just unique to the USA, this seems to be a common element across countries (e.g. Dahlin et al., 2005). These high levels of psychological distress have negative consequences for academic performance (Stewart et al., 1999) and patient care (West et al., 2009).

A recent study found that medical students, medical residents, and fellows have five to eight times higher rates of depression and anxiety when compared to age-matched individuals in the general population (Mousa et al., 2016). Studies have suggested that depression amongst medical students is chronic and persistent rather than episodic (Rosal et al., 1997). One longitudinal year-long study with 61 internal medicine residents found that over the course of the internship year, “enthusiasm at the beginning of internship soon gave way to depression, anger, and fatigue,” Bellini et al., 2002, p. 3143. This study also found an increase in personal distress coupled with a reduction in empathic concern (Bellini et al., 2002). Unfortunately in this population, rates of seeking help are low (e.g. Tjia et al., 2005; Tyssen et al., 2004; Givens and Tjia, 2002), and alcohol is reported as the preferred method of relieving stress (Mousa et al., 2016). It has been noted that for medical trainees, stigma, privacy concerns, accessibility of services, and lack of time are some of the barriers to seeking help (Guille et al., 2010).

When compared to the general population, medical trainees report higher rates of suicidal ideation and suicide attempts (e.g. Cornette et al., 2009; Goebert et al., 2009). According to the American Foundation for Suicide Prevention, (2017), on average in the USA, 300-400 physicians commit suicide each year, approximately one physician every day. These rates are 2.27 times higher than the general female population and 1.141 times higher than the general male population. There has been a call for a national response to this epidemic (Goldman et al., 2015), and it has been suggested that programs aimed at addressing physician mental health should be implemented throughout the entire course of medical training (Khan et al., 2015). Interestingly, a survey with 155 second- and third-year medical residents suggested that residents believe their own personal health struggles helps enhance their compassion for their patients (Roberts et al., 2011).

When considering medical education, Geary et al. (2014) describe the following: “excellence in compassion and empathy require repeated practice. Instead of providing this practice, medical school curriculums emphasize data acquisition and regurgitation, test performance, and competition” (p. 203). Of course this is not unique to the medical field as Gerdy (2008) writes: “like legal education, medical education has struggled with the questions of if, when, and how empathy and compassion should be taught” (pp. 37-38). When surveyed, patients themselves are unsurprisingly enthusiastic about compassion training for healthcare providers (Sinclair, Torres, Raffin-Bouchal, Hack, McClement, Hagen and Chochinov, 2016).

Physicians face challenging patient circumstances that require compassion for oneself as well as compassion for the person they are treating (e.g. Dhawan et al., 2007). While some interventions have been created and tested for medical students and interns (e.g. web-based CBT; Guille et al., 2015), in general, interventions aimed at this population have been slow to take hold. When considering interventions to train compassion in medical students, the literature is largely nonexistent. Shapiro et al. (2006) write that medical education is “guilty of continually exhorting students to maintain compassion and composure while providing little actual training and practice in how to do so” (p. 30). Nevertheless, the Association of American Medical Colleges’ (1998) “Learning objectives for medical student education: guidelines for medical schools” specifically addresses one aspect of compassion, compassion
for patients, and requires that students demonstrate competency in this area – “Physicians must be compassionate and empathetic in caring for patients […] For its part the medical school must ensure that before graduation a student will have demonstrated, to the satisfaction of the faculty, the following […] compassionate treatment of patients […]” (pp. 4-5). In fact, the section where these statements appear is entitled “Physicians must be altruistic.” While there are some efforts in getting attending physicians involved in educating medical students and residents in treating patients with compassion and respect (Burack et al., 1999), these efforts do not appear to be widespread; a survey of 800 patients and 510 physicians suggested that both groups agreed that compassionate care is “very important” and yet only 53 percent of patients and 58 percent of physicians said that the healthcare system actually provides compassionate care (Lown et al., 2011).

While not compassion specifically, Roodt and Wanjogu (2015) have suggested using “Technology-Enhanced Teaching Techniques (TETT) to improve the levels of empathy in the final year of students of medicine” (p. 307). When thinking about practicing physicians, formal compassion training programs have been explored within the context of a physician well-being initiatives. While data are not published from these courses, these initiatives and preliminary interest in bringing in compassion as part of a physician’s well-being is encouraging in terms of working toward the eventual adaptation of compassion training for medical students.

Nursing students. A survey of 59 second-year doctor of nursing practice students indicated moderate to high levels of burnout (81 percent of respondents), moderate to high levels of secondary traumatic stress (74 percent of respondents), and moderate to high levels of “compassion satisfaction,” defined as “the sense of pleasure associated with doing a job well” (71 percent of respondents) (Sheppard, 2015). These data suggest that while student nurses feel burnt out and experience secondary traumatic stress, they also reap satisfaction from being effective in their work. While not compassion specifically, longitudinal studies of nursing students has suggested that empathy is on the decline (Ward et al., 2012).

Compassionate nursing practice has been defined as comprising of the “enactment of personal and professional values through behaviour that demonstrates the emotional dimension of caring about another person and the practical dimension of caring for them, in a way to recognize and alleviate their suffering” (Curtis, 2014, p. 212). The Chief Nursing Officer for England Jane Cummings has indicated that “all nurses are expected to provide compassionate care and promote a culture in which compassion can thrive” (Curtis, 2014, p. 211; Department of Health, 2012). While the value of compassion in nursing seems to be widespread (e.g. in 2001, The Norwegian Nurses’ Association approved a new code of ethics that specifically included compassion as one of the basic values in nursing care), observational case study research has suggested that nurses are often not guided by compassion in their work with patients (Hem and Heggen, 2004). As the authors write, while “traces of compassion” can be found, “the inclusion of the idea of compassion in the [ethics] code does not immediately improve nursing practice in the sense of making it more compassionate” (p. 28).

The term “compassion fatigue” was first introduced to the nursing literature by Carol Joinson (1992) and has been widely used since (e.g. Boyle, 2011). While the term “compassion fatigue” is up for debate[3], what is not debatable is the high rates of burnout amongst practicing nurses which has consequences for emotion (e.g. depression, anxiety, stress), job satisfaction, quality of patient care, and retention (e.g. Aiken et al., 2002; Erickson and Grove, 2007; Drury et al., 2014; Hegney et al., 2014; Pellico et al., 2009).

Compassion in nursing has been said to be a “radical concept” and there have been concerns that “compassion might obscure the objectivity that must be expected of a professional nurse” (Hem and Heggen, 2004, p. 20). The field of nursing requires high-level
skills including the ability to think clearly on one’s feet, solve problems, and attend to the person right in front of you. There is a little room for error. Research suggests that “compassionate care” is not a “one-size-fits-all” model but in fact differs between patient to patient, depending on the health issue – there are different interventions at different levels that require various forms of attention, care, and adjustment (Kvangarsnes et al., 2013).

With regards to compassion in nursing education, it has been said that “there is currently an international concern that student nurses are not being adequately prepared for compassion to flourish and for compassionate practice to be sustained upon professional qualification” (Curtis, 2013, p. 746). A study with five nursing teachers indicated the concern that the “role of the RN was changing and was not always conducive to compassionate engagement through knowing patients as individuals and understanding their suffering in a way to be able to relieve that suffering” (Curtis, 2013, p. 749). Thus, while compassion seems to be “valued” and “part of the job” of nursing, from a nursing education perspective, with a few exceptions (see Adam and Taylor, 2014; Adamson and Dewar, 2011; Bauer-Wu and Fontaine, 2015; Fontaine and Keeling, 2017), the explicit nature of how these important themes of compassion, compassionate care, and compassionate behavior are taught (and measured) in academic settings is still unclear.

Finally, while compassion is sometimes considered to be a “soft skill” or a “nice to have,” empirical research has made a business case for compassion practices in hospitals. For example, McClelland and Vogus (2014) examined 260 acute care hospitals in the USA and found that “when a hospital explicitly rewards compassionate acts by its staff and supports its staff during tough times, it is associated with patients more highly rating the care experience and being more likely to recommend the hospital” (p. 1677); which again reinforces the notion that compassion in hospital settings is not just beneficial for employees but also patients.

Counselors and therapists-in-training. To be effective in their professions, mental health clinicians (e.g. psychologists, therapists, counselors, etc.) require preparation on both the professional and personal levels. While burnout is common amongst mental health professionals more generally, mental health professionals in particular report higher levels of burnout (Morse et al., 2012). The consequences of burnout are present both for the clinician (e.g. negative attitudes toward patients; Holmqvist and Jeanneau, 2006) and the patient (e.g. experiencing poor satisfaction with services; Garman et al., 2002).

In particular, novice counselors and therapists face many struggles – “the requirements for the novice to access, integrate, synthesize and adapt information are exhausting” (Skovholt and Rønnestad, 2003, p. 45). Self-awareness has been said to be a critical component of therapy and can be helpful for clinicians-in-training (e.g. Fauth and Williams, 2005). Professor and Clinician Charles Figley (1995) wrote that “the capacity for compassion and empathy seems to be at the core of our ability to do the work and at the core of our ability to be wounded by the work” (p. xv).

Qualitative data with 30 mental health consumers indicated that compassion was a major factor in whether the person would become engaged in their own healthcare (Lloyd and Carson, 2011). Similar to the empirical research on compassion (e.g. Jazaieri et al., 2013), a qualitative study of 14 psychotherapists (who were nominated by their peers for being compassionate) endorsed the notion that “compassion was innate” and could also be further enhanced. One of the findings from this research indicated that one of the ways of facilitating compassion in therapy is to approach the clients’ suffering (rather than avoiding) (Vivino et al., 2009). Furthermore, it has been suggested that “additional attention should focus on the positive aspects of working, such as the process by which mental health workers experience compassion, joy, meaning, and fulfillment in their jobs”
Given the evidence of burnout and empathy fatigue in clinicians (e.g., Stebnicki, 2007), it stands to reason that various forms of compassion (for oneself, for others) may help buffer against some of the stress and fatigue involved in being a clinician.

4. A review of empirical literature on compassion with students

In this section, I briefly review some of the published empirical literature on the trait levels of compassion (which at times has been enhanced through mindfulness training programs rather than compassion) as well as various forms of compassion-specific trainings for PK-20 students. Specifically, I examine the empirical literature on compassion with preschoolers, K-12 students including elementary school and middle school, junior high, and high school students, college students, and graduate students including law, medical, nursing, and counselors and therapists-in-training. It should be noted that formal “proposals concerning contemplative practices in education are speculative, and there is little evidence of their effectiveness” (Davidson et al., 2012, p. 151). Given this caveat, I now turn to examining the literature on compassion in PK-20 students.

Preschool students

There is a robust empirical literature examining empathy and prosociality in infants and toddlers (e.g., Eisenberg et al., 1999; Warneken and Tomasello, 2006; Svetlova et al., 2010; Roth-Hanania et al., 2011). When considering compassion specifically, given the intentional and motivational components, it is difficult to examine and accurately measure compassion within preschool children. While not compassion specifically, one study looked at a 12-week mindfulness-based kindness curriculum with 68 preschool children and while the curriculum included “concepts related to kindness and compassion,” and the student’s prosocial behavior was rated by the teacher (and did improve through the intervention compared to control group); however, no explicit measure of compassion was used in the research (Flook et al., 2015).

Measuring compassion in this population is complicated. Given that parents must consent for any intervention and teachers are likely also aware of whether the student is in a special curriculum, parent or teacher ratings of the student have the potential to be biased. Traditional self-report measures of compassion (e.g., Gilbert et al., 2011; Neff, 2003b) are also not an option at this age. Behavioral measures are generally tapping into the constructs of prosociality or altruism rather than compassion. This is an important puzzle for developmental contemplative scientists to address. For example, one avenue for future research to explore is whether peer rating of compassion with preschoolers is feasible. Given that almost half of three- and four-year-old children in the USA attend early education programs (Davis and Bauman, 2013), there is a great opportunity to start measuring compassion and teaching compassion at an early age.

K-12 students

When considering K-12, it is useful to separately examine elementary, middle school/junior high, and high schools.

Elementary school students. In terms of formal compassion training programs, as mentioned prior, CBCT has been modified for children. The early childhood CBCT program for children five to eight years of age is an eight- to ten-week-long group intervention that follows the same conceptual sequence as the original adult program with “age-appropriate modifications.” These classes meet twice a week for 25-30 minutes during the school day. The structure of the classes is as follows: a short meditation practice, brief overview or introduction to the topic of the week, and an activity, story, or game that facilitates learning and engagement. Unlike the adult program, children are not asked to practice
between classes. As the authors write, when doing the initial classroom assessments for the pilot program, “the first few weeks did not immediately lead us to believe that teaching compassion meditation to children would be possible” (Ozawa-de Silva and Dodson-Lavelle, 2011, p. 13). However, once age-appropriate ways of presenting the CBCT material were made (e.g. breaking down the eight topics into subcomponents) and students were engaged through stories, plays, and games (rather than adult-style lectures), the authors found that “the children were able to grasp the essentials of all of the concepts we put forward” (Ozawa-de Silva and Dodson-Lavelle, 2011, p. 14). Aside from qualitative reports from the authors and teachers (Ozawa-de Silva and Dodson-Lavelle, 2011), there is currently no other published data on the CBCT adaptation for children five to eight years of age. In general, there is very little research on compassion (self or other) within elementary school children. This is a fruitful area for continued research, particularly when examining the developmental aspects of compassion.

Middle school/junior high/high school students. When considering compassion within middle school, junior high, and high school students, at a trait level, Neff and McGehee (2010) examined one form of compassion (compassion for oneself) in a sample of 235 adolescents (average age: 15.2 years old (range 14-17 years), 52 percent female, 79 percent Caucasian) in a large private high school in a large southwestern city in the USA. There were no differences in self-compassion based on gender. There were significant positive associations between self-compassion and connectedness ($r = 0.51$), maternal supports ($r = 0.28$), family functioning ($r = 0.33$), and secure attachment ($r = 0.24$). In these adolescents, there were also significant negative or inverse relationships between self-compassion and depression ($r = -0.60$), anxiety ($r = 0.73$), preoccupied attachment ($r = -0.22$), fearful attachment ($r = -0.18$), and personal fable ("believing that their experiences are unique and that others cannot possibly understand what they are going through") ($r = -0.28$). Given the cross-sectional design of this research, it is not possible to make interpretations about potential causation. Another cross-sectional study with 117 youths (45.3 percent males) who were receiving child protection services found that there was an inverse relationship between trait levels of self-compassion and various forms of maltreatment (emotional abuse, emotional neglect, and physical abuse). Compared to youths with high self-compassion, youths who reported lower self-compassion were also more likely to report psychological distress, alcohol use, and a serious suicide attempt (Tanaka et al., 2011).

Karen Bluth and colleagues have also examined self-compassion in adolescents in a series of studies. In Bluth and Blanton’s (2014) cross-sectional study, they examined 67 adolescents in an urban high school and found self-compassion was positively related to life satisfaction and negatively related to negative affect and perceived stress. While cross-sectional, the authors reported some preliminary data that suggest potential mediation of mindfulness and self-compassion on emotional well-being. Bluth and Blanton (2015) looked at cross-sectional self-compassion data with 90 students (age range: 11-18 years old). The findings included no differences in self-compassion in early adolescents but in later adolescence (high school), an interesting finding emerged. Specifically, “high-school females reported being more self-judging, feeling more isolated, and having more difficulty maintaining a balanced perspective in the midst of challenging circumstances than either males of the same phase of adolescence or younger adolescent females” (p. 11). Furthermore, the researchers found that the developmental phase of adolescence (instead of gender) was a moderator, such that for older adolescents, the inverse relationship between self-compassion and negative affect was stronger ($\beta = -0.65$, $t(83) = -2.62$, $p = 0.01$).

In terms of compassion interventions, Bluth et al. (2016) conducted a randomized controlled trial of a six-week mindful self-compassion program for teens (an adaptation of
the adult mindful self-compassion program). In total, 34 students between the ages of 14 and 17 enrolled in this study. The program was found to be acceptable and feasible in terms of increasing self-compassion in adolescents. Compared to the wait-list control condition (n = 18), the teens in the self-compassion program (n = 16) reported greater self-compassion (β = 0.24, p = 0.049), life satisfaction (β = 0.30, p = 0.04), and lower depression (β = −0.27, p = 0.004). The authors also reported finding non-significant but marginal increases in mindfulness (β = 0.20, p = 0.08), social connectedness (β = 0.21, p = 0.097), and reductions in anxiety (β = −0.20, p = 0.098). When collapsing the groups’ data together (n = 29), there were small to medium (0.37-0.58) effect sizes on all variables of interest, suggesting that the original RCT design was likely underpowered which yielded the marginal findings on mindfulness, social connectedness, and anxiety. Furthermore, regression analyses indicated that when controlling for baseline self-compassion, self-compassion predicted increase in life satisfaction (β = 0.61, p = 0.001), reductions in anxiety (β = −0.48, p = 0.01), and reductions in stress (β = −0.49, p = 0.02). Finally, the authors found increases in self-compassion marginally predicted increases in social connectedness (β = 0.31, p = 0.09).

In a separate study, Bluth and Eisenlohr-Moul (2017) examined an eight-week mindful self-compassion course with 47 adolescents. The eight-week course covered: an introduction to mindful self-compassion, paying attention on purpose/mindfulness, loving-kindness for oneself, an introduction to self-compassion, comparing and contrasting self-esteem vs self-compassion, living deeply through art and writing aimed at identifying core values, working with difficult emotions, and embracing one’s life with gratitude. With regards to self-compassion, the researchers found that self-compassion covaries with stress, depression, curiosity/exploration, as well as resilience. In terms of demographic measures and self-compassion, “high school students, as compared to middle school students, demonstrated greater increases in self-compassion. There was also a trend for females to show greater increases in self-compassion than males” (p. 116).

This study provides additional evidence of the efficacy of training self-compassion in this adolescent population.

Other compassion interventions have also been examined within adolescents. For example, a six-week (one hour, twice a week, 12 total classes) CBCT program has been examined within the context of 71 adolescents (average age: 14.7 years old (SD: 1.14), 56 percent female, 78.8 percent African-American) who reside in the foster care system. The participants were randomized to twice weekly CBCT or a wait-list condition. When compared to the wait-list control condition, CBCT did not demonstrate improvements on the self-report measures of depressive symptoms, anxiety, hope, emotion regulation, or self-other four immeasurables. Qualitative data found that the adolescents found the program to be useful in dealing with life stressors and would recommend the program to a friend. No longer-term follow-up was reported (Reddy et al., 2013). Within this same sample of participants, salivary concentrations of C-reactive protein (CRP) were measured and while there were no differences between the two groups, in the CBCT group, meditation practice sessions during the study were related to reduced CRP (Pace et al., 2013).

In a separate study by Galla (2016), 132 self-selected adolescents (average age: 16.76 years old, 61 percent female, 64 percent had prior meditation experience) took part in a five-day meditation retreat (with up to four to five hours of silent meditation per day). Following the retreat, adolescents reported increased self-compassion (d = 0.49) and this increase was sustained at the three-month follow-up period (T1-T3; d = 0.62). Self-compassion was also found to be a strong predictor of emotional well-being (perceived stress, rumination, depressive symptoms, negative affect, positive affect, and life satisfaction). Without a comparison group or a more general adolescent population (without such a keen interest in meditation), the generalizability of this study is unclear.
Given that adolescence is often a time where stress and emotional reactivity are high, and the preliminary evidence suggests that compassion training with adults may be effective in increasing positive emotion and affect, reducing negative emotion and affect, and regulating emotion and affect (e.g. Jazaieri et al., 2014, 2018), future research with adolescents would benefit from explicitly examining emotion (or affect more generally) and the relationship between trait compassion as well as examining the trajectories of affect and ability to regulate affect in adolescent compassion training programs. Furthermore, research with adolescents would benefit from moving beyond simply examining compassion for oneself and exploring the feasibility of cultivating different forms of compassion at this age.

College students
The majority of published research has been conducted with college students as they are an easily accessible population for academics within university settings to study. In terms of college students, research has examined trait levels of self-compassion (e.g. Crocker and Canevello, 2008; Hope et al., 2014; Neff et al., 2005; Sirois, 2014; Wasylkiw et al., 2012; Wayment et al., 2016; Wei et al., 2011), experimental manipulations of self-compassion (e.g. Breines and Chen, 2012, 2013; Leary et al., 2007; Odou and Brinker, 2014), compassion, self-compassion, and loving-kindness meditation (LKM) interventions. Reviewing the empirical literature on compassion in college students could be a separate empirical investigation on its own. Here, I will briefly describe some of the findings with college students in compassion interventions specifically.

Compassion training with college students. In a study by Pace et al. (2009), 61 healthy undergraduate students (average age: 18.5 years old, 56 percent women) were randomized to either six weeks of 50 minutes, twice a week (12 total sessions plus daily taped meditation practices) of CBCT ($n=33$) or a health discussion group ($n=28$). College students in the CBCT group who did the meditation practices reported reduced emotional upset in response to stress, as well as lower levels of plasma concentrations of interleukin (IL)-6. While this research does not explicitly report results on compassion outcomes, it does suggest that compassion training can have an influence on college students’ well-being and physiology, beyond simply self-report questionnaires.

Another study by Plante et al. (2009) examined whether a community-based learning immersion trip could enhance compassion. Immersion trips lasted approximately one week, included groups of 10-15 students, and varied in location (e.g. rebuilding houses in New Orleans in the wake of Hurricane Katrina, visiting Pueblo, Mexico and staying with host families to learn about the culture, challenges, and marginalization of the community). When examining immersion students vs comparison students, the immersion students reported greater compassion after the trip. To my knowledge, this is the first study to explicitly show that community-based learning experiences (which increase engagement and connection) can also increase compassion. As the authors note, given that this is a self-selected group of students that chose to engage in an immersion trip (rather than students randomly assigned to the immersion experience), it is possible that these groups of students received a greater “compassion boost” from their service-learning experiences (compared to the average student). Nevertheless, this study is important to consider as researchers address the issue of loneliness that creates suffering for many individuals in the twenty-first century.

Koopmann-Holm et al. (2013) looked at results from 74 female college students (average age: 21.13 years old) who were randomized to either compassion meditation ($n=17$; two-hour weekly sessions for eight weeks plus daily taped practice), mindfulness meditation ($n=19$; based on Kabat-Zinn’s (1990) book Full Catastrophe Living), improvisational theater class ($n=16$; emphasis was on being spontaneous and cooperative rather than funny), and no intervention ($n=22$). In order to be adequately powered for the statistical analyses, the
authors collapsed the two meditation groups (compassion and mindfulness) and the two control groups (improvisational theater and no intervention). While an explicit measure of compassion was not included, the researchers found that following the interventions, participants in the two meditation groups reported that they valued low arousal positive states more than those students in the two control groups. There were no between group differences in: actual affect (high/low, positive/negative states), ideal negative affect, or well-being (as indexed by the satisfaction with life scale; Diener et al., 1985). While the small sample size and no explicit measure of compassion make the findings difficult to interpret, this research is important in that it goes beyond simply using a wait-list control condition for comparison purposes and also addresses the important question of valuing specific affective states (high/low, positive/negative) vs actually experiencing changes in specific affective states.

Smeets et al. (2014) looked at a three-week (1.5 hours for the first two weeks followed by a third 45-minute closing session) self-compassion course for female college students. The participants were randomized to either the self-compassion group (n = 27) or an active control intervention on time management (n = 25). According to pre- to post-self-report surveys, when compared to the active control condition, the three-week self-compassion course yielded increases in self-compassion, mindfulness, optimism, and self-efficacy, and reductions in rumination. Interestingly, both interventions increased life satisfaction and connectedness and no differences were reported for worry and mood outcomes. This brief intervention’s immediate effects are promising. Future research would benefit from generalizing this training to a larger and more diverse sample (e.g. including male students) and gathering follow-up data to examine whether benefits are sustained after the intervention.

A novel study by Wong and Mak (2016) looked at the effectiveness of a self-compassion writing intervention with 65 participants (average age: 20.5 years old (SD: 1.43), 53.8 percent female) Chinese college students. The participants were randomized to either a self-compassion writing (n = 33) or control writing intervention (n = 32) – students were given instructions to write three times a week and to self-report positive and negative affects after writing. Specifically, in the self-compassion intervention, the participants were asked to: “write about a recent event that was painful or about which they felt bad, or any time that they had judged themselves, and then to use an accepting and self-compassionate attitude to process the experience. Three prompts, each centered on the concept of mindfulness, common humanity, and self-kindness, were given to participants” (p. 77). These three prompts can be downloaded from the authors here: http://supp.apa.org/psycarticles/supplemental/aap0000041/aap0000041_supp.html. In the control condition, the participants were asked to: “write about their daily activities in a factual and unemotional manner: Day 1, what they did over the last week; Day 2, what they did over the last 24 hr; and Day 3, what they plan to do over the coming 24 hr” (p. 77). The participants also provided self-report questionnaires (depression, physical symptoms, self-compassion, and emotion regulation) before the study and at one and three months after the study. When compared to the control intervention, the self-compassion journaling group did not report any improvements on depressive symptoms, self-compassion, or emotion regulation; however, the self-compassion group did report a reduction in physical symptoms at the two follow-up periods. Given that writing has many benefits (e.g. Wing et al., 2006), is cost effective and carries little stigma, compassion writing and journaling exercises should continue to be explored within the diverse college student populations.

LKM with college students. LKM (sometimes referred to as metta) is a practice aimed at increasing the feelings of warmth and caring for oneself and/or others (Salzberg, 1995). Generally in LKM, the meditation practice is first directed toward oneself, then familiar others, and finally all beings. Several studies have looked at single session and multi-session LKM
with college students. For example, Feldman et al. (2010) randomly assigned 190 female college students (average age: 19.83 years old, 72.6 percent Caucasian) to one of three audio-recorded inductions of: LKM, mindful breathing, or a progressive muscle relaxation. The inductions consisted of a single 15-minute session (as the authors describe this included “12 minutes of guided instruction in the technique followed by a three minute period of silence before which participants were instructed to continue with self-guided practice” (p. 6)) While compassion was not explicitly measured, the researchers examined decentering, repetitive thoughts, and negative emotions to the thoughts immediately following the brief inductions. Comparing the three inductions to each other, the participants randomized to mindful breathing reported greater frequency of repetitive thoughts and greater decentering. There were no differences between the three inductions on negative emotions. While it is difficult to interpret longer-term effects from a single 15-minute induction, the study design employed here (three different induction techniques) helps address the potential differential effects that may be present in various meditation techniques.

One study examined the effects of LKM on novel dependent variable – affective learning (making positive or negative associations with neutral stimuli through repeated pairing), as well as cognition (Hunsinger et al., 2013). Researchers randomly assigned 97 undergraduate students (average age: 20.5 years old, 65 percent female) to either a control condition or a three-session (20 minutes per session within a single week) lab-based LKM intervention. Following the three-session practice, when compared to the control condition, with regards to affective learning the LKM group reported greater positive associations with neutral stimuli, and no between group differences in negative associations. In terms of cognitive control, using a color-naming Stroop task, when compared to the control condition the LKM group had greater accuracy and faster reaction times to correctly categorize words on compatible and also incompatible trials. This data provides preliminary evidence that even brief (60 minutes total, for three sessions, in one week) LKM can influence affective learning and cognitive control in college students.

Others have looked at longer-term LKM in college students. May and colleagues (2014) randomly assigned 31 freshman students (71 percent female) to five weeks of either concentration meditation (n = 15) or LKM (n = 16). The participants had one 20-minute guided meditation as instruction and then were asked to practice 15 minutes at home per day, three days a week, over the course of five weeks. While an explicit measure of compassion was not used, the authors utilized hierarchical linear modeling for analyses and found that individual differences (e.g. trait mindfulness, presence, acceptance, positive and negative affects) were responsible for 48-71 percent of the total variance explained. Compared to baseline, following the concentration meditation, the participants reported increases in mindfulness and acceptance; following LKM, the participants reported increases in mindfulness, presence, and positive affect. The researchers followed up with the mediators after the five-week programs and found that those in the concentration meditation condition declined in mindfulness, acceptance, and positive affect (in other words the benefits were not sustained) and the participants in the LKM group showed a decrease in presence and also continued reduction in negative affect. These results, while limited by the small sample size, provide additional information on the differential effects of meditation types as well as evidence regarding the sustainability of changes through brief meditation programs.

This research also begs the question of additional examination of potential moderating variables that predict for whom these programs may work best.

When employing a larger sample of undergraduate students (average age: 19.1 years old, 77 percent female, 78 percent Caucasian) who were randomized to either four sessions of LKM (n = 38) or a wait-list condition (n = 33), the researchers found that when compared to the control participants, LKM intervention participants reported greater compassionate love.
and self-compassion at post-treatment and higher self-kindness at the eight-week follow-up. Anxiety did not differ between the two groups. It is important to note that the LKM sessions were delivered in a group format (rather than assigned for homework) with 10-14 participants per group and sessions were 90 minutes in length (for a total of 360 minutes in the program). This study is important in that it was delivered in the psychology department of a university (providing feasibility of LKM in an education setting), was adequately powered, and also explicitly measured compassion.

Graduate students

Compared to the college student population briefly reviewed above, research on compassion with graduate students is fairly sparse. It is fair to say that graduate students are less of a "captured audience" in terms of researchers’ accessibility, given that many graduate students do not reside on campus (some commuting far distances), often have part-time or even full-time jobs in addition to school, and family commitments. Below, I will review the published literature on compassion with law students, medical students, nursing students, and counselors and therapists-in-training.

Law students. It has been suggested that “compassion can help nurture a service orientation in some lawyers and law students and connect them with service-oriented motivations that brought them into the profession” (Riskin, 2002, p. 65). In one study, Guinier et al. (1994) interviewed students enrolled at an elite law school. Some of the qualitative self-report survey data regarding compassion from women included the following: "I feel that [compassion is something that is eradicated in law school [...] We are taught that compassion is a bad thing" (p. 49). Another woman shared that: “I changed so much. I used to be much more compassionate person, much more tolerant of different choices, in terms of lifestyle, in terms of personality. I just feel like law school has put huge blinders on my eyes” (p. 50). While qualitative, these students report lower levels of trait compassion. In terms of formal compassion interventions or trainings with law students, I am unaware of any published empirical data.

Medical students. There are several potential causes of distress for medical students (e.g., adjustment to the medical school environment, ethical conflicts, exposure to death and human suffering, abuse, personal life events, education debt) and severe consequences associated with medical student distress (e.g. impaired academic performance, cynicism, academic dishonesty, substance abuse, suicide, etc.) (Dyrbye et al., 2005). While a fair amount of research has examined physician compassion (e.g. creating in the Barriers to Physician Compassion questionnaire (Fernando and Consedine, 2014)), a recent review by Sinclair, Norris, McConnell, Chochinov, Hack, Hagen, and Bouchal (2016) suggests that we have a limited empirical understanding of compassion in healthcare. Others have stated the issue clearly – “our assumption that compassion and other virtues can be ‘taught’ is so firmly embedded in the medical school curriculum that we fail to question or examine it” (Wear and Zarconi, 2008, p. 948). After a string of medical student suicides, Mount Sinai’s Icahn School of Medicine has been looking for ways to change the school’s culture to “make training more compassionate” (Lagnado, 2017).

In terms of medical students, research has examined trait levels of self-compassion (for a comprehensive review see Sinclair et al., 2017). Several studies have looked at enhancing compassion in medical students through a variety of interventions. For example, Deloney and Graham (2003) report using the humanities to expose students to the aspects of compassion.

Utilizing the well-known Pulitzer Prize-winning drama Wit (about a story of a woman dying of cancer and her experiences with medical professionals), first-year medical students watched the play and then participated in post-play discussions (or “talk backs”) with cast
members and reflected on their experience through an e-mail dialogue with the clinical faculty. While data were collected (e.g. regarding overall performance, emotions, quality of care, usefulness of Wit as a learning tool, etc.), there were no questions or quantitative measures of compassion. As the authors share, qualitative comments did indicate student concern regarding the medical education suppressing their compassion – for example, one student wrote: “I sincerely hope the medical school experience will not desensitize me to the point where I lose my feelings of compassion for those who are suffering” (p. 249). Other studies (e.g. Saab and Usta, 2006) have similarly utilized the Wit with medical students and while various measures were gathered, there were no explicit measures of compassion (e.g. trait compassion as a moderator of outcomes following Wit).

Shapiro et al. (2006) designed an elective course for third- and fourth-year medical students called “The Art of Doctoring.” The course was two weeks over an eight-month period, and included 25 small group contact hours, 15 hours of reading (including on the topic of compassion), and 80 hours of completing assignments which included self-monitoring, writing assignments, and a personal project of application of course skills during clinic. The course also makes use of poetry and short stories to assist in generating affective states such as those associated with compassion. While the course had several goals, it also included helping students develop “empathy and compassion towards patients.” While quantitative and qualitative student evaluations indicated a “favorable response to the course,” no data were reported on changes in compassion. The authors conclude that “when students are given the time and guidance to attend to the process as well as the content of medicine, they report becoming more empathic, compassionate and caring, more self-aware, and better able to learn from their ongoing clinical experience” (p. 34).

As described by Geary et al. (2014), the University of Texas Medical Branch, Galveston (UTMB-Health) implemented a new track called “The Physician Healer Track,” designed to help students “maintain their innate compassion and humanity and to grow these personal skills in relation to clinical care” (p. 203, for more details on the program, see: www.utmb.edu/pedi_ed/PHT/default.asp). Given that 2014 was the first year of the program, the authors write that “it is too early to evaluate its impact” though they do report that “student enthusiasm has been high” as the program had 40 students sign up and the ultimately limited enrollment to 24 students (10 percent of the class). In their paper, the authors included qualitative comments from two second-year students who reported this track as being an important aspect of their medical school training.

Nursing students. It has been said that “compassion for others is surely a motivating factor for most that join the nursing profession. Indeed it could be argued that nursing care is synonymous with compassion. However, the degree to which nurses balance this care by extending compassion and care to themselves is given little attention” (Mills et al., 2015, p. 791). There has been a fair amount of research on compassion in practicing nurses (e.g. Armstrong et al., 2000; Fry et al., 2013; Heffernan et al., 2010; Horsburgh and Ross, 2013; Kret, 2011; Smith et al., 2014; van der Cingel, 2011). However, when examining nursing students specifically, the empirical literature is a bit sparse.

In-depth interviews with 19 student nurses in the UK indicated that students had “concerns about their ability to engage in and maintain compassionate practice as they progressed towards undertaking the role of Registered Nurse” (Curtis, 2014, p. 214). Specifically, with regards to compassionate practice, students had concerns regarding things such as professional boundaries for emotional engagement, emotional vulnerability, and potential emotional distress (for both nurse and patient), to name a few (Curtis, 2014). While these concerns of students exist regarding balancing compassion with professional boundaries, one qualitative study examined 24 clinicians (10 practicing nurses plus 14 other medical professionals) who were nominated by hospital administrators as being particularly
compassionate and found that these clinicians reported not distancing themselves in the face of their patients’ suffering (essentially choosing to approach rather than avoid or suppress) and would instead “develop warm, empathic relationships with patients” (Graber and Mitcham, 2004, p. 87). This data are encouraging in that it suggest that it is possible to strike a balance between professional boundaries (as these were individuals who were nominated by hospital administrators) and compassion for patients.

When considering compassionate behavior, the data suggest that amongst nursing students, caring behaviors differs between first-year \( (n = 80) \) and third-year \( (n = 94) \) students, such that first-year students report engaging in more caring behaviors when compared to third-year students.

While not a perfect comparison since this was not a within-person longitudinal study, the authors described this data as evidence that the nursing educational process may reduce caring behaviors (Murphy et al., 2009). Additional longitudinal data following the students from the beginning of their first year in nursing programs, at the half-way point in the program, and at the end of the program (at least three data points) would be beneficial in terms of examining the trajectory of compassion in nursing students.

When considering self-compassion specifically within nursing students, Şenyuva et al., 2014 examined data from 571 nursing students (average age: 20.65 years old, 83.4 percent women) and found a significant moderate relationship \( (r = 0.40) \) between self-compassion and emotional intelligence (which includes self-awareness, self-management, self-motivation, empathy, and social awareness). Given the importance of emotional intelligence in the workplace (for reviews see Joseph and Newman, 2010; Zeidner et al., 2004), it would be beneficial to examine whether compassion training programs could influence nursing student’s emotional intelligence. A separate study by Crary (2013) also looked at trait self-compassion in a sample of 153 (90 percent female, 93 percent Caucasian, 79 percent between the ages of 20 and 24) undergraduate nursing students. A number of interesting relationships emerged from the battery of self-report questionnaires: self-compassion was significantly inversely related to perceived stress in general \( (r = -0.59; p < 0.001) \), perceived stress related to nursing school \( (r = -0.46; p < 0.001) \), negative mood \( (r = -0.48; p < 0.001) \), physical symptoms \( (r = -0.35; p < 0.001) \), and avoidant coping \( (r = -0.34; p < 0.001) \). Self-compassion was significantly positively related to positive mood \( (r = 0.38; p < 0.001) \) as well as four other interesting dimensions: supportiveness of educator in theory courses \( (r = 0.29; p < 0.01) \), supportiveness of educator in clinical courses \( (r = 0.18; p < 0.05) \), perceived competence in theory courses \( (r = 0.21; p < 0.01) \), and perceived competence in clinical courses \( (r = 0.18; p < 0.05) \). While the cross-sectional correlation design of this study with a sample that is fairly homogenous in nature makes it difficult to make conclusive interpretations, the correlational data on compassion and perceived competence as well as the students’ perceptions of support from their teachers are fascinating for educators to consider.

Recently, a two-week online compassion module has been explored with undergraduate nursing students (Hofmeyer et al., 2016). This online program is intended to help nursing students gain an understanding of the importance of: compassion in healthcare, being compassionate toward others (patients and colleagues), compassion toward oneself, cultivating resilience, and identifying factors that may hinder or enable compassionate care. Three hundred and sixty two nursing students took part in a compulsory course that contained the online compassion module and were invited to take part in the study that contained five open-ended questions (e.g. “What does compassion mean to you?” “Can you give an example of you acting compassionately toward a client or patient?”) before the intervention and 12 open-ended questions (e.g. “What does compassion mean to you now?” “Can you give an example of you acting compassionately toward a colleague at work?”)
after the intervention. Seventeen nursing students responded to the pre-intervention survey questions and 25 responded to the post-intervention survey (Hofmeyer et al., in press). Preliminary exploratory analyses of qualitative data suggest that four major themes emerge when considering how compassion is understood and practiced by nursing students—these themes were: being present (e.g. putting yourself in others’ shoes, taking time to listen carefully); acting to relieve suffering (e.g. small actions to convey compassion, doing things that really matter, acting to help colleagues thrive); getting the basics right (e.g. being resilient to achieve goals, making positive lifestyle choices to be better prepared to care for others, setting boundaries and having good support networks in place); and going forward (e.g. new insights gained will influence their work and self-care as a nurse, mindfulness and greater awareness will influence their work). While this data contain a small, non-randomized sample, and is qualitative in nature, it is encouraging in that it provides a feasible way to bring compassion into the classroom. We will likely see additional research examining compassion and compassion training (online and in person) for nursing students in the years to come.

Counselors and therapists-in-training. Several studies have looked at trait levels of compassion as well as various methods for enhancing compassion in counselors and therapists-in-training. While many of these studies have employed small, homogenous, samples with cross-sectional or single group designs, they provide initial information regarding the role of compassion in counselors and therapists-in-training.

At the trait level, one study examined social work interns (n = 111; average age: 32.17 years old, 92.5 percent female) and found a positive relationship between mindfulness and “compassion satisfaction,” or the enjoyment one obtains from work (r = 0.46, p < 0.001), and an inverse relationship between mindfulness and “compassion fatigue” (r = −0.53, p < 0.001) (Decker et al., 2015). Another study examined trait self-compassion in 66 entering MSW students (average age: 29.74 years old, 90.9 percent female, 66.7 percent Caucasian) and found that self-compassion (but not religiosity or spirituality) was inversely related with the severity of reported stressors (r = −0.26, p = 0.03) and positively related to satisfaction with coping (r = 0.24, p = 0.03). Follow-up regression analyses showed that overidentification (considered to be a negative component of self-compassion) was associated with increased stress, while common humanity (considered to be a positive component of self-compassion) was associated with effective coping (Ying and Han, 2009). In a separate study, Ying (2009) again examined self-compassion subcomponents (mindfulness, common humanity, self-kindness, overidentification, isolation, and self-judgment) in 65 master’s of social work (MSW) students (average age: 38.12 years old, 89 percent female, 69.2 percent Caucasian). The results indicated that the self-compassion subscale of overidentification directly and indirectly (mediated by decreased coherence) affected depressive symptoms in the MSW students. While the correlational design and small sample size are limits to this research, it does suggest that looking at specific components of compassion may be a fruitful endeavor.

Several mindfulness and MBSR-type interventions have examined the influence of these trainings on compassion in counselors and therapists-in-training. For example, Shapiro et al., 2007 employed an non-randomized, cohort-controlled MBSR study for therapists-in-training (average age: 29.2 years old, 88.9 percent female, 76.9 percent Caucasian) and found that the compared to the cohort controls (n = 32, enrolled in research methods or a psychological theory course), the MBSR program for therapists-in-training (n = 22) increased positive affect and self-compassion and reduced negative affect, stress, rumination, as well as state and trait anxiety. In a longer-term mindfulness training, Felton et al. (2015) looked at a 15-week mindfulness course loosely based on MBSR with 41 counseling students (93 percent female). The course was comprised of 75 minutes, twice a week, in-class mindfulness practices as well
as out-of-class practice for 45 minutes, four times a week. The students responded to research questions in journal format and responses were then coded. In terms of self-compassion specifically, the authors reported that the students “endorsed a new degree of self-compassion gleaned from mindfulness practice,” which included “increased acceptance and non-judgmental attitude toward their clinical abilities and limits” (p. 166). Similarly, Dorian and Killebrew (2014) examined a ten-week (four hours in length with 30 minutes of mindfulness practice plus 30 minutes of home mindfulness practice five days a week) elective mindfulness course for 21 therapists-in-training (age range: 22-41 years old, 90.4 percent female, 66.6 percent Caucasian). Qualitative comments reflected experiences with increased compassion for self and others. While qualitative reports are important, quantitative reports of outcomes (such as different forms of compassion) and a comparison condition would help in understanding and evaluating the effectiveness on such program.

Newsome et al. (2012) examined an eight-week mindfulness group (content based on MBSR with weekly 90-minute sessions and recommended home practice of 45 minutes, four days a week) in 31 students (average age: 29.26 years old, 87 percent female, 54.8 percent Latino) who were intending on entering the helping professions. The results indicated that participants in the mindfulness training reported an increase in mindfulness and self-compassion (and reduction in perceived stress) after the intervention. From post-treatment to one-month follow-up there were no changes in self-compassion. Without randomization to a comparison condition, it is again difficult to convincingly interpret these results; however, this study provides some preliminary evidence of potential benefits of mindfulness trainings influencing self-compassion in students in the helping professions.

When thinking about compassion trainings specifically for counselors and therapists-in-training, Boellinghaus et al. (2013) had 12 therapists-in-training (who had previously attended a mindfulness-based cognitive therapy course) take part in a six-session LKM course. Qualitative reports from the participants indicated that while LKM was emotionally challenging at times, the students perceived an increase in self-awareness, compassion for self and others, and therapeutic presence and skills. Short-term LKM meditations (utilizing larger samples and randomized designs) are worthy of continued investigation with therapists-in-training. A recent study by Finlay-Jones et al. (2017) looked at a novel online six-week self-compassion training program (detailed outlines of the specific components of the six modules are available in the original paper) for Australian psychology trainees (n = 37; average age: 32.61 years old, 89 percent female). Researchers found increases in self-compassion and happiness and reductions in depression, stress, and difficulties regulating emotions. Encouragingly, when examining the three-month follow-up, from baseline to three-month post-intervention, the majority of changes on the outcomes of interest were maintained (aside from happiness and depression). This study is encouraging in that it provides preliminary efficacy of training self-compassion online for counselors and therapists-in-training. Additional research utilizing larger sample sizes and a randomized design will provide more conclusive evidence.

Recommendations for future research on compassion with students

While there is a growing body of evidence in adults highlighting the benefits of trait compassion and compassion training programs in regulating attention and emotion, enhancing positive affect, reducing negative affect, and altering brain function and structure (see Seppälä et al., 2017), rigorous research is still needed to understand the effects of trait levels of compassion and compassion training programs in children, adolescents, and young adults. I have a few recommendations for future research within this domain to consider.

First, similar to research on mindfulness and SEL, research on compassion has been largely based on self-report, particularly with children and adolescents. Within self-report much of the
research has relied on qualitative rather than quantitative reports. Future research should aim to examine the effects of compassion training in students using a multi-method approach, including valid and reliable quantitative self-report measures, when possible physiological measurement (e.g. fMRI, EEG, cortisol), objective behavioral measures of cognition, affect, and attention, physical health outcomes, academic performance (e.g. GPA, standardized test scores, absences), and outside reports (e.g. from peer students, teachers, parents) of the student’s behavior and interpersonal experiences. It is only through a more rigorous multi-method approach that research can accurately understand the effects of various training programs on students’ compassion.

Relatedly, many of the studies presented above are cross-sectional studies. Future research should examine longitudinally the effects of various compassion interventions on students throughout the course of their education. This follow-up data will provide evidence to whether any benefits gained are sustained. Additionally, whenever possible, research should employ randomized controlled trial designs (e.g. randomizing one classroom or section to the compassion intervention and the other classroom or section to no intervention or a placebo intervention). Having a comparison group will help address some of the internal validity issues (e.g. ruling out changes being due to history or maturation).

Additionally, it will be important for future research to address the external validity issues by increasing the sample sizes of students so that studies are well powered to find effects. Studies should consider limitations to interpretations regarding compassion (trait and intervention based) when there is a lack of diversity (e.g. gender, ethnicity, SES). Given the increasing interest in meditation more generally, studies should assess whether prior meditation experience moderates any of the compassion effects. Examining various potential moderators of these compassion interventions is a fruitful endeavor for future research to consider (see Goldin and Jazaieri, 2018).

Finally, given that the majority of empirical research on compassion has focused on one form of compassion (compassion for oneself), future research with students would benefit by exploring other forms of compassion including: compassion for others such as loved ones, neutral individuals, disliked individuals, unknown individuals, receiving compassion from others such as from those who you consider to be peers, those who you consider to be “above” or “below” you in the social hierarchy, and the effects on students when witnessing compassion between others (e.g. seeing compassion between a teacher and a student, or a supervisor, and a patient). It is important for future research to examine the relationship between trait levels of different forms of compassion and outcomes of interest as well as examining the effects of compassion trainings on these different forms of compassion within student populations.

5. Recommendations for cultivating compassion in the classroom
In this section, I provide some recommendations for cultivating compassion within the classroom in PK-20 education. Of course, there are some important practical concerns that must be addressed regarding how to teach and evaluate compassion in the classroom. I agree that compassion training programs in education settings must be “thoroughly secular, developmentally and culturally appropriate, and predicated on evidence-based practices” (Davidson et al., 2012, p. 150). It is important for schools to partner with experienced compassion teachers as well as developmental psychologists when considering bringing compassion into the classroom.

There are some general classroom recommendations that can be considered by all teachers (PK-20):

(1) Educators can integrate attention and awareness practices into the classroom, as many of the formal compassion training programs start with a foundation of mindfulness. Teachers can help students notice where their attention is (past, present, future),
and redirect their attention back to the present moment. These can be structured or
formal mindfulness exercises and activities or informal activities (e.g. intermittent
attention checks when students hear a bell).

(2) Given that the word “compassion” is not well understood and often confused with
similar terms, educators can help students understand what compassion is and what it
is not. This can take form in small or large group discussions, journaling, drawing, etc.
It is important to get clear about the construct as many “myths” about compassion
exist and these myths may be barriers for students in experiencing compassion.

(3) Teachers can help students identify the four components of compassion (cognitive,
affective, intentional, and motivational) within themselves. Again, this can be
interactive – helping students identify when they have (or do not have) recognition
of suffering, feel emotionally moved by suffering, wish for an end to that suffering,
and feel motivated to take action to relieve that suffering. Teachers can also help
students develop within the classroom skills and resources to cultivate aspects of
compassion (cognitive, affective, intentional, motivational) within themselves.

(4) All of us (teachers included!) have limits to our compassion. It is important for us to
recognize these limits as it influences the way that we show up in the world.
Specifically, educators can help students identify the barriers/limits to their
compassion (e.g. who is it easier to have compassion for and who is it harder to have
compassion for and why might that be the case?). It is only through recognizing our
limits that we can work toward cultivating compassion toward all.

(5) To support these endeavors, teachers can allow for classroom time (e.g. small groups
or as a larger group) for students to check-in and share about their own experiences
with compassion – whether it be sharing compassion successes or failures around
the various forms of compassion (e.g. compassion for self, compassion for others,
receiving compassion from others, witnessing compassion between others, etc.).

(6) Related to compassion, it is important for educators to acknowledge when there is
“breaking news” that may relate to experiences of compassion. Of course, there is
always suffering going on in the world, even right now as you read this; however, for
example, in my own experience as an educator, I have taught a graduate-level
research methods class on a day when a tragic school shooting occurred, and I have
taught a compassion class at Stanford University’s School of Medicine on the
evening of a controversial presidential election. While it is reasonable to want to
bypass these uncomfortable and potentially polarizing conversations and just stick
with the pre-planned class agenda, these are opportunities for educators to model
making a bit of space and time in the classroom context to briefly attend to the
suffering that may be on the minds of some of the students in the classroom.

(7) Remember that as an educator, you are a powerful role model of compassion.
Perhaps in some students’ lives, you are the role model of compassion. Whether it is
the student arguing about a grade or a student sharing suffering s/he is
experiencing at home, teachers have the opportunity to meet the student with
compassion and model for the student what compassion looks like in difficult
situations. Remembering that compassion does not mean giving the student what
they want (e.g. changing their grade or solving the problems that are going on at
home), but compassion, as defined in this paper, has the opportunity to foster greater
connection and understanding in the midst of suffering.

(8) Finally, as a teacher, consider measuring your classroom, department, or school’s
compassion. There is a short and free quiz available on the Greater Good Science
While the questions still remain whether compassion training programs can be modified in effective and developmentally appropriate fashions for children and adolescents and whether we have valid and reliability methods to measure these differences (see Roeser and Eccles, 2015), I believe it is still worthwhile to cultivate compassion in various ways in the classroom setting. What is likely required of educators is integrating somewhat of a socialization toward compassion in education – educators are key to bringing formal and informal practices around compassion into the classroom. I now turn to making some suggestions for bringing compassion into the classroom from preschool to graduate school.

**Preschool students**

For some students, preschool is part of their initial “education of the mind.” With the help of teachers, preschool can also be a time of “education of the heart.” In his 1993 book, Charles Smith includes “compassion activities” for preschoolers (organized by various skills and ages – three, four, and five years old), which is a great resource for preschool teachers. Below, I provide a few suggestions for different ways that teachers can help the seeds of compassion to continue to grow within each child.

*Observe and describe non-judgmentally.* A foundational skill to compassion is mindfulness or the ability to pay attention. Teachers can use objects around the classroom to practice observe and describe skills (in an effort to cultivate mindfulness and non-judgment). For example, teachers can make a game out of this by having a student look at an object in the classroom (e.g. a plant) and asking the student to observe the object and then practice describing the plant accurately so that other students can guess what they are looking at.

*Talking about compassion.* Teachers can encourage circle time or round-robin style reporting so students can share about experiences of giving or receiving compassion in order to encourage recognizing these states within ourselves and others. During these times, we can encourage children to use their observe and describe skills to share what they experienced (cognitive component), share how they felt (and recognize the felt sense within their physical bodies) (affective component), share if they had a wish for the other person (in the case of compassion for others) (intentional component), and whether they felt like they wanted to do something to help (motivational component).

*Acknowledging suffering right in front of us.* It is useful to help children to explicitly acknowledge the suffering of other students in the classroom through specific intentions or well wishes for others (e.g. a child is crying because s/he feels left out and in our own mind thinking about well-wishes for that child) or specific behaviors (e.g. “Tommy’s dog died, what if we drew a picture for him?”, “Sara is home sick this week, what if we wrote a get well card to send her?”). By acknowledging suffering, children have opportunities to get in touch with what compassion feels like in their bodies and physiology.

*Compassionate behaviors.* At this age, teachers can encourage students to engage in compassionate behaviors. Specifically, a great place to start is getting young children involved in volunteer activities in the classroom – considering that elderly individuals in nursing homes may be lonely and choosing to draw pictures and/or write cards to randomly send out. If the classroom allows pets, considering options for the class to rescue the pet (e.g. hamsters, guinea pigs, gerbils) from a local shelter. If there is a local park in walking
distance, teachers can schedule regular visits (with gloves and supervision!) to pick up litter in the area. While compassion does not necessarily need to always include a prosocial or altruistic behavior, for young children, engaging in concrete behaviors can be a useful way of learning about the process of compassion.

**K-12 students**

Here, I make some recommendations for K-12 education in terms of teaching/training compassion and assessing compassion. Given the developmental considerations, I make separate recommendations for students in elementary school and for students in middle school/junior high/high school.

**Elementary students.** Below I make five recommendations for teachers of elementary students to consider—compassion journaling, compassionate images, interdependence, compassion body maps, and tracking compassionate behaviors.

**Compassion journaling.** There is a lot of research to support journaling as a useful skill (e.g. Ullrich and Lutgendorf, 2002), though most of this research is with adults, some forms of journaling (e.g. a few sentences for younger kids up to a few paragraphs for older kids) may be useful in terms of reflecting privately on one’s experience of compassion. Some potential journaling prompts include: “What does compassion mean to you?”, “Write about experiencing compassion for someone else,” “Write about experiencing compassion for yourself,” “Write about receiving compassion from someone else,” “Write about witnessing compassion between other people,” “Write about times when I did not experience compassion (for self or others),” “Write about other people that I am choosing to exclude from my circle of compassion (and why),” etc. As is age appropriate, teachers can encourage students to include details such as “how did you know/not know it was compassion?”, “what did it feel like in your body?”, “how long did this experience last?”, etc.

**Compassionate images.** What does compassion look like? Have the student visualize a “compassionate image” – an image that represents the qualities of compassion to them. Students can come up with very creative and inspirational visualizations for their compassionate images. For example, an image of oneself at the beach with the warm sun shining down, providing warmth and light, or an image of oneself holding an umbrella over a baby fawn while it is raining. Elementary school teachers can encourage students to draw what compassion means to them. Not only is this a fun and interactive project that can spark meaningful discussion, these pictures can then be saved and bound into an individual compassion book for each student to keep (at school, at home, etc.).

**Interdependence.** In my opinion, interdependence is one of the most important concepts that are taught in formal compassion training programs. Interdependence is recognizing that in order to live the lives we do, we rely on countless other people – both known and unknown to us. Teachers can encourage students to consider interdependence in a variety of contexts from food (e.g. where does this tomato come from? – seed, water, sun, farmer, the food that fuels the farmer, trucks, the gas in the trucks, the store, employees, etc.), to clothing (e.g. where is this cardigan from? – reading the label on where it was made (finding it on the globe if necessary), the person who grew the cotton plant, the person who sewed the buttons on it, etc.), to the objects in the classroom (e.g. where did this chair come from? – the architect who designed it, the person who built it, the money that was used to buy it, the person who placed it in this classroom, etc.). By acknowledging the countless people that are involved in making our lives run smoothly (from teachers and parents to farmers in far away countries), we can cultivate a greater sense of connection with others and also a sense of appreciation for others.

**Compassion body map.** There is now a fair amount of research that suggests that emotions show up in our bodies fairly rapidly (see Nummenmaa et al., 2014). Teachers can
begin to encourage students to pay attention to how and where emotions show up in their bodies. For example, each student can be given a generic body map and can work on noticing where in their body they experience physical sensations when they are experiencing compassion (e.g. in the heart and chest). An equally useful exercise would be to notice what their bodies feel like (e.g. specific physiological sensations such as clenched fists) when experiencing (or not experiencing) compassion.

Track compassionate behaviors. Research suggests that when we track behaviors, it helps move the behavior in the favorable direction (Kazdin, 1989). One way to assess growth in students' compassion is to have students track their compassionate behaviors (frequency and the specific behavior) each day. Not only does this tracking bring attention to the intention (of acting on our innate compassionate instincts), students or classrooms can be positively reinforced for engaging in compassionate behaviors (e.g. students or classroom can receive praise for their efforts or the “process” (Dweck, 2006) around compassionate behaviors). When learning and encouraging new behaviors positive reinforcement such as praising efforts or the process can be a useful for some students.

Middle school/junior high/high school students. Below I make four recommendations for teachers of middle school, junior high, and high school students to consider – compassionate listening with others, being with suffering, compassion for oneself, and loving-kindness for oneself.

Compassionate listening with others. It is often said that one of the greatest gift that you can give another is the gift of your undivided attention and listening. Often when listening to another person speaking, we interrupt them, start problem solving for them, think about what we are going to say next, etc. Essentially, we are doing everything aside from truly listening.

Teachers can encourage compassionate listening through specific dyadic exercises designed to tap into compassionate listening. Students can pair up on their own (deciding who’s person A and who’s person B) and one person will share for three minutes about something in their lives that they are experiencing that is difficult and the other person practices mindful and compassionate listening (without interrupting, problem solving, asking questions, etc.). Then the pair switches roles and repeats the exercise again for three minutes. Afterwards, the pair can discuss for three minutes what that experience was like for them (both as the person sharing and as the person listening). This exercise gives each person an opportunity to share something difficult with someone else and the opportunity to give the gift of attention, listening, and non-judgment. It is important for teachers to review what compassionate listening looks like in terms of non-verbal behaviors and body language (e.g. nothing in hands, soft eye contact, open body posture, etc.). It is also important to set the rules for confidentiality – this dyadic exercise can only work if both parties agree to keep the contents of the exercise confidential and agree to not continue the conversation at a later point in time (e.g. when seeing the person at lunch not bringing up the contents from the exercise again).

Choosing to be with suffering. For many, the daily life creates opportunities to be with suffering on some level – the person with the sign asking for help at the stoplight, the neighbor down the street who recently lost her spouse, the late night Facebook post of a classmate describing experiences with loneliness. Teachers can encourage students to really be with suffering – any suffering. For example, high school seniors at The Harley School in Rochester, New York have the opportunity to take an elective course called “hospice.” In this course, the students have the opportunity to be with people who are at the end of their lives (Campbell, 2016). Qualitative comments from students suggest that this can be a powerful lesson in compassion. While hospice may not be the right fit for all students, other local options may be available such as animal shelters, food banks, homeless or
women’s shelters, etc. When possible, integrating these types of opportunities directly into the classroom curriculum allows students to receive course credit as well as broaden their personal horizons for growth in compassion.

Compassion for oneself. For middle school, junior high, and high school students, given the rampant self-criticism (which is often paired with peer and/or parent criticism), it is worthwhile to help students recognize when they are suffering. This awareness of one’s own suffering and taking one’s suffering seriously is an important entry point into compassion for oneself. This does not mean over-identifying with one’s suffering, or pushing away or holding onto one’s suffering, it is simply a non-judgmental acknowledgment of one’s own suffering.

Upon this recognition, the students can recognize that while they may feel alone and “the only one in the world” at this time, in reality, many other people are likely feeling a similar way.

Acknowledging that this experience of suffering is not something that is necessarily unique about “me” or an experience that only “I” have, but rather suffering is part of being human. Everyone experiences suffering. This allows the student to adopt a “common humanity” approach over an “isolation” approach to their suffering (Neff, 2003a). Finally, this compassion for oneself approach also includes choosing to be kind, warm, and understanding toward oneself, even in the midst of failure. Recognizing that whatever the shortcoming, it is a communication of and an opportunity to reorient back toward one’s core values (engaging in a bit of self-mentoring). Rather than judging or punishing oneself, the student can instead choose to be a bit gentle with ourselves. In a classroom, when hearing students judge themselves negatively or beat themselves up, educators can help coach students through having a more self-compassionate response to the situation.

Loving-kindness for oneself. Often, people walk around thinking about their failures and shortcomings. With adolescents, perceived failures may include things like ruminating about the B+ on the exam, the party they were not invited to, the text that never got a reply, the Snap that was never opened, and so on. Loving-kindness for oneself means to acknowledge the “other side of the coin” – as we often discount the positives and only see the negatives in our lives. While grounded in mindfulness (observing and describing things that are true, not making up things that are not true), we might choose to also think about some of our strengths, the things that we do that positively contribute to the lives of others, or things that we appreciate about ourselves. While most report that this feels uncomfortable initially (it certainly is not a skill that we are well versed in practicing!), people often report that it feels good to acknowledge this other aspects of themselves. In a classroom setting, educators can invite students to privately write down or pair up and consider these other aspects of themselves that perhaps rarely get acknowledged.

**College students**

Educators of college students generally have a shorter period of time with students (e.g. if on the quarter system maybe as short as ten weeks). Below, I make a few general recommendations to consider. First, with college students, educators can notice suffering and notice compassionate behaviors and bring explicit attention to this. As Compassion Expert Paul Gilbert once wrote that “attention is like a spotlight – whatever it shines on becomes brighter in the mind. This knowledge can help us build compassion” (Gilbert, 2013). Educators can help students “keep compassion on their minds.” Second, college students may also benefit from taking one of the many interventions that have been empirically validated to enhance compassion. Given that college is a time in adulthood with fewer responsibilities in general, it may be feasible for students to spend eight weeks learning, the skills and tools presented in these compassion courses before entering the
workforce or going on to graduate school. Specifically, educators can have lists available to
provide students with on-campus or community courses that are designed to enhance
compassion. Third, educators can encourage students to take self-report assessments to
examine their own compassion (e.g. Gilbert *et al.*, 2011; Neff, 2003b) – these assessments are
freely available online (and educators can make photocopies available to students and even
allow for a few minutes of class time to complete) and can be taken at multiple time points in
order to examine any changes (increases, decreases) in various forms of compassion within
oneself. These questions will allow for time for important introspection about how
compassion does and does not show up in the student’s life.

**Graduate students**
As educators, it is important to recognize the humanity (which includes suffering) of
students who are currently or will soon be entering into the workforce. As Frost *et al.* (2000)
clearly state, “pain and compassion are not separate from ‘being a professional’ and the
‘doing of work’ in organizations. They are a natural and living representation of people’s
humanity in the workplace” (p. 25). Similar to teachers of college students, teachers of
graduate students often have a shorter period of time with students (i.e. one class
throughout their entire education). Below, I make some general recommendations to
consider for law students, medical students, nursing students, and counselors and
therapists-in-training. In the classroom with graduate students, my personal preference falls
along the lines of open communication and dialogue in the classroom about compassion,
personal reflection on compassion, and opportunities for experiential learning.

**Law students.** Interestingly, some mission statements of law schools include the term
“compassion” (e.g. the mission statement at the Santa Clara University’s School of Law
describes being “dedicated to educating lawyers of competence, conscience and
compassion” (see Polden, 2008). It has been suggested that in order for students to
develop compassion, they need to “see examples of empathic and compassionate behavior,
particularly in the lawyering context. But simply understanding and observing is not
sufficient to cause real development; students must also practice the behavior they wish to
develop and receive feedback from their teacher” (Gerdy, 2008, p. 39). Thus, it may be a
worthwhile endeavor to not just talk about what compassion (for self and others) looks like
in the lawyer context but to actually have the opportunities to practice these skills and
receive feedback from peers and professors.

Further, it is important for law students to be able to explicitly make the connection
between compassion and their work as lawyers. As Lawrence Krieger (2005), a Professor of
Law at the Florida State University writes, “I present professionalism to law students as a
combination of developed legal skills and various personal virtues that we typically seek in
lawyers: broad vision/wisdom, integrity and honesty, compassion, respect for others and for
differences, unselfishness, the desire to serve others and one’s community, self-confidence,
in individualism, and a real commitment to justice” (2005, p. 427). Examining some of the
myths around being compassionate (for self and others) in the field of law, making time for
reflection on one’s compassion (or lack of), and classroom discussions and experiential
exercises around compassion can be beneficial for law students.

**Medical students.** Teaching compassion to medical students is not simply about
compassion for patients or “bedside manner.” When thinking about how compassion shows
up with patients, one study of 23 oncologists systematically catalogued conversations with
advanced cancer patients (*n* = 49) and through analysis of the audio-recorded office visits
found that similar to the definition of compassion proposed here, three elements emerged:
recognition of the patient’s suffering (cognitive component), which included verbal and
non-verbal acknowledgment, emotional resonance (affective component), which included
direct and indirect verbal expression and various forms of paralinguistic expression (e.g., silence, softening of tone, emphasis/animation, long sounds), and movement toward addressing suffering (motivational component), which included personalization, affirmation, reassurance, action, supplementary humor, non-abandonment, and presence (Cameron et al., 2015) (the intentional component from our working definition likely cannot be assessed solely through linguistic examination and would likely need additional probing to examine if present). This study provides some empirical support for what compassion between a doctor and patient might look like. In medical school, it may be useful to explicitly train students in recognizing these four components of compassion within themselves. One explicit way of doing this (with patient consent) would be to spend time audio or video recording one’s own interactions with patients and playing back the recordings and reflecting on instances where different components of compassion were (or were not) showing up. Students could then use their own audio/video data to reflect and learn to shift their behavior and responses for future patients. Small group and larger group classroom discussions around the students’ reflections of their own audio recordings would likely be a rich learning experience.

In a qualitative study with 52 fourth-year medical students, the participants were asked to write a two to three-page essay reflecting on “how their medical education had fostered and hindered” their conceptions of compassion, altruism, and respect for patients” (Wear and Zarconi, 2008, p. 949). Data were organized around three main themes – foundational influences (early life factors), preclinical education influences (classroom and curriculum before med school), and clinical education influences (including role models and the clinical environment). Based on this research, concrete recommendations emerge for medical student education – first, the influence of role models – “how clinical faculty treat and talk about patients, how they interact with others providing care, how they characterize a life in medicine – all these have profound effects on students. But a few positive role models in any clinical setting will not do the trick” (Wear and Zarconi, 2008, p. 952). Educators of medical students play a powerful role in the continued development of skills such as compassion. Second, students need time and space for such self-reflection. It is important for students to have explicit time to reflect and journal on their education, experiences, strengths, and areas for growth. This must be an ongoing reflection, not a one-time event, and space must be created where students can freely talk to peers and faculty about their reflections, if they wish.

For medical students, it is equally important to help cultivate compassion for oneself during times of suffering, as well as one’s patients, even difficult patients – as Mills and Chapman (2016) state: “compassion is necessary […] Even for unappreciative or ‘difficult’ patients, and doctors who, of course, are only human” (p. 88). Finally, Dyrbye et al. (2005) also make several suggestions for educators of medical students, including: creating a nurturing learning environment, identifying and assisting students who are suffering, explicitly teaching skills for stress management, promoting self-awareness skills, and helping students promote personal health and well-being in a preventative fashion.

Nursing students. It has been said that compassion in nursing is a “radical idea, with a critical potential” (Hem and Heggen, 2004, p. 28), a notion that the majority of nurses, and perhaps even patients, would likely agree with. In terms of nursing education, it has been acknowledged that, “there is currently a lack of clarity in how student nurses can be best supported to achieve and sustain compassionate practice as they move through their education programmes and into future nursing careers” (Curtis, 2014, p. 220). It is important for educators of nursing students to bring the topic of compassion (for oneself and others) to the forefront. For example, educators could have students periodically throughout the year reflect on the questions such as: “what does compassion for yourself look like?” – checking in
to ensure that the students are describing things that a specific, achievable, and consistent with what self-compassion truly is (it is not letting oneself off the hook or engaging in behaviors that move one away from their goals and values). Educators can encourage students to reflect on additional questions such as: “what makes for a compassionate caregiver relationship?” Research by Sanghavi (2006) suggests that three major categories may emerge: communication, common ground, and respect for individuality. Classrooms and cohorts of nursing students could examine what majority categories emerge and come up with behaviorally specific and objectively measurable methods for examining within oneself whether the student is engaging in compassionate caregiving. Other research has suggested that one of the ways that nurses communicate compassion is through paying “attention to the little things” (Perry, 2009). As an exercise, nursing cohorts can get clear about what paying “attention to the little things” really means in the contexts in which they are, or will be soon practicing in.

Additionally, nursing students may benefit from department sponsored and organized “fireside chats” of sorts with the nursing faculty whereby the faculty have an opportunity to share regarding their own experiences with compassion for oneself and for patients. Students could also submit anonymous questions (in the event students feel uncomfortable asking directly) prior to the forum regarding questions/concerns they have around compassion for oneself, patients, colleagues, etc. This would provide students with the opportunity to hear how faculty and their peers think about and respond to some of the challenges in the profession around compassion. More generally, it is crucial for educators to create classroom environments where nursing students can feel comfortable speaking openly about challenges with compassion (for self, for patients, for colleagues, etc.).

Counselors and therapists-in-training. Suffering is a common topic that comes up in therapy. Many patients come to therapy reporting low self-esteem, rampant self-critical thoughts, perfectionistic tendencies, guilt, and shame about the past, difficulty forgiving oneself, and so on. Coinciding with these concerns is often a lack of compassion for oneself. Many patients also come to therapy reporting an inability to get along with or empathize with others, difficulty moving on from past hurts, unwillingness to forgive others, negative judgments about others, and so on. Again, coinciding with these concerns is often a lack of compassion for others.

From a professional standpoint, it would be beneficial for counselors and therapists-in-training to have explicit training with cultivating compassion through formal courses offered within the school or local community. With this context, students will be able to be of greater help to their patients who are suffering. When considering the student in training, from a personal standpoint these compassion programs can assist in managing the student’s own suffering as a form of self-care. Relatively, encouraging counselors and therapists-in-training to attend therapy themselves throughout their graduate careers in an effort to get in contact with their own suffering would be extremely beneficial.

6. Concluding comment
The seeds of compassion are already present within students. Teachers at various stages of a student’s education trajectory have an opportunity to contribute to the growth of compassion within each student. Clearly more empirical work is needed to examine the feasibility of bringing compassion into the classroom at various stages of education. As highlighted throughout this review, there are many exciting avenues for developmental contemplative scientists to examine. With rigorous designs and longitudinal follow-up, we can better understand whether, when, how, and for whom compassion and compassion trainings (with age appropriate techniques that are culturally sensitive and amenable to careful scientific scrutiny) influences individual students, classrooms, and ultimately, societies.
Notes
1. While these programs are secular in nature, many of the practices included are derived from the Tibetan Buddhist tradition.
2. The term “compassion fatigue” is used here in an effort to be consistent with the terminology used by the original authors; however, the term itself is up for debate (see Klimecki and Singer, 2012).
3. It has been suggested that “empathy fatigue” is a more accurate description of the phenomenon given that empathic/personal distress lies at the heart of the experience (Klimecki and Singer, 2012).

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Further reading


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Exploring whether mindfulness can enhance ethnic identity among undergraduate and graduate students

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Abstract

Purpose – The purpose of this paper is to explore whether attention, emotion, and cognitive regulation (CR) may be strategies to advance one’s ethnic identity.

Design/methodology/approach – The paper is presented in three parts. The first section discusses integrative inquiry (INIQ) (Bresciani Ludvik et al., 2016), a mindfulness methodology and mindful inquiry training program, as a potential pathway to help mitigate stress and enhance healthy development and well-being strategies that combat stressors related to ethnic and racial identity; and increase opportunities for positive ethnic identity development. INIQ was designed to influence areas of the brain associated with attention regulation, emotion regulation, and CR in order to decrease stress and anxiety, and heighten executive functions of undergraduate and graduate students. The second section discusses an exploratory study to see whether INIQ resulted in higher mean scores for participants on their ethnic identity, as assessed by the multigroup ethnic identity measure (Phinney, 1992).

Findings – The results indicated that there was a significant increase in pre-test and post-test scores for mindfulness (p = 0.001) as well as the dependent measure for learning exploration (p = 0.028) among 30 undergraduate, master’s- and doctoral-seeking students. There was also a non-significant increase for clear understanding (p = 0.13) and overall ethnic identity achievement (p = 0.367); and non-significant decrease for ethnic belonging (p = 0.424).

Originality/value – These findings suggest that INIQ may increase students’ ethnic learning exploration, which is an important process in ethnic identity development (Phinney and Ong, 2007). This study also suggests that INIQ increases mindfulness in participants. The authors conclude with a discussion and recommendations to future INIQ and other diversity centered student support practitioners interested in influencing positive ethnic identity formation.

Keywords Mindfulness, Ethnic identity, Ethnic identity development, Integrative inquiry (INIQ), Multigroup ethnic identity measure

Paper type Research paper

Student identity research suggests that postsecondary institutions must move beyond diversity initiatives that simply focus on access to higher education. There is a need for understanding who “students are, [and] how they identify and see themselves” (Moses, 2014, p. 78), in order to create environments that facilitate their success.
A comprehensive approach to the success of diverse populations must be integrated into systematized structures, campus culture, policies, and practices (Moses, 2014) in order to rectify structural/institutional racism resulting in the previously mentioned disparity between white and ethnic minority baccalaureate attainment. As postsecondary institutions shift toward a model of institutional transformation, there needs to be concurrent action to provide students with tools to manage their reaction to direct and indirect racism and ethnic discrimination, and how they experience existence in racially and ethnically structured institutions. Institutional racism exists in nearly all aspects of life in the USA (Nesbit, 2015). Thus, exploring potential tools that may be integrated into an educational setting would be useful to educators invested in minority students’ academic success and personal well-being.

In an educational system where structural/institutional racism exists (Miller and Garran, 2017), mindfulness may be able to provide strategies to awaken an individual to threats to one’s identity, such as in social identity threat or stereotype threat, and make choices based on critical thought (Bresciani Ludvik et al., 2016). In those instances of threat to one’s identity, such as racist encounter, a student can attend to the present moment, and observe events as phenomena (i.e. attention regulation (AR)). A student can then become aware of the emotions they are having and how they are regulating those emotions (i.e. emotion regulation (ER)). As a result, they can use cognitive processes to re-appraise the situation and inform their decision making (i.e. cognitive regulation (CR)), thus maintaining their original course of positive goal-directed behavior (Zelazo et al., 2016). Kitayama et al. (2000) described emotions as more than private or bodily states, and further described them as social phenomena (DeRivera, 1984; DeRivera, and Grinkis, 1986; Kemper, 1978; Lutz, 1988; Lutz and White, 1986; Parkinson, 1995). When an individual engages and connects in an ongoing relationship with others, this is known as perceived interdependence. However, when an individual disengages from the relationship with others, this is known as interpersonal disengagement (Kitayama et al., 2000; Block, 1957; Dittman, 1972; Lutz, 1988; Reisenzein and Hofmann, 1990). The ability to observe threats to one’s identity, observe one’s emotional responses to these threats, and then use cognitive processes to decide whether to continue an interdependent relationship with one’s own ethnic group instead of disengaging may create opportunities to foster positive ethnic identity development. We hypothesized that utilizing the above mentioned strategies acquired from mindfulness-based practices may result in increased opportunities for positive ethnic identity development.

Context of need

The ethnic and racial composition of college students in the USA has become more diverse. For example, between 1976 and 2010, the minority American college student population increased while the white American college student population decreased (US Department of Education, 2012a, b, c, d); yet, the gap in attaining a bachelor’s degree between whites and blacks and between whites and Hispanics remains, with more white students earning degrees (US Department of Education, 2012c). As such, the opportunity for access to graduate school and doctoral level attainment decreases. By 2060, the US Census Bureau forecasted that the US population would be “more racially and ethnically diverse [where] no group is the majority” (US Department of Commerce, 2012b).

Furthermore, 2014-2060 population projections foresee that the black population will have moderate growth from 42 million (13.2 percent) in 2014 to 60 million (14.3 percent) in 2060, American Indians and Alaskan Natives will have moderate growth from 4 million (1.2 percent) to 5.6 million (1.3 percent), the Native Hawaiians and Other Pacific Islanders will increase from 734,000 (0.2 percent) to 1.2 million (0.3 percent). The Asian population is expected to more than double from 17.1 million (5.4 percent) to 39 million (9.3 percent).
Hispanics will more than double from 55 million (17.4 percent) to 119 million (28.6 percent), an increase of 115 percent. This will bring Hispanics to one-quarter of the total population in 2060. Projected to triple from 8 million in 2014 to 26 million in 2060 are people who self-identify as being of two or more races. The white population is projected to fall from 198 million in 2014 to 182 million by 2060. It is the only population that is expected to decrease between 2014 and 2060. In short, the ethnic minority population will likely more than double from 119.2 million (37.8 percent) in 2014 to comprise 224.5 million (56.4 percent) of the total population in 2060 (US Department of Commerce, 2015).

Similarly, the US ethnic minority student population has grown while the white student population has declined. From 1976 to 2010, the percentage of Hispanic students increased from 3 to 13 percent, Asian/Pacific Islander students increased from 2 to 6 percent, and black students increased from 9 to 14 percent. In contrast, the percentage of white students fell from 83 to 61 percent during the same period (US Department of Education, 2012a, b, c, d). The enrollment of US residents in a postsecondary degree granting institution is projected to increase by 42 percent for Hispanic students, 25 percent for black students, 20 percent for Asian/Pacific Islander students, 4 percent for white students, and 1 percent for American Indian/Alaskan Native students between 2010 and 2021 (US Department of Education, 2013).

Despite these changes in the USA and student populations, there remains a gap in conferral of baccalaureate degrees between whites and ethnic minority students. Graduation rates for the first time, full time students who enrolled in bachelor’s degree granting institutions in 2004, varied by race and ethnicity. For example, the 2004 cohort’s completion rates were highest for Asian/Pacific Islander students at 69 percent, white students at 62 percent, Hispanic students at 50 percent, and black and American Indian/Alaska Native students at 39 percent (US Department of Education, 2012d). Although there were increases in degree attainment in every race, except for whites between 1999 and 2000 and 2009 and 2010, whites still obtained more than 7 out of 10 baccalaureate degrees in the USA. Bachelor’s degrees conferred for whites were 72.9 percent, blacks were 10.3 percent, Hispanics were 8.8 percent, Asian/Pacific Islanders were 7.3 percent and American Indian/Alaskan Natives were 0.8 percent (US Department of Education, 2012a). This leads to obvious implications for attainment of graduate degrees for people of color.

Education of the US population is of critical importance to the nation’s ability to be a global leader in innovation, ingenuity, and economic competitiveness. Additionally, the success of America’s education system is inextricably tied to and influences the strength of the American economy (The White House, 2016). During the twentieth century, advances in the education system and increased graduation of high school and college students led to an economic rise of the USA such that it became the wealthiest country among all other nations. Gone is the twentieth century economy, where the USA was the “most productive, and most competitive in the world; amazing new technologies were invented and commercialized; the workforce became the most educated in the world; and [where] incomes soared while a large middle class emerged and thrived” (US Department of Commerce, 2012a, p. v).

The twenty-first century is described with the USA demonstrating an inability to maintain its preeminent position as a world leader, via stagnated incomes and slowed job growth. By today’s standards, the US education system has slipped (US Department of Commerce, 2012a). Today, the USA has fallen internationally from 1st place in 1990 to 12th place in baccalaureate degree attainment among 25-34 year olds (White House, 2014). This is of economic significance, considering a highly educated population is essential to foster innovation and increase living standards (US Department of Commerce, 2012a, b).
Additionally, higher levels of educational attainment correspond to increased earnings (US Department of Education, 2016) and are a “key pathway for social mobility in the USA” (US Department of Education, 2016, p. 1). The economic growth of the nation and prosperity of its population is directly tied to the education of the workforce. Thus, postsecondary educational institutions and educators need to ensure the academic success and graduation of students of color. In less than three decades this demographic will compose a majority of the population. They will need to be prepared to lead innovation and keep the nation at the forefront of the global marketplace.

Trailing behind other industrialized countries in the conferment of high school and college degrees and failing to educate the ethnic minority population of students is an urgent national problem. Of significance is the converse relationship between the increase of a racially and ethnically diverse US population and postsecondary student population vs conferral of baccalaureate degrees to ethnic minority students in the USA. The US Department of Education, under the Obama Administration, recommended that in order to achieve this, institutions must make a commitment to promoting student body diversity and inclusion on campus. Diversity needs to be valued across all levels of the education system including faculty, staff, and students. Institutions must make a commitment to outreach to and recruit diverse groups of students. One of the academy’s highest priorities should be historically underrepresented students; however, institutions have not yet successfully decreased disparities in these students’ persistence and graduation rates (Quaye and Harper, 2015). Support services need to advance students’ academic success such as decreased time in remediation, increased retention, and increase in students earning good grades. There needs to be a commitment to creating an inclusive campus climate (e.g. decreased reports of discrimination and bias, increased cultural competency of leadership, faculty, staff, and students, and financial support to decrease gap for economically disadvantaged students). Additionally, there needs to be further research in ways to advance educational equity for underrepresented groups in terms of students’ enrollment, retention, and graduation rates (US Department of Education, 2016).

A national imperative has been established to increase college graduation rates by 2020 (The White House, 2009), and it is critical to use race as part of the college admissions process in order to ensure a diverse student body which would enrich students’ educational experience (The National Association for College Admission Counseling, 2016). However, postsecondary institutions are still in varying degrees of institutional transformation to address the needs of their diverse student population ranging from models where diversity is valued and tied to an institution’s mission, to those whose diversity initiatives are assigned to individuals who are not in executive roles (Moses, 2014). The aspiration of complete institutional change would have an end goal with diversity valued by higher education leaders and at the core of an institutional mission (Moses, 2014; Gregorian, 2012). Thus, it is important to research opportunities to increase ethnic minority student retention, academic success, and graduation. Broadly speaking, there is a need to consider multi-ethnic student academic and personal needs, and institutional and system wide ethnicity-sensitive policies in postsecondary education. We believed that opportunities to foster minority students’ positive ethnic formation may contribute to these efforts.

Relevant literature
In this manuscript, we explore whether the mindfulness-based practices of attention, emotion, and CR may be strategies to advance one’s ethnic identity. We believe that there may be skills that can create pathways to help foster protective and promotive strategies against stressors related to ethnic and racial identity discrimination and increase opportunities for positive ethnic identity development. This can be particularly relevant to ethnic minority students who exist in social structures and institutions that have been
shaped by a history of racism and discrimination. Mindfulness methodology may also assist those who hold leadership positions within the academy to become more aware of how they may be able to cultivate environments that foster ethnic identity development and positive goal-directed behavior.

Ethnic identity
For ethnic and racial minorities, ethnic identity is vital to psychological functioning and well-being, and is a critical component of their self-concept (Roberts et al., 1999; Phinney, 1990). Categorized as a social identity that is representative of sense of belonging to one’s ethnic group, ethnic identity development has been associated with positive psychosocial outcomes such as higher self-esteem (Bracey et al., 2004; Phinney, 1991; Phinney et al., 1996; Romero et al., 2014; Tajfel and Turner, 1986), and lower depressive symptoms (Street et al., 2009; Umáña-Taylor and Updegraff, 2007).

Recent studies on health literature suggest that ethnic minorities, including ethnic minority college students, who perceived racial and ethnic discrimination, may experience increased stress and ultimately, disease. Ethnic minorities’ repeated exposure to discrimination elicits both a physiological and psychological response to stress, which can lead to mental and physical illness (Pascoe and Richman, 2009; Williams and Mohammed, 2009). We recognize that this cannot be generalized across ethnic groups, nonetheless, the instruments that are used to measure stress, anxiety, attention, emotion, and CR as well as ethnic identity development are designed and administered in a manner to generalize across all ethnic identity groupings. Donovan’s et al. (2012) research in perceived discrimination, and depressive symptoms in eight ethnic-generational groups suggest that it is important to recognize that minorities, as a group, and individuals within each ethnic group experience and respond to ethnic discrimination differently, such that research on the relationship between discrimination and ethnic identity vary across different ethnic groups (Fuller-Rowell et al., 2013).

A positive sense of one’s ethnic identity is expected to play a favorable role in minority psychosocial functioning by buffering the negative aspects of cultural stressors on well-being (Gonzales-Backen, 2013; Iturbide et al., 2009; Umáña-Taylor et al., 2011) and having a protective stabilizing effect on self-esteem (Romero et al., 2014). This is particularly salient to Mexican-origin youth because it provides them with a sense of purpose, understanding, and confidence in their ethnicity, and ethnic group membership (Umáña-Taylor et al., 2014, p. 190; Neblett et al., 2012; Umáña-Taylor, 2004). For Asian Americans, positive ethnic identity development has been linked to eudaimonic well-being (Iwamoto and Liu, 2010), and moderating symptoms of depression resulting from discrimination (Mossakowski, 2003). Ethnic identity has been associated with quality of life, playing a role in self-esteem, related to self-worth, and happiness (Tovar-Murray and Munley, 2007), and predictor of life satisfaction (Tovar-Murray and Munley, 2007; Diener and Diener, 1995) for African Americans. Similarly, underrepresented college students with achieved ethnic identity have both cognitive and non-cognitive benefits. Research has suggested ethnic identity positively impacts a sense of competence, sense of belonging, interpersonal relationships, and commitments (Maramba and Velasquez, 2012). These positive psychosocial outcomes combined with the proportional growth of children and young adults of color have resulted in researchers’ increased interest in ethnic identity development (French et al., 2013).

Although there are a number of studies that have associated ethnic identity development with positive psychosocial outcomes, there is still a need to acquire knowledge about processes and antecedents of identity development (Fuller-Rowell et al., 2013). Here, we consider that the meaning of ethnic identity and preference as contextual and which can be impacted by social milieu (Phinney and Rotheram, 1987). Since students of color have historically been considered members of a devalued group in the USA (Jones, 1997), this
may have, in some cases, resulted in a predisposition to internalizing negative attitudes (Tajfel, 1978) about ethnic group membership (French et al., 2006). Being mindful of these circumstances and considering alternative approaches to one’s ethnic identity formation may influence a more positive sense of self. Note that a continual limitation to this discussion and also inherent in this study is the consistent generalization of findings to all students of color. In the next section, we provide an overview of mindfulness and literature pertaining to AR and ER. We will connect these practices and theories to majority and minority groups’ use of cognitive reappraisal and expressive suppression strategies and the resulting effect on well-being.

Mindfulness
Mindfulness meditation is the intentional act of focusing attention to one’s thoughts, emotions, and body sensations while observing them from inception to end (Hölzel et al., 2011). The interacting components of mindfulness meditation include: AR; body awareness; ER, including reappraisal and exposure, extinction, and reconsolidation (e.g. CR); and change in perspective of self. Hölzel et al. (2011) defines mindfulness and mindfulness meditation within the context of current scientific research. Mindfulness is the act of experiencing the present with nonjudgmental attention (Kabat-Zinn, 1990). One may do this by regulating attention so that it is in the present moment, and then orienting self with interest and receptivity to the experience regardless of what it is (Bishop et al., 2004). It is typically attached to meditation practices and has been integrated into sitting meditation, walking meditation, or other mindful movements (Kabat-Zinn, 1990). As a practice, mindfulness meditation is inclusive of focusing attention on one’s thoughts, emotions, and body sensations while being cognizant of the experience from the start of the experience to its ending or transition to the next experience (Hölzel et al., 2011).

We hypothesize that the active practice of mindfulness meditation may sway potentially destructive emotional responses to threats on one’s ethnic identity. Specifically, interacting components of mindfulness meditation can influence one’s ability to focus attention to one’s thoughts, and have cognitive control of how one experiences their emotions. As a result, the ability to use cognitive reappraisal to down-regulate negative emotional responses to an external threat (e.g. discrimination and prejudice), and increase executive brain function may foster positive ethnic identity development. What follows is more detail and how that might occur.

AR
As previously mentioned, Hölzel et al. (2011) synthesized existing research that describes distinct interacting mechanisms that occur during mindfulness meditation. The first component described is AR. AR is the action of focusing attention on a single object, where if one notices that the mind has wandered away, one is invited to return thoughts back to the intended object (Lutz et al., 2008). This process is also referred to as conflict monitoring or executive attention (Posner and Petersen, 1990). As a result of the repeated practice, Hölzel et al. (2011) says, mindfulness meditators with typically developed brains, are able to increase their attention with fewer distractions and self-reported enhanced attentional performance (Barinaga, 2003; Jha et al., 2007; Slagter et al., 2007; Valentine and Sweet, 1999; van den Hurk et al., 2010).

Of particular interest to Hölzel’s et al. (2011) research and to this study is the neural mechanism of executive attention as it relates to AR. In neuroimaging research, the anterior cingulate cortex (ACC) has been attributed to enabling executive attention. This may mean that distractions during meditation and in conflict with the goal of focusing on one’s breath may result in ACC activation which alerts systems in the brain that implement top-down regulation (executive function part of the brain, which is the prefrontal cortex, which down
regulates the reactivity of the emotional reactive part of the brain) (van Veen and Carter, 2002). As a result, one can focus attention back to the breath.

The ACC has been linked to meditation in several neuroscientific studies (Cahn and Polich, 2006). Hözel’s et al. (2007) functional Magnetic Resonance Imaging research suggests that there was greater activation in the rostral ACC for experienced meditators who practiced focused attention meditation. The rostral ACC is associated with the limbic region of the brain where emotional responses are generated (Etkin et al., 2011). Other studies aligned with research suggesting greater rostral ACC activation in meditators (Gard et al., 2012; Tang et al., 2009). Structural MRI analysis of brain gray matter indicates that the practice of meditation may result in the cortical thickness in the dorsal ACC for experienced meditators when compared to control subjects (Grant et al., 2010), and white matter integrity in the ACC for participants in an 11-hour integrative body-mind training (Tang et al., 2010). The dorsal ACC is associated with the appraisal of negative emotion and how it is expressed (Etkin et al., 2011). In short, Hözel et al. (2011) argued that mindfulness meditation may result in strengthening AR and ACC performance, which regulates blood pressure and heart rate. As such, the mindful practitioner, who has a typically developed brain, has access to self-initiated ER.

ER
A dearth of literature exists pertaining to ER as a potential influence on positive ethnic identity development. This is particularly interesting because the ability to manage negative emotions that can deter one from positive goal-directed behavior (Zelazo et al., 2016) may be relevant to ethnic minorities in the USA considering various stressors that may impact their psychosocial well-being. There are many opportunities for minorities to develop a negative identity as it relates to membership in one’s ethnic group, especially because membership in oppressed and exploited minority groups can increase the tendency to internalize unfavorable perspectives by majority groups (Erikson, 1968). Ethnic minorities deal with “contrasting and often conflicting attitudes, values, practices, and expectations derived from dual frames of reference, their home, or ethnic culture and the culture of the larger society as embodied in their school and among their peers” (Phinney, 2010, p. 34). Within a cultural ecological framework, identity can be influenced by the environment. Racism, prejudice, discrimination, oppression, and segregation can influence the formation of minority children’s identity (Eccles et al., 2006; Garcia Coll et al., 1996), and thus, should be considered in the development of ethnic minorities. Additionally, prejudice and discrimination have been associated with stress, lower self-esteem, depressive symptoms, and risky behavior (Adams et al., 2006; Eccles et al., 2006; Edwards and Romero, 2008; Garcia Coll et al., 1996; Jackson et al., 1996; Romero et al., 2007; Romero et al., 2014; Romero and Roberts, 2003a, b; Spears Brown and Bigler, 2005; Szalacha et al., 2003).

ER is an individual’s ability to modulate which emotions one has, when he or she has them, and how one expresses or experience those emotions (Gross, 1998b; Gross and Desteno, 2013). Of interest to this paper is the cognitive reappraisal strategy (e.g. CR), which is the process of re-contextualizing a thought prior to an emotional reaction (Gross, 1998a), to elicit a more positive reaction (e.g empowering self by choosing how to feel, react, and/or respond to a racist situation), or not personalizing a situation (e.g. delineating that an act of microaggression is about how you are being treated as opposed to who you are as a person). It can be useful as a strategy to thwart negative emotions (John and Gross, 2004), and has been associated with fewer depressive symptoms, less negative affect, more positive affect, greater well-being, and more successful social interactions (Butler et al., 2003; Gross and John, 2003).

In a study measuring the individual differences in the use of cognitive reappraisal and expressive suppression, Gross and John (2003) explored whether emotional expression...
varied across different ethnic minority groups. A portion of their research was influenced by the social stratification of race and ethnicity in the USA where European Americans tended to have more power and social status than ethnic minorities. Based on how power influences behavior, Keltner et al. (2003) discussed the consequences of power-related behavioral patterns. In short, those with a lower status (minorities) had to minimize the risk of upsetting those who held a higher status (majorities) because they controlled valuable resources. As a strategy, those with lower status carefully monitored and controlled expression of their emotion. This led Gross and John (2003) to hypothesize that ethnic minorities may use emotion suppression as an ER strategy more frequently than European Americans.

Their study found that European Americans showed the least use of suppression as an ER strategy. Based on their ANOVAs, they did not find a difference in suppression as an emotional regulation strategy between minority groups. In line with their original premise, greater use of suppression to regulate emotions was associated with minority status. In the frequency in use of reappraisal, they found no significant differences across the four ethnic groups.

The study then explored the consequences of reappraisal and suppression as ER strategies. In this part of the study, ethnicity was not a consistent moderator for suppression or reappraisal in moderated multiple regression analyses. Findings in this part of the study suggested that inauthenticity, or discrepancy between presentation of self and inner self (Gross and John, 1998) was related to suppression but not reappraisal. Gross and John (2003) believed that individuals who chronically used suppression were aware of their inauthenticity and deceit about inner feelings, attitudes, and beliefs. As a coping mechanism, this may be problematic for ethnic minorities who tended to use suppression to regulate emotions more often than European Americans.

Findings by Juang et al. (2016) suggested how the use of suppression to regulate emotions could be problematic for ethnic minorities. They found that lower cognitive reappraisals in combination with higher suppression as ER strategies to combat discrimination (in the form of denigration) has been tied to symptoms of depression, anxiety, and aggression for Latino/Latina and Asian heritage college students. However, the benefits of cognitive reappraisal as an adaptive strategy are also contextual. Soto et al (2012), investigated cognitive reappraisal strategies across Latinos in the context of oppression and strength in numbers. Their study suggests that cognitive reappraisal as an adaptive strategy against discrimination was linked to better psychological functioning for Latinos who were in high-Latino populated counties such as Riverside County, California, but this relationship was absent for Latinos in low-Latino populated counties, such as Lancaster County, Nebraska (Soto et al., 2012). As can be seen, it is important to note that global conclusions or assumptions that one ER strategy is better than another could be misleading; specificity of context should be factored into each scenario (Gross and Desteno, 2013; Soto et al., 2012). For example, in a study exploring ethnic variation in emotion regulation, Arens et al. (2013) findings suggested value in conceptualizing ER as a sociocultural phenomenon. In their research, healthy female Turkish immigrants in Germany exhibited a greater ER balance than German women. The Turkish women frequently used both cognitive reappraisal and expressive suppression, and had more positive outcomes of expressive suppression than German women. Their study supports previous research suggesting ER is practiced differently and has different health outcomes across various cultures (Arens et al., 2013; Consedine et al., 2002, 2005; Gross and John, 2003). Thus, factors such as ethnicity, gender, and context may influence nuances in how mindfulness-based strategies are practiced and the health outcomes of mindfulness-based trainings.

As can be seen in our discussion the literature review about mindfulness, AR, and ER there is constant interaction between self, behavior, and the changing environmental setting. One’s ethnic and racial identity is experienced in everyday life as a set of “behavioral and
psychological negotiations” (Cross et al., 2017, p. 2). This can be described as a dynamic psychological web where one has to psychologically navigate oneself based on their interaction with varying situations (Cross et al., 2017). This constant internal and behavioral negotiation highlights the importance of developing a positive ethnic identity in order to successfully traverse in everyday life. Thus, we were interested in exploring opportunities to provide strategies that cultivate students’ positive ethnic identity development.

### Purpose
The purpose of this study was to learn whether participation in the mindfulness methodology called integrative inquiry (INIQ) resulted in a difference in students’ ethnic identity, as measured by the multigroup ethnic identity measure (MEIM).

### INIQ
Using mindfulness methodology and mindful inquiry, INIQ was developed to influence areas of the brain associated with AR, ER, and CR in order to decrease stress and anxiety, and heighten executive function for undergraduate and graduate students. Designed as a 16-week hybrid or online AR, ER, and CR curriculum, undergraduate and graduate students were invited to participate in: reading assignments; online mini-lectures; reflective questions; interactions with nature; mindfulness methodology assignments; creative expression assignments; journal assignments; focused breathing exercises; focused movement exercises; didactic exercises; presentations; compassion exercises; common humanity exercises (including reinforcing compassion and empathy for others and reminding students that all humans have feelings and want to be happy “just like me”); expressive exercises; and community service projects (Bresciani Ludvik et al., 2016). INIQ participants included undergraduate students who met two hours a week, master’s students who met 15-45 minutes a week, and doctoral students who met two days a month. Bresciani Ludvik’s et al. (2016) research found that undergraduate, master’s, and doctoral students participating in a INIQ pilot programs reported significant effectiveness in decreased stress and anxiety and increased AR, ER, and CR.

Participants’ ethnic identity was measured by the MEIM (Phinney, 1992). Mindfulness was measured by the Five Facet Mindfulness Questionnaire (FFMQ) (Baer et al., 2006). Both inventories were given to students before and after participation in INIQ.

### Research question
Our research question is:

**RQ1.** Does participation in INIQ result in higher mean scores for ethnic identity, as assessed by the MEIM (Phinney, 1992)?

### Hypotheses

**H1.** There will be no significant difference ($p < 0.05$) in ethnic identity development for INIQ participants.

**H2.** There will be no significant difference ($p < 0.05$) in mindfulness for INIQ participants.

### Theoretical framework
Phinney’s (1993) three-stage model of ethnic identity was the theoretical framework guiding this study. In this framework, individuals’ degree of exploration and commitment to one’s
ethnic identity is classified into four identity statuses (Gjerde, 2014). Stage 1 describes two identity statuses. This includes one’s unexamined ethnic identity as a classification of either diffusion or foreclosure. Diffusion is when one has not explored their feelings and attitudes about one’s ethnic identity. In foreclosure, an individual has not explored one’s ethnic identity, but may have made a commitment to an ethnic identity based on the opinions and attitudes of others (Phinney, 1993). Stage 2 describes the search and exploration of one’s ethnic identity and is classified as moratorium. In Stage 3, an individual has explored one’s ethnic identity in depth and has committed to positive sense of oneself. This is described as identity achievement (Phinney, 1993).

This model was created to conceptualize ethnic identity development and led to the instrument used to measure aspects of ethnic identity development and achievement. The components of exploration and commitment from Stages 1 and 2 become the measureable aspects of ethnic identity development in Phinney’s MEIM (1992a, b). Using a likert scale to understand extent to which one explores and commits to one’s ethnic identity, researchers can quantify these aspects of ethnic identity and in combination measure ethnic identity achievement. In this study, we used Phinney’s (1992) MEIM.

Connecting INIQ regulation strategies to theoretical framework
Using mindfulness methodology, INIQ was designed to influence areas of the brain associated with AR, ER, and CR. CR, in the training, encourages individuals to explore a sense of self, self-regulation, and being aware of one’s relationship with experiences within and around oneself. This can be useful during the first stage of unexamined ethnic identity, diffusion and foreclosure, where feelings and attitudes of ethnic identity have not yet been explored. The active practice of “thinking about sense of identity, of self, of belonging, of community, [and] of making meaning out of the experiences that surround one” and of thinking about how one is the same or different from others (Bresciani Ludvik et al., 2016) can influence thinking about oneself in relation to the sense of belonging in one’s ethnic group.

AR is the ability to focus attention on a single object, where if one notices that attention has wandered away, then one can return thoughts back to that object (Lutz et al., 2008). During, the second stage of ethnic identity search or moratorium, an encounter can influence one to look at one’s own ethnicity and become aware of ethnicity.

Application of this process may look like this: Mike, a Japanese American, meets his University roommate for the first time. During the introductory conversation, Sean, a European American, asks Mike “Where are you from?” Though this question may seem harmless, ethnic minorities may experience it as a threat to their personal identity (Armenta et al., 2013; Tajfel and Turner, 1986; Turner et al., 1987), because of the potential implications that that they may not be “as American as their European American counterparts” (Armenta et al., 2013, p. 131). Having participated in INIQ, Mike notices heat rising in his body. He also notices a mixture of emotions as he begins to interpret what Sean is interested in learning about Mike and he begins to predict the implications of each interpretation. Mike breathes in because he has learned in his training that the breath will literally alter his physiology and down regulate his fight or flight reaction (e.g. amygdala). The breathing may also up-regulate his pre-frontal cortex giving him access to his executive functions. Mike responds “I am from San Francisco.” Sean asks for more clarification “Where are you really from?” Mike then moves into mindful inquiry. Fact – Sean is interested in knowing where Mike is from. Interpretation – Sean sees me as someone who is not from here. Fact – Mike is from San Francisco. Interpretation – Sean thinks I am a foreigner. Fact – Sean may or may not realize his comment implies he believes that Mike does not reflect his representation of what a San Franciscan or an American is. Interpretation – Sean sees me as less American than he is. Sean’s process of moving through
mindful inquiry gives him an opportunity to bring attention to his emotions and to his thoughts. Then he can choose his next response, as opposed to automatically reacting to and expressing his anger. As a result, Mike decides that he is not comfortable answering personal questions about himself. Instead he decides to ask Sean “where he is from,” and learn more about who Sean is as an individual. This is an example of how participants in INIQ are coached to focus attention to their feelings and thoughts so that they may engage in CR of how they experience their emotions. Students are not specifically guided though activities explicitly meant to influence ethnic identity development.

Method

Study population and setting

In this pre-post-assessment study, 30 participants were recruited from an ethnically diverse Hispanic serving institution in Southern California, where students were enrolled in undergraduate, masters and doctoral programs. Two of the students did not complete the post-test, \( n = 28 \). The undergraduate students were recruited from science, technology, engineering, and mathematics programs geared to supporting underrepresented students. The master’s and doctoral students were recruited from educational leadership programs with a focus on social justice. All students attended an ethnically and racially diverse institution.

The study consisted of 30 students from Spring 2013 and Fall 2014 cohorts of the INIQ program. Two students did not complete the post-test. Demographic information and results sections are representative of a sample size of \( n = 28 \). The educational composition of the students included: 18 percent undergraduate students, 32 percent master’s students, and 50 percent doctoral students. Students’ ranged from age 19 to 56 years old (\( M = 32; \text{SD} = 11.13 \)), with 36 percent between the ages 18 and 24 years old, 25 percent between 25 and 34 years old, 25 percent between 35 and 44 years old, 7 percent between 45 and 54 years old, and 7 percent between 55 and 64 years old. The students were predominantly female (75 percent). Their ethnic composition, based on self-reporting measures, was 14 percent black or African American; 18 percent mixed (Parents are from two different groups); 25 percent Hispanic or Latino, including Mexican American, central American, and others; and 43 percent white, Caucasian, Anglo, European American. No students self-reported that they ethnically identified as either Asian or Asian American, including Chinese, Japanese, and others; or American Indian or Native American.

Of the 30 participants who took the pre-test, two people did not complete the post-test. In the \( t \)-test there were no missing data, so the sample size was \( n = 28 \).

A summary of demographic characteristics of the study population can be found in Table I.

Procedure

Data collection for this paper was a part of a larger study that asked students to complete, a pre- and post-packet containing demographic questions, the MEIM, and FFMQ. Additionally, the research team received Institutional Review Board approval to conduct this study in a Hispanic serving institution in Southern California. Consent forms were gathered from all participants prior to engaging in INIQ training.

All data were collected in the form of self-report assessment packets prior to and after completing the training program. Confidentiality was maintained by assigning each participant a unique identification number that was then used on all documents instead of their name or any other personally identifying information.

When students completed and submitted their pre-assessment packets, they received an e-mail with their login details that allowed access to the online modules. The students participated in the hybrid model of INIQ, meaning participants engaged in both face-to-face
and online sessions. Preceding the last week of classes (week 16) and following ECP instruction, participants were given a post-assessment packet to complete and return. All packets were returned to the course instructors who then filed them in a locked filing cabinet for the researchers.

A number of analytical strategies were employed to explore whether participation in INIQ influenced students’ ethnic identity, as measured by the MEIM. Our analysis included descriptive analytics to provide insight about participants’ characteristics and an exploratory factor analysis to examine the underlying factor structure of MEIM as influenced by students’ participation in INIQ. Analytical strategies were conducted using the International Business Machines Corporation Statistical Package for the Social Sciences Software.

**Measures**

The following measures were used.

**MEIM.** The MEIM is composed of a 12-item self-report inventory used to measure ethnic identity across diverse populations and ages (Phinney, 1992). It measures two factors including affirmation/belonging and ethnic identity achievement, and overall ethnic identity achievement. With Cronbach’s $\alpha$ of 0.80, the MEIM has shown good reliability (Roberts et al., 1999).

**FFMQ.** The FFMQ is composed of five factors of mindfulness. These factors include observing (which is associated with AR), describing (associated with AR and CR), acting with awareness (associated with AR and ER), non-judging of inner experience (associated with ER and CR), and non-reactivity to inner experience (associated with ER and CR). This self-report inventory includes 38 items (Baer et al., 2006).

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**Results**

This study found that there were significant increases in students’ mindfulness ($p = 0.001$) and ethnic learning exploration ($p = 0.028$) pre-test and post-test scores after participation in INIQ. This study also found that there was no significant difference in pre-test and post-test scores for dependent subscales of ethnic belonging ($p = 0.424$) and clear understanding ($p = 0.15$); and overall ethnic identity development $p = 0.387$.

**Exploratory factor analysis MEIM**

An exploratory factor analysis was conducted on items of the MEIM with a complete data set ($n = 28$). According to Roberts *et al.* (1999) factor analysis, the MEIM is comprised of two factors. These include ethnic identity search (items 1, 2, 4, 8, and 10) and affirmation, belonging, and commitment (3, 5, 6, 7, 9, 11, and 12). These items can then be scored with a mean score reflecting search (five items), affirmation (seven items) and overall score (all 12 items). We were interested in exploring the underlying constructs of ethnic identity search and affirmation, belonging, and commitment as influenced by participation in INIQ. Conducting principle components analysis, we used SPSS to extract factors based on eigenvalues greater than one. In order to make factors more interpretable and presuming factors were not related, we used maximum likelihood with varimax rotation. A three-factor solution was obtained reflecting subscales of 2 items in learning exploration (2, and 4); 5 items in ethnic belonging (5, 6, 9, 11, and 12); and 5 items in clear understanding (1, 3, 7, 8, and 10). Cronbach’s $\alpha$ coefficients were 0.89 for the entire sample, 0.49 for learning exploration, 0.91 for ethnic belonging, and 0.84 for clear understanding.

**Paired sample t-test procedure**

The paired sampled $t$-test statistical procedure was conducted to determine whether students’ pre-test mean score for ethnic identity (as measured by MEIM), and mindfulness (as measured by FFMQ) differed from post-test scores after participation in INIQ.

In the first paired sample $t$-test, we examined students whether students’ pre-test mean score for ethnic identity (as measured by MEIM) differed from post-test scores after participation in INIQ. The results revealed that there was significant increase in students’ learning exploration subscale between the pre-test ($M = 4.89$, $SD = 1.59$) and the post-test scores $M = 5.39$, $SD = 1.50$; $t(27) = 2.32$, $p = 0.028$. The effect size for learning exploration is medium ($d = 0.439$). It also revealed there was no significant difference in students’ pre-test and post-test scores for the subscales of ethnic belonging pre-test scores ($M = 3.26$, $SD = 0.618$) and post-test scores ($M = 3.19$, $SD = 0.681$); $t(27) = 0.812$, $p = 0.424$ and clear understanding pre-test scores ($M = 14.85$, $SD = 3.39$) and post-test scores ($M = 15.46$, $SD = 2.92$); $t(27) = 1.4$, $p = 0.15$. Additionally, there was no significant difference in pre-test ($M = 36.07$, $SD = 6.67$) and post-test ($M = 36.82$, $SD = 6.54$) scores for overall ethnic identity achievement $t(27) = 0.880$, $p = 0.387$.

In the second paired sample $t$-test, we examined whether students’ pre-test mean score for mindfulness (as measured by FFMQ) differed from post-test scores after participation in INIQ. The results revealed that there was significant increase between the pre-test ($M = 130.63$, $SD = 17.70$) and post-test scores ($M = 151.10$, $SD = 21.2$) for overall FFMQ scores $t(29) = 6.16$, $p = 0.001$. The effect size for mindfulness is large ($d = 1.12$).

A summary of mindfulness, dependent measures of ethnic identity development, and overall ethnic identity achievement pre-test and post-test scores can be found in Table II.

**Paired sample t-test procedure on two-factor MEIM**

Our exploratory factor analysis resulted in a three-factor solution with a low Cronbach’s $\alpha$ for the learning exploration factor. Since the theory we are using is based on Phinney’s
(1992a, b) two-factor version of the MEIM, we decided to conduct another paired sample $t$-test statistical procedure to see whether there were differences in ethnic identity development for INIQ participants. The results revealed that there was significant increase in students ethnic identity search pre-test scores ($M = 2.66$, $SD = 0.669$) and post-test scores ($M = 2.82$, $SD = 0.663$); $t(27) = 2.08$, $p = 0.047$. The effect size for ethnic identity search was medium ($d = 0.3927$). The results for the affirmation, belonging, and commitment factors had a non-significant decrease in pre-test scores ($M = 3.26$, $SD = 0.563$) and post-test scores ($M = 3.24$, $SD = 0.583$); $t(27) = 0.127$, $p = 0.900$. There was a non-significant increase in the overall 12-item pre-test scores ($M = 3.01$, $SD = 0.552$) and post-test scores ($M = 3.07$, $SD = 0.545$); $t(27) = 0.880$, $p = 0.387$. The Cronbach’s $\alpha$ coefficient for identity search (items 1, 2, 4, 8, 10) were 0.73, affirmation, belonging, and commitment (items 3, 5, 6, 7, 9, 11, 12) were 0.89, and overall MEIM (all 12 items) were 0.89.

We summarize the pre-test and post-test scores from the dependent measures of ethnic identity development and overall ethnic identity achievement in Table III.

**Analysis of covariance (ANCOVA)**

An ANCOVA was conducted in order to control for age or gender. The results indicated there was no significant difference in the MEIM scores based on INIQ participation for age ($f = 0.450$, $p = 0.508$), and gender ($f = 0.612$, $p = 0.441$).

**Assumptions**

Assumptions made in this empirical study were that participation in INIQ activities can inform ethnic identity development, as well as attention, emotion, and CR through improvement in mindfulness. Based on existing literature, we believed that ethnic identity development was measurable by using the MEIM. Additionally, we recognized that assumptions about psychological consequences resulting from ER cannot be generalized across ethnic groups, and can differ with each group’s unique cultural values (Arens et al., 2013; Butler et al., 2003).

**Limitations**

A data limitation in this study were the use of a small sample size of doctoral, master’s and undergraduate students $n = 28$. An additional limitation was that the learning exploration subscale was measured by two items and had a low Cronbach’s $\alpha$. However, it should be noted that the $\alpha$ coefficient for the ethnic identity search factors in Phinney’s two-factor...
MEIM and which measures a concept similar to learning exploration yielded acceptable values of $\alpha$. Future work with larger samples of students is needed, so as to delineate differences among various ethnic identities.

**Discussion**

This study found that there was a significant increase in students’ pre-test and post-test scores for mindfulness and learning exploration of one’s ethnic identity. This study also found a non-significant increase in students’ pre-test and post-test scores for clear understanding and overall ethnic identity achievement as well as a non-significant decrease in ethnic belonging. Overall, students who engaged in mindfulness, AR, ER, and CR practices in INIQ had increased scores for mindfulness and the learning exploration component of ethnic identity development. These strategies may be of value for educators interested in integrating opportunities to foster students’ positive ethnic identity formation in curricula or in student centered programming.

The connection of mindfulness as a potential factor to influence ethnic identity development is a contemporary concept rooted in Buddhist philosophy, and contextualized in western psychological and psychiatric scholarship (Panaïoti, 2015). The metaphysical doctrine that self-as-context (sense of self) can be influenced by recognizing that self can be separated “from (not entangled with) one’s private experience” (Hayes and Plumb, 2007 as cited in Panaïoti, 2015) is a foundational practice of secularized mindfulness and is the mindfulness methodology used in INIQ.

Although directly influencing ethnic identity development was not a targeted outcome of the INIQ training, we believed activities in the training may influence aspects of ethnic identity exploration. Significant increases in pre-test and post-test scores in factors measuring learning explorations in our three-factors MEIM and similarly measuring ethnic identity search in Phinney’s two-factor MEIM indicate that aspects of identity exploration are influenced by participation in INIQ. For example, while practicing mindfulness and CR strategies students were invited to engage in the intentional act of self-exploration. This may have influenced one of the developmental processes of ethnic identity. Specifically, and as measured by the MEIM, exploration of self in relation to their ethnic group, and engagement in activities that included their ethnic group were considered. As a process approach to understanding ethnic identity development, Erikson’s theory (1968) suggests that one progresses “through a sequence of identity statuses ranging from low to high levels of identity exploration and commitment” (Yip, 2014, p. 2). The process of exploring the significance and meaning of ethnic identity to oneself, and placing value on ethnic identity results in ethnic identity achievement (Yip, 2014). Sample INIQ exercises that may have influenced exploration and meaning making processes were that students were invited to begin with a focused breathing exercise, and then notice what arose in response to the question “Who am I?” Students were invited to journal on their responses as part of the self-inquiry practice. While doing this, students were encouraged to be in the present moment of their thoughts and be aware of those times that their attention wandered away. They were then invited to engage in inquiry that would later lead to CR exercises, by exploring “sense of self” and “experiences within and around oneself,” such as “What do I want? What is my life’s purpose? and For what am I grateful?” This inquiry included self-exploration questions that prompted students to reflect on their values, and professional and personal goals through both mindfulness meditation and through reflective journaling. Thus students were invited to engage in a process of self-exploration and meaning making.

The significance of ethnicity and race varies from one moment or context to the other (Yip, 2005, 2009; Yip and Fuligni, 2002). In those moments of self-exploration and inquiry, exploration of ethnic identity may have become more salient to students or they may not have, depending on the context into which the student was reflecting. A content approach to
ethnic identity development emphasizes the “content, meaning, and significance of ethnic identity at a given point in time” (Yip, 2015, p. 4). Factors that may influence whether students engage in a process of ethnic identity exploration during CR exercises during INIQ are centrality, salience, and regard. Yip (2015) describes these as important factors to meaning making and to influencing significance of ethnic identity development. Such that it is important for ethnic identity to be central to one’s sense of self, it must be salient to the relevance of one’s ethnic identity at that particular time, and one must have regard or feelings about one’s group membership (Yip, 2015).

Since participants were undergraduate, master’s and doctoral students who were either supported by, or enrolled in social justice-oriented programs at an ethnically and racially diverse institution, these content components of ethnic identity were likely relevant to students who were engaging in INIQ practices. Setting intention to engage in self-inquiry in an environment where ethnic identity was already salient in students’ identity may have resulted in the significant increase between pre-test and post-test scores of the learning exploration subscales of the MEIM. Such that there was an increase in exploration of self in relation to one’s ethnic group membership and increased reflection of involvement in one’s ethnic groups. This suggests that mindfulness methodology, which cultivates increases in AR, ER, and CR, may be useful in proactively prompting exploration of one’s own ethnic identity - an important ethnic identity development step (Phinney and Ong, 2007).

Additionally, given that a majority of the subjects under study were master’s and doctoral students enrolled in postsecondary educational leadership program, it is possible that their own experiences in the INIQ curriculum may prove beneficial to providing the students they serve with opportunities to cultivate AR, ER, CR, and ethnic identity learning exploration. Such that the strategies they learned in INIQ may be integrated into topics in academic curricula or tools given to students in diversity centered programming.

In all, the findings from this study demonstrate that, in its current format, INIQ resulted in significant increase between pre-test and post-test scores in mindfulness (AR, ER, and CR), as well as the learning exploration subscale in the MEIM. However, the analysis indicated there was non-significant increase in the pre-test and post-test of the MEIM, and clear understanding subscale. A possible explanation for this current finding is that the lack of ethnic-specific focus in the training suggests that the overall MEIM and the clear understanding subscale scores only had non-significant increases because they were not a targeted aspect of the training. Additionally, there was a non-significant decrease in the ethnic belonging subscale. One aspect of the training in INIQ is focused on common humanity activities where students are invited to be mindful about others who are similar to oneself in order to promote pro-social behavior. This may diffuse the sense of belonging aspects of ethnic identity development, and influence students’ engagement in commonality with the human experience. However, further studies with larger samples should be conducted to confirm these results. As can be seen in the discussion, intentionally connecting AR, ER, and cognitive reappraisals may be able to enhance positive ethnic formation. Yet, in order to have a greater impact on ethnic identity, INIQ and other diversity centered student support programs must make ethnic identity a central and intentional goal.

In future iterations of the INIQ training, it may be pertinent to this study to integrate activities that have an intentional goal to increase commitment and sense of belonging in an ethnic group, and overall positive ethnic identity achievement. Mindfulness, AR, ER, and CR practices should be inclusive of a process and content approach to increasing ethnic identity achievement. Such that practices should make ethnic identity salient and central and give students an opportunity to think positively about their ethnic identity (positive regard). In tandem, it is important to guide students to intentionally challenge societal and structural threats on one’s ethnic identity and ethnic group. Negative interactions such as racism, discrimination, and microaggressions, can make ethnic identity salient as well (Yip, 2014).
Thus, it is important to develop guided activities that integrate AR, ER, and CR practices as tools to sway potentially destructive emotional responses to threats on one’s ethnic identity. Ethnic identity development is a continual process that changes over time (Phinney, 1989; Yip 2014), where the meaning and significance of one’s ethnic identity can change at any given point in time (Sellers et al., 1997). These processes and content approaches to understanding ethnic identity highlight the value in creating opportunities to intentionally foster ethnic identity development. INIQ gives students mindfulness strategies so that they can be more aware about what they are experiencing in their lives. This can be applicable to increasing students’ exploration and commitment to their ethnic identity. Additionally, students are given strategies to become aware of experiences they are having and how they are experiencing them. This is called AR. In those times that ethnic identity becomes salient (both positive and negative) to a student they can focus attention to these experiences. They are also given tools to regulate their emotions. In those times that students’ ethnic identity becomes salient in a negative way, they can become aware to the emotions that they are feeling (i.e. feelings of anger, and frustration). They are then invited to use CR strategies to think critically about how to respond to these experiences. As such this thoughtful process may thwart potential threats to their identity. As can be seen these strategies can be helpful to the ways in which students experience their ethnic identity, how it makes meaning in their lives, and how to respond to threats to their identity (e.g. racism, discrimination, microaggressions). In this study, mindfulness, AR, ER, and CR strategies taught in INIQ were associated with significant increase in students’ pre-test to post-test scores in mindfulness and ethnic identity exploration. The “behavioral and psychological negotiations” (Cross, et al., 2017, p. 2) of how one experiences one’s ethnic and racial identity in everyday life gives responsibility to INIQ and diversity centered programming to equip students with the tools to navigate through the structural and institutional racism impacting their learning environments (Moses, 2014). Intentionality is integral to fostering positive ethnic identity formation and INIQ and diversity centered programs must keep it at the forefront in order to create environments that engage the needs of the growing student of color population.

Recommendations for practice
The following recommendations are for INIQ trainers, student affairs practitioners, faculty, and administrators who are interested in integrating mindfulness practices into programs or academic curricula that foster opportunities for positive ethnic identity formation. They can be integrated into future INIQ trainings by INIQ trainers. Student affairs practitioners may adopt these recommendations into activities they coordinate for undergraduate or graduate students. Faculty may integrate some of these practices into academic curricula or as strategies to deal with instances of racism, discrimination, or microaggressions that occur in the classroom. Administrators may consider providing professional development training for campus staff and faculty so that they are aware of these practices and are given training to teach these strategies inside the classroom or as out-of-class activities. These recommendations are rooted in Phinney’s (1993) theoretical framework for ethnic identity development, the three-stage model of ethnic identity; the findings from this study; and adaptations to mindfulness practice from the “UNESCO MGIEP Mindful Compassion Teacher Training Manual” (Bresciani Ludvik, 2017). Recommendations that educators may want to consider include:

- Integrate mindfulness methodology and practices into academic curricula, diversity centered programs, and student centered programs targeting minority students. This study suggests that INIQ increases mindfulness in participants. It also suggests that INIQ may increase students’ ethnic learning exploration, which is an important
process in ethnic identity development (Phinney and Ong, 2007). Educators interested in influencing minority students’ positive ethnic identity formation may want to consider making INIQ training available to their undergraduate and/or graduate students by integrating strategies taught in INIQ in curricula or as part of out-of-class activities.

- Make ethnic identity a central and intentional goal. In order to have an impact on ethnic identity, administrators, faculty, and staff must be intentional about implementing and developing practices designed to increase positive ethnic identity formation. This can be done by making ethnic identity salient to students, for example, inviting students to actively think about their ethnic identity and contextualize it in their daily lives. To make ethnic identity central to identity, students can be invited to think about one’s own ethnic identity in the context of who they are as a person. To capture regard or positivity about one’s ethnic group membership (Yip, 2014) practices should invite students to think about positive aspects of their group membership.

- Acknowledge that students come from diverse ethnic backgrounds and may have and may continue to experience overt and covert discrimination, racism, and microaggressions at the hands of other humans. Be mindful about students’ sociocultural influences and modify cultural relevancy, language, modifications, and examples used accordingly (Bresciani Ludvik, 2017). Invite students to think about the context of their environment and observe situations as they occur (AR), be aware their emotions that arise as they experience or think about their experiences in these environments (ER), and think critically about these situations as environmental factors that should not influence ethnic identity (CR).

- Develop activities that invite students to mindfully explore cultural characteristics, such as values, language, traditions, and customs of the ethnic group in which they identify.

- Develop activities that guide students to be mindful of their commitment or lack of commitment, and sense of belonging or lack of sense of belonging in the ethnic group in which they identify.

- Invite students to focus attention to their feelings and thoughts of experiences that have influenced their commitment (or lack thereof) and sense of belonging (or lack thereof) in their ethnic group, so that they may engage in CR of how they experienced their emotions.

- Develop activities that train AR, ER, CR, and mindfulness practices as tools that may influence exploration and sense of belonging into one’s ethnic group.

- Give students an opportunity to reflect about: their intentional exploration about their ethnic identity and the cultural characteristics about their ethnic group(s); how they experience their belonging and commitment (or lack of belonging and commitment) to their ethnic group(s); and what may have influenced these feelings. Give students an opportunity to reflect about these experiences individually and opportunities to reflect about these experiences as a group.

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References


Further reading


Insight Assessment (2013), “California critical thinking disposition inventory scales”, available at: www.insightassessment.com/Products/Critical-Thinking-Attributes-


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Positing a framework for cultivating spirituality through public university leadership development

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Abstract

Purpose – Similar to religion, spirituality is considered a private affair along with issues of faith, hope, and love (Palmer, 1998). American public education has been reluctant to address such issues due to our cultural norm of “separation of church and state” (Love and Talbot, 2000, p. 1) yet the American Council for Education calls upon higher education to provide students ways to explore their personal values, world beliefs, and spirituality (Chickering et al., 2006; Dalton and Crosby, 2006). As such, the purpose of this paper is to explore student leaders’ perspectives on how leadership development activities influenced their sense of spirituality.

Design/methodology/approach – A qualitative case study design was used to explore responses from ten student leaders who completed a leadership development program in the Spring 2015 at a public four-year institution. As part of the leadership development program, students were paired a peer mentor while they completed leadership workshops, a reflection paper, self-assessment, and an ongoing community service project painting murals with individuals who have intellectual disabilities. Participants were from various majors and religious backgrounds and had completed the leadership development program two months prior to their participation in this study.

Findings – Findings revealed that leadership workshops, self-assessment, reflections, peer-to-peer mentorship, and an ongoing shared community service project, influenced students’ perspectives of spirituality and their leadership identity. Student leaders both did and did not differentiate the developmental process of leadership from the spiritual development process, defining both as cognitive and emotional development deeply grounded in self-awareness. Study participants shared that through self-reflection, developing their inter and intra personal skills through conducting service, shaped their understanding of their spiritual identity and developed their sense of self.

Research limitations/implications – Study results are not generalizable but provide insight into the experiences and perceptions of student leaders on two hard-to-define topics: spirituality and leadership. The order of the interview questions may have influenced the thought process leading up to student’s responses connecting spirituality and leadership concepts. Another limitation is that the leadership activities were designed and coordinated by the lead investigator. Hence, there may be findings that were influenced by the investigators’ personal beliefs about leadership. Study participants may have also felt more comfortable discussing their beliefs about spirituality because of their familiarity with the lead investigator.

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It may be that providing the opportunity for an ongoing civic engagement project such as a leadership program coupled with creating a project with a marginalized community is an innovative and intentional technique to foster spiritual development among college students.
Practical implications – Results support the notion that non-faith based public institutions may intentionally support the spiritual development of students through the context of leadership development program activities. Approaching spiritual and leadership development through Baxter Magolda’s (2009) theory of self-authorship allows students to experience new activities coupled with personal self-reflection, to deepen their self-understanding, compassion for others, and self-awareness. This learning is an ongoing process that expands as students engage in contemplative practices such as mindfulness training provided through leadership workshops, self-reflection, and peer-to-peer interactions and self-assessment.

Social implications – This case study illustrates that intentionally designed and implemented leadership development programs may cultivate both the spiritual and leadership identities and behaviors of students. Also, this study reveals that spirituality and leadership are not mutually exclusive processes because both are deeply rooted in connecting to our community, connecting to our greater purpose and our higher consciousness about who we are and how we treat others. Hence, this work may support educators develop more compassionate and empathetic students who are agents of positive social change.

Originality/value – This qualitative case study suggests a new framework for public institutions to support students’ leadership and spiritual development through the theoretical framework of self-authorship. As such, educators can stop being fearful about discussing religion, spirituality, and matters of the heart if they use this framework to design leadership developmental activities.

Keywords Leadership development, Public four-year institutions, Self-authorship, Spiritual development

Why do we need to foster spirituality among college students?

Spirituality has been defined as a lens through which people construct meaning and understanding of universal rules about kindness, civility, relativity, and perseverance (Stewart et al., 2011; Tisdell, 2001). Like religion, spirituality may be considered a private matter along with issues of faith, love, and hope (Palmer, 1998). Americans’ reluctance to address spirituality from a public education standpoint stems from spirituality’s association with religion, which challenges our cultural norm of “separation of church and state” (Love and Talbot, 2000, p. 1). Such expectations of separation can often make educational leaders uncomfortable and challenged to create curriculum that does not favor one religion over another or one world perspective over another (Bolman and Deal, 2001; Collins et al., 1987).

Beyond our cultural norm of secular education, traditional Western culture values positivistic, empirical, and objective knowledge, leaving little room for spiritual conversations or contemplation (Love and Talbot, 2000). Paradoxically, the American Council for Education holds that a main objective of the student affairs profession is to value holistic student development including the exploration of personal values, spiritual development, and beliefs about the world (Chickering et al., 2006; Dalton and Crosby, 2006; Love and Love, 1996; Stewart et al., 2011). Although practitioners and scholars have been advocating that institutions are more intentional with cultivating students’ spiritual development (Chickering et al., 2015; Palmer, 1998; Rendón, 2000) very few tools have been created to actually help educators facilitate that process for students. Hence, if educators are expected to cultivate the “whole student” they must be empowered with the tools or resources to do so in an explicit and well-thought out way (Astin et al., 2011). Psychology may be the only socially acceptable way to heal unless approached from a cognitive psychology perspective in which self-authorship, for example, can be nurtured. Self-authorship is the process of intrapersonal, interpersonal, and cognitive development theorized by Baxter M. Magolda (2009, 2008) to help students listen to their “inner voice,” specifically after experiencing crossroads experiences (Magolda, 2009). By fostering students’ spiritual development through self-authorship, student affairs professionals can feel empowered to foster spirituality as long as a specific religion is not being promoted (Love and Talbot, 2000).

Research supports the notion that spirituality is how students discover their values, approach to life, and make meaning of their lived experiences (Astin and Keen, 2006; Baxter Magolda, 2009; Gehrke, 2008). Spirituality, approached from a multi-epistemological
perspective, is rooted in human consciousness and how individuals relate to a higher sense of purpose or self, “Great Spirit,” “God,” or “Universe” (Astin, 2004; Astin and Keen, 2006; Benefiel, 2005; Tisdell, 2001, 2006, 2007; Rockenbach et al., 2015). Hence, leadership education may play a role in developing college students’ sense of spirituality. In turn, leadership programs such as the one examined here could play a role in student’s interpretation and engagement of the world as leaders and in developing leadership capacity (Astin and Keen, 2006; Benefiel, 2005; Tisdell, 2001, 2007; Rockenbach et al., 2015).

**Purpose**

In teaching leadership from a multi-epistemological perspective, we suggest that educators may be intentionally support students’ leadership and spiritual journey while also not marginalizing certain faiths or religious preferences. We suggest that by framing leadership as a journey toward deeper self-awareness and connected to community, we may also be cultivating the skills that employers demand and fostering students’ spiritual development. For the purpose of this research, we are using the terms identity development and journey interchangeably because we assume that leadership programs directly influence spirituality, spiritual identity and leadership identity through facilitating students ability to lead their lives (Magolda, 2009). Leadership programs that utilize Magolda’s (2009) model of self-authorship for integrative pedagogy help students construct meaning from their experiences lending to new understanding and self-awareness (Komives et al., 2006). Some leadership activities which challenge students to stretch their perceptions of the world (such as working with disabled individuals to paint murals) may be referred to as a “crossroads” experience (Magolda, 2009). A crossroads experience is an experience where a student is challenged to follow their own expectations and dreams despite torn between what they want vs what others may want for them (p. 4). Leadership activities are a medium to providing students with crossroads experiences so that they are able gain insights and be encouraged to internal validation and to follow their own source of happiness. Students who navigate through crossroads experience using their own internal mechanisms are able to ultimately recognize that their own fulfillment depends on themselves and not outside forces such as other’s approval or validation.

If spirituality is important to cultivating sound leadership skills, do we know how to foster it, particularly in public higher education systems? What do student leaders experience that may inform educators about what is already being done on college campus’ to nurture spirituality? In this study, we explored how participation in leadership activities influence students’ spirituality via their progression through Baxter Magolda’s stages of self-authorship, which we assumed, ultimately facilitates spiritual understanding (spirituality), spiritual and leadership identities and the capacity to lead . This case study explored student leaders’ perspectives on how leadership development activities influenced their sense of spirituality and more specifically, how participating in a shared community service project as part of the leadership program influenced their sense of leadership and spirituality.

Participants engaged in a weekly civic engagement project painting murals with individuals with intellectual disabilities. This study investigated the influence of this shared community service activity students’ definitions of spirituality and leadership assuming that the project is a way to provide student leaders with meaningful crossroads events (Magolda, 2009). The researchers also sought to discover whether engagement in the community service activity fosters spirituality. The leadership program under investigation provides students with opportunities to gain deeper insight, knowledge, and skills. It is expected that these results will encourage student affairs professionals to honor various religious and faith preference, while also understanding that this approach to fostering spirituality may be time and resource intensive. In turn, we hope to alleviate the confusion
about how spirituality can be experienced by students at a public institution and how educators can create environments that foster spirituality as a dimension of diversity and as an aspect of leadership development, specifically at non-faith based institutions.

Leadership program overview
The leadership program that was analyzed in this study was developed in 2007 as a platform for student leadership development. The aim of the leadership program is to provide students with a safe learning environment to practice leadership skills on and off campus. It is a co-curricular initiative offered annually at a mid-size regional state institution in the southwestern part of the USA. The program enrolls approximately 200 diverse students each year. Students who are enrolled in the program are required to complete a minimum of 30 hours of leadership development activities within one or two semesters depending on their schedules and ambitions.

Enrollment into the program begins with a peer-to-peer enrollment meeting between the new student and a graduate from the program called a peer leader. Peer leaders coach new students on how to set specific measurable attainable realistic and timely (SMART) goals relating to their major and career and discuss students’ self-assessment results (Conzemius and O’Neill, 2009). The leadership program contains several typical components found in most leadership programs, such as leadership workshops, student mentorship, reflection, and resume writing. This leadership program is uniquely innovative by hosting a weekly ongoing and shared community service project for students to meet their hours of civic engagement. The project is built into the weekly schedule for students and although not mandatory, students who attend the mural project three or more times are also given a certificate of acknowledgment from a United Nations Education Science and Cultural Organization (UNESCO) commissioner and document the experience on their resume and LinkedIn profiles. Students enjoy the project and attend regularly, reportedly because the project is fun yet challenging. From a self-authorship perspective, the civic engagement project exemplifies a “crossroads” experience because students are challenged to work with people unlike themselves and they are challenged to expand their understanding of themselves and others with intellectual disabilities.

Ultimately, the goal of the community service project is to support students’ journey from leading authority-dependent experience to a self-authored experience. Although they are trained on how to work with the clients, they are not directed on the specific needs of each client – they have to sense and be there to support the client in order to paint. Students are then asked to reflect on the experience and how it relates to community, their sense of self, and leadership. In this sense, the program coordinator is educating students on how to cope with the initial discomfort of working with the clients. As such, the relationship between the educator and students is a “partnership” which empowers students to lead their own lives (Magolda, 2009).

Supporting students’ journey toward self-authorship includes helping them secure internal commitments by listening to their internal voice. The program accomplishes this through another innovative approach. All leadership program students are required to take a TypeFocus personality assessment, which is an abbreviated MyersBriggs Personality Type Indicator. The TypeFocus must be completed before the student enrolls into the program with their leadership program peer leader. Peer leaders are trained on how to analyze the results with their students and to coach students on how to leverage their results by getting involved in specific campus and off-campus activities, which align with their MBTI. Students set specific major related goals with their peer leader so that students begin to author their own college experiences knowing that they are supported by their peer leader and that their journey is reinforced by the program activities. Table I illustrates how the leadership program activities are aligned with Baxter Magolda’s theory of self-authorship.
The leadership program activities detailed in Table I are designed to intentionally challenge students to articulate their learning in both written and oral form and to practice leadership in different settings, especially when working with diverse individuals and teams to accomplish a goal. The following research questions were investigated:

RQ1. How does this leadership program activities influence students’ understanding of leadership and spirituality as interwoven identities?

RQ2. How did participating in a shared community service project as part of the leadership program influence students’ leadership and spirituality?

**Theoretical framework for fostering spiritual development: self-authorship**

Deep learning is the developmental process of making meaning that takes into account the interpersonal skills one develops out of life’s experiences (Marx and Gates, 2016). This process of meaning making, particularly as it relates to fostering leadership and spiritual development can be understood using the theory of self-authorship as a framework (Magolda, 2009). Swiss developmental psychologist Jean Piaget (1947/1950) suggested that humans personally grow after they move beyond a particular understanding with new experiences, thereby changing that understanding based on one’s reaction and perception of new information (Magolda, 2009). The intertwining of life’s experiences and the co-existence of multiple perspectives is the essence of Baxter Magolda’s theory of self-authorship (Hodge et al., 2009).

The three developmental phases of self-authorship are: moving toward self-authorship, building a self-authored system, and moving beyond self-authorship (Hodge et al., 2009; Magolda, 2009). The theory of self-authorship takes into consideration the complexities of human experience and is therefore not linear, but cyclical. Individuals move toward increasing levels of self-authorship but can be at any phase at a given time, depending on personal characteristics. These characteristics are the result of socialization based on engagement with as traveling, relationships, sexual orientation, gender, faith orientation, ethnicity, or race (Torres and Hernandez, 2007). These personal characteristics influence individuals’ actions and perceptions of global issues (e.g. presidential campaigns, economic down turn) and personal life experiences (e.g. health, relationships, career choice). Self-authorship focuses on the development and expression of one’s internal voice that occurs during ones’ twenties and thirties.

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**Table I. Leadership development program activities and self-authorship alignment**

<table>
<thead>
<tr>
<th>Program activities</th>
<th>Alignment with self-authorship</th>
</tr>
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<tbody>
<tr>
<td>TypeFocus Personality Assessment (Abbreviated MBTI)</td>
<td>Moving toward self-authorship: listening to the internal voice and cultivating the internal voice</td>
</tr>
<tr>
<td>Enroll with a peer leader to set SMART goals relating to major, career, and personal life</td>
<td>Moving toward self-authorship: listening to the internal voice and cultivating the internal voice</td>
</tr>
<tr>
<td>Attend a minimum of 7 leadership workshops facilitated by different faculty and staff</td>
<td>Building a self-authored system: trusting the Internal Voice</td>
</tr>
<tr>
<td>Conduct a minimum of 7 hours of civic engagement (i.e. weekly mural project)</td>
<td>Building a self-authored system: trusting the internal voice building an internal foundation</td>
</tr>
<tr>
<td>Conduct a minimum of 7 hours of campus engagement (i.e. participating in a student organization)</td>
<td>Building a self-authored system: trusting the internal voice building an internal foundation</td>
</tr>
<tr>
<td>Create a LinkedIn profile based off career center critiqued resume</td>
<td>Building a self-authored system: building an Internal Foundation and Trusting the Internal Voice</td>
</tr>
<tr>
<td>Write a concise 2-3 page reflection paper</td>
<td>Building a self-authored system: listening to the internal voice</td>
</tr>
<tr>
<td>Participate in a panel exit interview with community leaders, faculty, and staff</td>
<td>Building a self-authored system: building an Internal Foundation and Trusting the Internal Voice</td>
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Individuals typically move between phases as they make meaning out of experiences (Hodge, et al., 2009; Magolda, 2009). In the process of design, we assumed that the theory of self-authorship is the quintessential vehicle to better understand the process of spiritual development (deep learning) or the soul’s journey of embracing intuition, diversity of perspective, diversity of others and honoring the authentic self.

In alignment with the theory of self-authorship, students’ involvement in community service has also been found to develop ethical reasoning and morality (Eva and Sendjaya, 2013). Astin and Sax (1998) surveyed 3,450 students from 42 institutions around the country. Their results revealed that participation in civic engagement activities enhanced student’s development and sense of civic responsibility. Moreover, participants reported that engaging in service strengthened their commitment to pursuing their life goals and being committed to solving social issues (Astin and Sax, 1998). This study also revealed that students who participated in as little as one hour a week of service were more interactive with faculty, spent more time studying, and had higher grade point averages than nonparticipants. Conducting service also positively influenced participants’ cognitive processes. Participants reported their knowledge and preparation for graduate school was significantly stronger than their counterparts and they displayed significant increases in leadership and self-confidence than nonparticipants.

Confidence also relates to students’ journey to self-authorship. Educators can partner with students to provide essential support to help them face challenges. By facing a challenge students can learn how to strengthen their internal voice, which gives them the answers to their problems, and to be bold enough to hold this prerogative despite external pressures (Magolda, 2009). Magolda (2009) defines educators as learning partners who, “promote students internal voices and enhance their ability to handle ambiguity (p. 275). Educators are respectful and affirming to students as they express their internal thoughts and they know when to provide challenge. Hence, the role of an educator is to provide students with enough autonomy for them to gain experience cultivating their own internal thoughts (voice) during challenging (crossroads) experiences.

The leadership development program examined in this case study was designed to foster students’ progression through self-authorship by infusing civic and campus engagement service hours and reflection about how these experiences connected to leadership concepts students learned during workshops. Students were invited to volunteer at an optional ongoing weekly service project where they painted murals with individuals who have intellectual disabilities. The community service occurred on a weekly basis off-campus at a non-profit that supports adults with intellectual disabilities and helped student leaders meet their seven minimum hours of civic engagement. Each week, student leaders were paired with clients to paint canvased murals in the wake of natural and human disasters such as Umpqua Community College’s mass shooting which occurred October 2015. The project is recognized by the UNESCO because of its capacity to cultivate world peace through art and educational partnerships. Hence, all mural participants, including those who participated in this case study, learned about UNESCO and earned a UNESCO certificate of appreciation in addition to their leadership certificate.

In addition to civic and campus engagement students completed a minimum of seven highly interactive leadership workshops hosted by diverse faculty, staff, and community leaders. Students enroll in the leadership program by meeting with a their peer leader where they to reflect on their major or career goals and campus and civic engagement opportunities. Peer leaders act as role models for success. They are trained on how to help their student leaders focus on building the skills they need to achieve their goals. Peer leaders are trained on helping students navigate possible ambiguity by listening to them and helping students follow-through on projects.
If spiritual development is the essence of making meaning (Gehrke, 2008; Love, 2001); and effective leaders understand their spiritual beliefs may inform decision-making (Kuh, 1995; Phipps, 2012) how can leadership programs intentionally foster spirituality among college students? Hence, this case study explored students' how leadership activities may have influenced students sense of spirituality and more specifically, how participating may have effected students' sense of leadership and spirituality. The two key research questions investigated were:

**RQ3.** What components of the leadership certificate program cultivated students' sense of spirituality?

**RQ4.** How did participating in a shared community service project as part of the leadership program influence students' sense of leadership and spirituality?

**Methodology**

A qualitative case study design was used to explore whether leadership activities within a leadership program can foster college students' spiritual development at a non-faith based public institution in Southern California. The leadership program hosts a variety of co-curricular experiences for students to apply their leadership knowledge and skills in different settings both on and off campus. Students must complete a minimum of seven workshops, seven hours of civic and seven hours of campus engagement in order to earn their certificate. The aim of the program is to provide students with a safe learning environment to practice leadership skills. A case study design best captured students' development of spirituality and leadership as a result of leadership activities, specifically participating in a shared community service project.

**Data collection strategies**

Three forms of data were collected: in-depth semi-constructed interviews, observation notes from the mural project and leadership workshops, and data analysis of leadership reflection papers insuring triangulation of data. In depth one-on-one interviews were structured by 13 guiding questions. Interviews were recorded on two recording device and saved onto a memory device kept in a locked drawer in a home office. All interviews took place in a private conference room on the university campus. IRB approval was obtained and consent forms were used with each participant. Any concerns or questions were addressed before the interview. Interviews were transcribed verbatim and uploaded to the web-based platform, Dedoose for coding. After each interview, the primary researcher summarized and noted key body language and summarized thoughts about the interview as well as their perspective about the student’s interview.

The primary researcher noted and coded observer comments in addition to weekly observations and observer comments taken during the mural project and weekly leadership workshops. The primary researcher identified incidences or interactions that appeared to be significant and applied an initial code to capture them. Similar incidents or interactions (based on the initial codes) were grouped and the primary researcher started to make meaning out of the related codes, applying another code to capture the relationship between them. Data were then analyzed using open coding and axial coding to find key themes in the research. Once the initial codes and themes were determined, a re-analysis occurred to check the data for consistency. Researchers finalized themes and identified exemplarily quotes from each theme. Reflection papers were coded first by open coding and then by axial coding to capture key themes and categories of data. Reflection paper codes included students' perspectives of what leadership activities influenced their sense of leadership and spiritual identities and specifically how the mural project influenced their perspective of leadership and spirituality.
This case study’s ten participants were Spring 2015 graduates from the campus’ leadership development program who participated in the mural project and were recruited by e-mailing the 43 Spring 2015 leadership program graduates. From that recruitment e-mail, 13 students responded with interest in participating in the study, but due to personal circumstances three participants had to withdraw. Saturation of data was reached by the seventh interview, but all ten interviews were conducted for increased confidence.

Description of sample
The ten students who participated in this study were of various majors and religious backgrounds. Three identified as Christian, three as spiritual but not religious, two as Catholic, one as neither spiritual nor religious, and one identified as Agnostic leaning toward Buddhist but not practicing. Overall, study participants were engaged in leadership activities outside of the leadership program with the exception of Nicole, our self-identified Agnostic participant, who was not engaged in any on or off campus leadership roles. Of the ten participants, four were peer leaders starting in the Summer 2015. As peer leaders, students volunteered part of their summer to be trained on mentorship and leadership and helped refine the programs’ enrollment and graduation processes. Eight of the study participants identified as female and two identified as male. One male participant identified as Catholic and the other identified as Christian.

Data analysis
Data were analyzed using the web-based platform, Dedoose for coding of transcripts and analytic memos. Interviews were coded sequentially with observer comments so that each participant’s interview transcript was being analyzed individually. Approximately 200 open codes led to 75 axial codes, 13 categories and ultimately 9 themes using the constant comparative method. The constant comparative method started with coding one set of data, reflection papers, then observations, and interview transcripts. The nine condensed themes were: spirituality is defined as mindfulness, spirituality defined as empathy, leadership is defined as mindfulness, leadership is empathy/love; mural project cultivated empathy, peer leader developed sense of self, workshops developed self-awareness, spirituality is having a greater sense of community (beyond self), spirituality is having deeper self-awareness.

Limitations
Due to constraints of case study design, study results are not generalizable but provide insight into the experiences and perceptions of student leaders on two hard-to-define topics and the potential for leadership development programs to intentionally cultivate spirituality among college students. The order of the interview questions may have influenced the thought process leading up to students connecting spirituality and leadership concepts. Participants were Spring 2015 graduates class of a leadership program at a public institution in Southern California, which inherently limits the scope of this study. Another limitation is that the leadership activities assessment, workshops, peer mentorship, reflection papers, and civic engagement, were designed and coordinated the lead investigator. Hence, there could be findings that were influenced by the investigators’ personal beliefs about leadership.

Study participants may have felt more comfortable discussing their definitions of spirituality because of their familiarity with the lead investigator. As such, students may have shared perspectives they perceived to be desirable to the investigator, in an effort to please. The lead investigator remained objective as much as possible. All interviews were conducted in a conference room in the office where the leadership program is housed. Hence, the space may have influenced student responses by virtue of being in a leadership designated space rather than a neutral space.
Findings

Overall, students felt that the leadership development program, particularly that of the community service mural project, influenced how they perceived themselves as leaders. The real names of the participants are not included in our analysis. Participants seemed to be more comfortable identifying themselves first as leaders before they were able to delve into sharing their path toward spirituality. When exploring the third research question, study participants shared that they were able to “identify as a leader thanks to the workshops” (Rady) but more importantly, the workshops facilitated students’ “humanitarian perception that we are all part of the same Universe” (Emma). While the participants did not always use the word “spiritual” to define their experience, it can be inferred that words like “Universe” and “humanitarian perception” can be categorized as spiritual in nature.

The “interactive workshops forced (students) to talk and get out of their comfort zone” (Gene) which thereby cultivated their ability to reach out for others and speak up during the workshop activities. It was observed for example, that Gene entered the program very shy. At the beginning of his program, Gene attended all of the workshops and the mural project with one friend and he did not participate until the third week of workshops when the friend was not with him. Gene seemed more confident because, it was assumed, he felt more comfortable in the workshops and at the mural project, he had made new connections and it was clear that is confidence was increasing. Gene later revealed that he grew up Christian, and although he still identifies as Christian, he is in a crisis of faith because he also recently embraced his identity as also being gay. Part of what made him feel confident coming out to his family was the self-acceptance he learned in the leadership program where he “could just be” himself without “judgment or criticism” (Gene). Gene simply “enjoyed working with the clients because they just love and accepted” him into their community. Hence, perhaps part of leadership and spiritual development is to create spaces and experiences where students can be inspired by hearing about other people’s lives.

Similarly, spiritual and religious students alike said that the program helped them become more empathetic leaders, thereby more spiritually centered. The majority of participants, the most influential leadership activities that fostered students’ sense of spirituality were: peer-to-peer mentorship, the weekly leadership workshops, and the weekly mural project to meet their civic engagement hours.

First, students felt that their peer leader inspired them to stay committed to their goals originally set during their enrollment meeting. Lauren, president of her student organization and leader in her church’s college ministry, said that her peer leader “inspired (her) to work toward her short term goals for the program and long-term career goals.” Peer leaders are trained on how to coach students through conflict, decision-making, time management, while being active engaged listeners. Another religious participant, Adelle, even felt shared that her peer leader “gave (her) tips on how to stand out to an employer and showcase (herself) professionally.” Adelle has become very involved on campus in multiple student organizations and attends church regularly. Since peer leaders and the program coordinator review each student leaders’ LinkedIn profile then provide constructive feedback, the students learn that the program is trying to help them succeed beyond completing the program criteria.

The program also helps students achieve personal goals, such as deeper self-awareness. For example, Belle, a Christian participant, shared that one of the workshops about mindfulness and leadership reminded her of something she learned in Bible study that being “present through prayer or meditation – or anything to slow the mind – helps us not be worried about the past or the future” which will ultimately help us as “leaders make better decisions.” Developing interpersonal skills and intrapersonal skills by giving service and being engaged in workshops, students reported gaining deeper self-awareness and thereby, deeper understanding of their spiritual identity. Furthermore, study participants shared
that the leadership program developed their sense of self and spirituality by shaping their leadership style and how they work with others. However, one participant, Emma, who did not identify as spiritual or religious, was observed to engage in behaviors associated with spirituality (empathy, self-awareness, showing a commitment to personal growth and the common good) during the workshops and mural project. Emma was a white female majoring in Nursing who enjoyed yoga, volunteering in her community and being in nature. Emma attended the mural project where she expressed understanding and kindness toward her peers as well as the clients. Even so, she did not identify as a spiritual person nor did she at first believe that the leadership program helped her develop spiritually. Emma shared that the program helped her become a better person and be “more present in the lives of others around (her).” Similar to Emma, participant John who identified as Catholic, shared that the project “forced them to see themselves as helpers, as leaders, because leaders are the helpers in life” – John.

When exploring the fourth research question, students consistently reported being transformed by the mural project experience. Pauline, who identified as non-religious but spiritual, shared with her later that the program helped her remember that “ALL students have something to offer […] (she) was humbled by other students and remembering that all people are included, every (student) is equal, and valuable.” Pauline is also a leader in her department as a teaching assistant, and volunteered to join the peer leadership team where she would mentor current leadership program students. Pauline’s narrative of the mural project echoed that of other participants who learned that everyone has a place in this world, a role to fulfill, a purpose. Participants realized that physical ability is one aspect of self, not a definition or self or a necessarily the dominant identity. Participants overall expressed that their identity as a leader is a choice that they make based off confidence they have gained by being involved in leadership activities. Study participants reported having higher levels of happiness and well-being while painting murals with their friends at the non-profit because of the joy they felt co-creating a piece of art.

Overall students shared that working with individuals with disabilities helped them understand that weather one is disabled or not, our similarities spiritually are the same. Rady, who identified as non-religious and spiritual was also a sociology major and graduating senior who shared, “they do look different, like appearance wise, but I think that mentally and spiritually, they are the same as us. Like a persona is a person and love is love.” Love was a consistent verb used by study participants. The “loved” the project, “loved” the clients, and “loved” that this was a hands-on leadership experience with their peers. Rady was asked what she meant by “they are the same mentally and spiritually.” She shared that after spending time with the clients she learned that she was the one struggling with their disability (at first) and that she was the one who had to learn how to engage – they already knew – and once she understood the commonalities she was able to engage more fully in the activity. The mural project reflected the notion that leadership is about understanding that everyone has an underlying desire to be apart of something greater than themselves.

Discussion

This study explored how graduates from a leadership development program experienced spirituality through leadership activities. Data analysis revealed that students developed deeper awareness of their spirituality and leadership identity by participating in the leadership development program activities. Findings revealed that leadership workshops, self-assessment reflections, peer-to-peer mentorship, and an ongoing shared community service project, influenced students’ spirituality and leadership identity. Students defined both leadership and spirituality as cognitive and emotional processes deeply grounded in self-awareness yet differentiated the developmental process spirituality as more of a relationship with a higher
power or connection to a greater life force such as God or the Universe. Most students did not
differentiate the developmental process of leadership and spirituality after having engaged in
the community service-learning project. One participant, Emma, said that the mural project had
influenced her leadership but not her sense of spirituality.

Fields outside of education are exploring spirituality as a means of identity
development such as workplace spiritual leadership theory that suggests that there are
direct correlations between spirituality, profits, authentic leadership, workplace
satisfaction and productivity known as the theory of spiritual leadership (Dent et al.,
2005; Benefiel, 2005). The University of California Los Angeles’ Higher Education
Research Institution, conducted a seven-year study examining the role that college plays
in facilitating the development of students’ spiritual qualities. Not surprisingly, their
study found that spirituality is associated with enhanced college student outcomes in
academic performance, psychological well-being, leadership development and satisfaction
in college. Furthermore, Chickering et al. (2006) suggest that spirituality is a pedagogical
practice, which can be applied, in diverse disciplines such as anthropology, leadership,
history, art, and even science. They suggest that learner oriented pedagogy gives students
the time and space for deep learning. Practices include reflections, discussions about prior
attitudes and emotional reflexes vs surface learning such as quizzes, tests, and assigned
papers. Activities such as reflections and discussion help students connect students to
prior experiences and new contexts and cultures leads to a deeper learning and an
authentic, meaningful college experience (Chickering et al., 2006; Palmer, 2000).

Implications
This study supports the notion that non-faith based public institutions can intentionally
cultivate students’ leadership and spiritual identity development using Baxter Magolda’s
(2009) theory of self-authorship as a framework (Tinto and Pusser, 2006). Researchers
indicate that spiritual identity development is an ongoing process, as is the expansion of
self-understanding (Tisdell, 2000, 2001; Wilber, 2000). Self-understanding is integral to
leadership development (Raffo, 2012; Davis, 2014) and can be achieved through
contemplative practices such as mindfulness training to help students be
present in the moment (Davis, 2014). Contemplative practices can increase students’
capacity for reasoning and as such, may help students relate to one’s self, the world, or
others (Davis, 2014).

As such, we posit a framework focused on the alchemy of students’ self-reported identity
as leaders and as being spiritual (y axis) and their action that results from that identify
(x axis). Students can either show evidence or non-evidence of leadership and spiritual identity
within one of four quadrants: high action and high identity; low identity/high action; the
lacking evidence side with; high identity/low action; or low identity/low action. If students
have low action in leadership and spirituality, yet report high identity (high identity/low
action), it is difficult to ascertain whether they are engaged in accurate self-assessment as their
behavior does not appear to match their identity. However, if they report low identity as a
leader and also engage in decreased activity as a leader or in behavior they deem spiritual (low
identity/low action), then we can accurately evaluate how the program did not contribute to
fostering their leadership and spiritual development (Figure 1).

This study illustrates that intentionally designed and implemented leadership
programs can cultivate spiritual and leadership development and that those identities and
behaviors may not be mutually exclusive. We can better evaluate whether there is
evidence of that leadership and spiritual development when students self-report as
identifying and acting (e.g. high identity and high action). Nonetheless, even if students do
not fully identify (low identity) yet engage in high action, we can see the influence of the
program on their behavior.
Recommendations

There are several implications that leaders at higher education institutions may consider in hopes of helping students develop their spirituality. The following ideas and initiatives provide a broad foundation for how spirituality may be cultivated through a leadership development program using Baxter Magolda’s theory of self-authorship as the framework, “Moving Toward Self-Authorship”: Baxter Magolda (2009) defined the “Movement Toward Self-Authorship” as a student’s ability to listen and cultivate their internal voice. Personalizing leadership programs can foster academic and personal success by helping students stay encouraged and motivated to understand and achieve their goals.

Leadership programs may be the answer for institutions seeking to create more empathic and socially just graduates. We recommend that student leadership programs consider including an ongoing regularly scheduled community service project similar to that explored in this study. The project should take place off campus at an organization that serves at-risk and underserved, underrepresented groups. Students should be expected to engage with the individuals and complete brief reflection summaries after each visit so that the program supervisors can gage the student learning. This will allow students to cultivate relationships with educators and peers that are constructive to their learning. We posit that listening to our internal desires is synonymous with listening to your “gut” or intuition. Baxter Magolda (2009) described as students’ ability to listen to and cultivate their internal voice as a movement toward self-authorship. We add that this is the beginning of metacognition: listening to your intuition.

Students who are able to listen to their intuition begin to feel more confident in their ability to build an internal foundation or locus of control (Magolda, 2009) or what Bolman and Deal (2001) defined as, “Leading with the Soul.” The true meaning of leadership is to discover your own soul and to empower others to do the same. We recommend five possible techniques that leadership development programs can implement to intentionally cultivate...
spirituality: peer-to-peer mentorship; leadership workshops facilitated by diverse faculty, staff, and community members; self-assessments such as TypeFocus Self-Assessment (abbreviated MBTI); and anticipating in shared community service project:

(1) Peer-to-peer mentorship: start by partnering new leadership program students with a peer mentor to coach them through the act of listening to their internal voice. Leadership programs can harness the influence of peers by providing purpose and reflection behind their activities as well as life’s events (Dalton and Crosby, 2010; Kuh and Hu, 2001). Peer leaders ideally meet with students to set specific and attainable goals that relate to a student’s major or career of choice. Challenging students from the onset of a leadership program to be self-aware and accountable for their actions makes them more empowered to delve deeper into their learning experiences and abilities to move toward their future career path (Magolda and King, 2004; Magolda, 2009).

(2) Leadership workshops: regular ongoing leadership workshops can be facilitated by diverse faculty, staff, and community members illustrates to students that leadership transcends all disciplines and aspects of life. Leadership workshops encourage students to have multiple forms of engagement with individuals from different backgrounds and experiences showing that leadership transcends disciplines, creed, and contexts (Kuh and Hu, 2001; Hurtado et al., 1999; Umbach and Kuh, 2003). Baxter Magolda’s (2009) theory of self-authorship suggests that validation from peers, faculty, and staff can increase students’ trust in their internal voice as a step toward building a system. Hence, it is important that diverse faculty, staff, and community leaders who can relate to and challenge students’ perspectives facilitate leadership workshops and engagement activities where they can engage students in meaningful dialogue (Posner, 2013).

(3) Shared community service project: participating in service demonstrates care for another person regardless of background or creed. Service has been shown to provide personal life experience, strengthen values, and shine a light on students’ self-discovery, or what Baxter Magolda (2009) calls a “self-authored system.” Our study lends to current literature that completing a shared community service project with reflection has a profound influence on a student’s ability to embrace differences in people, navigate challenges, and value the interconnectedness of life. Hence, spirituality can be intentionally cultivated through the act of providing service to others on a regular ongoing basis.

Conclusion
The findings from this study may empower educators to be more comfortable facilitating students’ sense of spirituality irrespective of religion. Students in this study expressed that both spirituality and leadership require levels of self-awareness and a connection to a greater purpose. This study illustrates the capacity for leadership development programs to cultivate students’ spiritual development as well as the potential for educators to be more intentional and deliberate in fostering opportunities for students to delve into their spirituality regardless of if they identify as spiritual or exhibit spiritual behaviors.

We believe that having an ongoing civic engagement opportunity such as the mural project is an innovative and intentional technique to foster spiritual development among college students. Having a service project embedded into the context of the leadership program not only allowed students to understand differences but fostered high identity and high action in students’ leadership and spirituality. Since spirituality can be perceived as the essence of leadership, and leadership as the expression of spirituality (Astin, 2004;
Love and Talbot, 2000), it makes sense for educators to understand that they may also be intentionally fostering spirituality through the scope of leadership activities. The mural project built trust and confidence within the students and helped them get outside of their comfort zone of only working with like-minded and similarly abled people.

References


Further reading

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Restorative practices and the integration of social emotional learning as a path to positive school climates

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Abstract
Purpose – An understanding of the effects of zero tolerance policies in schools has resulted in rethinking of approaches to prevent conflict and creating a healthy school climate. Restorative practices (RP) have been looked to as an alternative to zero tolerance policies. At the same time, social emotional learning (SEL) programming has been implemented to provide students with the skills to communicate and build relationships with peers. The purpose of this paper is to provide a look at the historical context shaping the development of RP, and explore connections between RP and SEL. Considerations for implementation and conceptual models for implementing RP are also discussed.

Design/methodology/approach – Informed by education policy analysis methods, this essay places RP in their broader context, explores RP and considers such practices important to study due to the unintended effects stemming from “traditional” obedience-oriented punitive approaches to school discipline (American Psychological Association Zero Tolerance Task Force, 2008; O’Malley and Austin, 2014).

Findings – Based on the analysis of current research, the authors explain that when RP are implemented with SEL programming, it is an opportunity for educational practitioners to address issues around race, gender, disability, and other aspects of diversity. By integrating these approaches together, RP become a vehicle to develop students’ SEL skills, which includes communication skills, kindness, empathy, and caring.

Research limitations/implications – An understanding of how zero tolerance policies have played out in the school setting has resulted in rethinking of current approaches to preventing conflict. Subsequently, educational leaders and professional associations have led a shift toward alternative models and practices in school discipline.

Practical implications – District, state, and federal policymakers have pressed for more constructive alternatives that foster a productive and healthy instructional climate without depriving large numbers of students the opportunity to learn (Skiba and Losen, 2016, p. 4). These approaches include RP, as well as integrating SEL into school practices and the curriculum.

Social implications – Several challenges and opportunities lie ahead. Based on the firsthand work with schools and districts implementing restorative and SEL practices, as well as the knowledge and insights gained from this analysis of research, one important need to consider is the need to integrate school disciplinary practices, including RP, into the school context and existing structures.

Originality/value – By conducting this study of the research evidence on RP, the authors were able to gain insights into questions, including: How have school practitioners applied RP as an alternative to zero tolerance policies?

Keywords Climate, School discipline, Restorative practices, Social emotional learning, Trauma-informed care

Paper type Conceptual paper
Introduction
Restorative practices (RP) are the overarching philosophy and actions that regard relationships and learning from harm as paramount in any community setting. The International Institute for Restorative Practices (IIRP) defines RP as including the use of “informal and formal processes and practices that proactively build relationships and a sense of community to prevent conflict and wrongdoing” (Wachtel, 2016, p. 1). RP encompass a spectrum of actions from proactively building community to responding in restorative ways when serious harm has occurred. Social emotional learning (SEL) programming supports the goals of RP by providing a “coordinated and coherent approach to helping children recognize and manage their emotions, appreciate the perspectives of others, establish positive goals, make responsible decisions, and handle interpersonal situations effectively” to enhance a student’s connection to school (Payton et al., 2008).

Informed by education policy analysis methods, this paper explores RP and considers such practices important to study due to the unintended effects stemming from “traditional” obedience-oriented punitive approaches to school discipline (American Psychological Association Zero Tolerance Task Force, 2008; O’Malley and Austin, 2014). Based on our analysis of current research, we explain that when RP are implemented with SEL programming, it is an opportunity for educational practitioners to address issues around race, gender, disability, and other aspects of diversity. By integrating these approaches together, RP become a vehicle to develop students’ SEL skills, which includes communication skills, kindness, empathy, and caring.

Thus, efforts to integrate SEL within the school culture and curriculum go hand-in-hand with the development of RP. With these ideas in mind, we explored the literature with attention to understanding how educational practitioners might employ and integrate RP and SEL skills in the school setting. We sought to gain insights into questions, including: How have school practitioners applied RP? What are factors to consider in the implementation of RP? And, can an understanding of students’ social and emotional learning needs enhance our overall understanding and assessment of RP?

We begin our analysis by providing historical context of the development of RP, including a discussion of zero tolerance policies and the unintended consequences of such policies. After exploring RP and its connection to SEL, we explore the implementation of RP in schools. With a focus on developing and supporting relationships, we conclude our paper by discussing three models that may help to link RP with SEL approaches. With this work we hope to contribute useful research to support efforts to address school discipline and conflict in a peaceful and constructive manner, and help to address the roots of violence in both schools and society (Bickmore, 2011). Through this review of the literature, we were able to expand our understanding of the connections between the work occurring in schools that is both dedicated to developing students’ skills in SEL and to implementing RP.

Historical context of RP: early development to current state
During the 1980s and 1990s, school administrators’ concerns about school violence led to an increase in implementation of zero tolerance policies (Curtis, 2013; Skiba, 2014). Zero tolerance has been described as a “broad term that generally reflects rigid, mandated-response approaches to school discipline” (Monahan et al., 2014, p. 1110). The term became widely adopted in schools in the “early 1990s as a philosophy or policy that mandates the application of predetermined consequences, most often severe and punitive in nature, that are intended to be applied regardless of the gravity of the behavior, mitigating circumstances, or situational context” (American Psychological Association Zero Tolerance Task Force, 2008, p. 852).

One of the most common criticisms of zero tolerance policies is that students of color and students with disabilities tend to be more harshly punished under these policies, compared
to white students. There is a high degree of racial disparity in school suspension and expulsion in US schools (Skiba et al., 2002). Specifically, research shows ineffective outcomes for zero tolerance approaches and negative impacts on social and academic outcomes, particularly for students from historically disadvantaged groups in education – students of color, poor children, and children with disabilities (Gregory et al., 2010; Thompson, 2016). The disproportionate discipline of students of color may be due to lack of training in culturally competent practices and/or racial stereotypes; and lack of teacher preparation in classroom management (American Psychological Association Zero Tolerance Task Force, 2008, p. 854).

Another criticism of zero tolerance policies in schools is concerned with the increases in security and police presence. Skiba (2014) suggests that zero tolerance advocates believe that the failure to suspend or expel students allows “the cycle of disruption and violence to gain a solid toehold in our schools and community” (p. 28). However, there is a lack of evidence to show that school suspensions prevent future misbehavior or make schools safer (Gregory, Clawson, Davis and Gerewitz, 2016) or that suspensions and expulsions reduce school disruptions or improve the school climate (Skiba, 2014). On the contrary, research has found that out of school suspension and zero tolerance approaches do not reduce or prevent misbehavior (Hannigan and Hannigan, 2016); that zero tolerance policies have contributed to the school-to-prison pipeline (Skiba et al., 2002); and that these types of school disciplinary actions place students at risk for juvenile justice system involvement (Monahan et al., 2014; Thompson, 2016). Reasons cited for the ineffectiveness of zero tolerance policies are due to: inconsistency of implementation; poor outcomes for the school climate; and unfair application of the policy (Skiba, 2014). Often such policies do not work because the root cause of the misbehavior is not addressed. Positive behavior intervention supports (PBIS) is one strategy intended to address this issue.

In 2000, Skiba and Peterson posited “a new perspective on school discipline” (p. 340) and described the emergence of a comprehensive model of prevention to address “the complexity of emotional and behavioral problems in schools” (p. 341). They further explained that this model of school discipline might be conceptualized as an early response opposed to a zero tolerance approach to school violence. This is a valuable point to consider; it helps illustrate a useful idea and key takeaway from the research literature, that RP are both proactive and reactive (National Center for Mental Health Promotion and Youth Violence Prevention, 2009).

RP has its roots in restorative justice, which is “a process whereby all the parties with a stake in a particular offense come together to resolve collectively how to deal with the aftermath of the offense and its implications for the future” (Braithwaite, 1999, p. 5). Although restorative justice has a long history rooted in indigenous cultures, it is still considered a relatively new approach in schools in the USA (Gregory, Soffer, Gaines, Hurley and Karikahalli, 2016). Models of restorative justice can be grouped into three categories: circles, conferences, and victim-offender mediations (Latimer et al., 2005). Restorative justice is a way of “looking at criminal justice that emphasizes repairing the harm done to people and relationships rather than only punishing offenders” (Wachtel, 2016, p. 2).

The benefits of restorative justice include emphasizing recovery of the victim through redress, vindication, and healing (Van Ness and Strong, 2014) and coming together to restore relationships (Llewellyn and Howse, 1998). Although related strategies may contain restorative elements, if they do not bring together the victim, the offender, and the community, they are not considered restorative justice strategies. Community building provides a foundation to help support discipline procedures.

RP provide an alternative to the “punitive school disciplinary policies” that have been shown to be ineffective and racially discriminatory (Anyon, 2015, p. iii). There are several compelling reasons that schools consider restorative justice. These elements include giving schools that are seeking to limit out of school suspension/expulsion tangible and meaningful
tools; giving schools the ability to address disproportionality of discipline on students of color; and evidence that such practices can improve teacher morale and retention. As Curtis (2013) notes, even with “seemingly clear-cut policies in place, teachers still decide which infractions are serious enough to report to the office and thereby determine when students are disciplined” (p. 1257). This is also an important point to consider for how teachers themselves become engaged in and are able to develop skills in relationship building and other RP. Some of the problems with students considered to be defiant relate to a lack of skills in communication and conflict resolution and underuse of effective behavior strategies due to inadequate teacher training (Espelage et al., 2016; Skiba and Peterson, 2000). We offer this scenario as an example:

Teacher: Tina, you were talking during a test. Give me your paper.

Student: I was talking because Shaila stole my pencil again and I’m already in trouble with my mom because she stole my basketball. Teacher: That isn’t the problem. You were talking during a test. Student (irritated): She was talking too. See? I told you this teacher hates me.

Teacher: Don’t be disrespectful to me in my classroom when you were the one who broke the rule. Go to the dean’s office.

RP and SEL

As we described in the previous section, an understanding of how zero tolerance policies have played out in the school setting has resulted in rethinking of current approaches to preventing conflict. Subsequently, “educational leaders and professional associations have led a shift toward alternative models and practices in school discipline. District, state, and federal policymakers have pressed for more constructive alternatives that foster a productive and healthy instructional climate without depriving large numbers of students the opportunity to learn” (Skiba and Losen, 2016, p. 4). These approaches include RP, as well as integrating SEL into school practices and the curriculum. Skiba and Losen (2016) summarized these alternative strategies that address school climate and school discipline as:

- Relationship building (i.e. through approaches such as RP).
- SEL approaches (e.g. improving one’s ability to understand social interactions and regulate emotions).
- Structural interventions (i.e. PBIS).

RP are one form of relationship building. RP are rooted in restorative justice and support the development of positive relationships, which in turn, create healthy climates while also helping to generate a number of other benefits to support the success of students in school. Part of the work with supporting RP is helping schools to demystify skill building so that teachers and staff can respond with needed skill building strategies during times of conflict or when negative behaviors arise. When students are provided an opportunity to participate in RP, they get to participate in role playing on the conflicts experienced, and are able to receive support for skill development from a trusted adult and/or a small group of students.

It has long been known that a healthy school climate requires “instruction in important social skills” (Skiba and Peterson, 2000, p. 335), and a safe and healthy school climate is a “prerequisite to academic rigor” (International Institute for Restorative Practices, 2009, p. 3). Greenberg et al. (2003) recommend that SEL instruction begin in preschool and continue through high school. School-based SEL programs often entail implementing policies and practices that may help students (as well as teachers, staff, and administrators) to learn and apply knowledge, skills, and attitudes that enhance personal development, social relationships, health, and well-being (Taylor et al., 2017).
SEL “helps students to recognize emotions first in themselves and then in others so they can also develop empathy. SEL curricula directly teach children appropriate actions and provide a safe environment for them to practice what they learn” (Gunter et al., 2012, p. 151). SEL programs promote positive behaviors such as caring, empathy, and kindness to improve relationships between students, and between students and teachers. Thus, understanding the connection(s) between RP and the goals of SEL programming makes sense. Furthermore, the “stability and security of the student-teacher relationship is also foundational to SEL” (p. 152). Students able to have strong relationships with adults in school have been found to gain a sense of belonging. Gregory et al. (2011) also suggest that understanding the teacher-student relationship is critically important given that positive teacher-student relationships among all racial groups are essential to creating an equitable and supportive school climate that does not rely on punitive approaches to behavior.

Finally, PBIS and other structural interventions have been used as a method for schools to help change student behavior (Thompson, 2016). PBIS is thought to be effective because of the school-wide system that is developed, consisting of a team of teachers, staff, and administrators. Sprague (2012) described PBIS as organized around three main themes: prevention; multi-tiered support; and data-based decision making. Thus, the idea that PBIS is concerned with preventing problem behavior disciplinary procedures; and that behavioral expectations are applied consistently school-wide, are two key characteristics and goals of PBIS. Sprague (2012) explained that “the focus is on establishing a positive social climate, in which behavior expectations for students are highly predictable, directly taught, consistently acknowledged, and actively monitored” (p. 5). Finally, although the above strategies have been thought of and defined as alternatives, it is important to note that these as practices can and are being integrated together by schools and districts.

Integration of RP and SEL

In recent years, researchers have devoted greater attention to the connections between the approaches of RP, SEL practices, and structural interventions. Indeed, it is important to note that practitioners and researchers are recognizing the possibilities for improving school discipline models by integrating both restorative and SEL practices (and structural strategies such as PBIS) and models. Sprague (2012), for example, examined the integration of school-wide PBIS and restorative discipline.

The recent SEL movement has helped to create more attention and interest in the social, emotional, behavioral, and mental health outcomes. According to Chafouleas et al., increased concern has emerged about these outcomes and how they connect to overall success in school to the multi-tiered supports of PBIS. Furthermore, “multi-tiered prevention logic” has created an opportunity to integrate trauma-informed approaches into schools and “are built on foundations involving early identification of risk, varied levels of intervention support designed to teach skills and prevent more serious problems, and continual data-driven evaluation of response” (p. 144).

Research on SEL (Durlak, 2015; Taylor et al., 2017) may help to make additional connections between RP and neuroscience. Gregory, Clawson, Davis, and Gerowitz (2016) posit a need for more research and empirical evidence into developmentally appropriate school discipline interventions that can be integrated into daily instructional practices. Researchers have already integrated these current approaches to inform understanding around creating healthy school environments that support student learning. Increasingly, more attention is paid to how emotions influence learning, relationships, and behaviors (Desautels, 2016). For example, Mary Helen Immordino-Yang’s work examines the neurological and psychological bases of social emotion and self-awareness and the implications for learning, development, and schools. Daniel Reisel’s “The Neuroscience of
Restorative Justice lecture applied both neuroscience and restorative justice theories together to ask questions about the brain and rehabilitation in the criminal justice setting.

SEL is the “process whereby children are able to acknowledge and manage their emotions, recognize the emotions of others, develop empathy, make good decisions, establish positive friendships, and handle challenges and situations effectively” (Gunter et al., 2012, p. 151). Researchers have been able to identify and examine specific learning outcomes for SEL programming and curriculum. These “Core SEL Competencies” are: self-awareness; self-management; social awareness; relationship skills; and responsible decision making. When these SEL concepts are implemented along with RP, the advantage is that the concepts are not presented in a vacuum; rather, these SEL competencies are learned through the filter of the community. For example, “responsible decision making” is defined by the community itself. “Self-management” becomes desirable because the relationships and community are enticing enough to pull students in, rather than push them out.

Often proactive circles are filled with content from the participants themselves. Rather than teach a lesson on how to handle stress or anger, a circle allows the teacher to turn it over to students to discuss ways that they have experienced successful management of stress and/or anger. These strategies that come from within the community are often more likely to be heard and acknowledged by the students; and relevant and workable for the students. Further, in a restorative conference, often discussing misdeeds allows us to understand the missing skillset and “prescribe” specific lessons or skill development. In practice, these most often look like the need for emotional regulation, conflict resolution, and communication skills. The community, in all its diversity, is affirmed, by being the lens through which these social and emotional skills are learned and refined. There are multiple ways of being together and building relationships, and one is not necessarily superior.

Implementation: training and evaluation
One 2009 report by the National Center for Mental Health Promotion and Youth Violence Prevention, called Implementation Guidelines, described restorative justice practices as “a brand new way of looking at resolving conflict, restoring relationships, and problem solving, especially in the school setting” (p. 7). As a result, buy-in, changes in culture and behavior, and especially training and evaluation become essential to a successful implementation.

Training is the most significant cost in implementing RP in schools (National Center for Mental Health Promotion and Youth Violence Prevention, 2009). Prior to training beginning, we often hear about the importance of buy-in to successfully implement RP:

It requires buy-in at all levels of the school system and community, as well as a commitment to using and working through the restorative practices, not just with students but also among staff, to create a culture that produces results in students’ behaviors. And it is an investment in time, staff, and training (p. 5).

Buy-in and support for RP can be encouraged with the use and presentation of the data that is available on schools that have integrated RP into the school culture. Community members and leaders throughout the school community may help to serve as helpful advocates in communicating the benefits of RP for students and the school community. Policy studies conducted on policy implementation, specifically, may help provide further insights into how educational practitioners gather support and buy-in for a particular program or idea.

Training is one of the next important steps in the implementation process for RP and SEL programming. Along with the National Center for Mental Health Promotion and Youth Violence Prevention’s Implementation Guidelines, the International Institute for Restorative Practices (2009) Improving School Climate: Findings from Schools
Implementing Restorative Practices provides several great examples from schools to show the various ways the implementation of a program can be supported through training (and these data may also be helpful for other schools and districts considering RP). The training approaches vary from introductory trainings to trainings specifically on facilitating circles. In addition, the train-the-trainers approach may help to reduce training costs, make implementation more sustainable, and may help to create a leadership team that will support the sustainability of RP and SEL programming.

Finally, an organizational culture change is critical for implementing and meeting the desired outcomes and/or impact. Evaluation of a newly implemented program will begin on an ongoing basis, and may begin in the early stages of implementation to help ensure program fidelity. Both RP and SEL programs involve multiple components and require school resources to implement. In such cases, the intensity and duration of the activities provided will relate to program effectiveness (Wang et al., 2015). One unique aspect of integrating the two approaches of RP and SEL together is that this may present some challenges in evaluating and/or determining which components are most essential to meeting a school or district’s intended goals.

Theoretical models to support the implementation of restorative and SEL practices
To conclude our analysis we review theoretical perspectives and models that may help guide: the development of social emotional skills; and the implementation of RP. Based on this goal, three key models emerged from the literature as particularly helpful and useful to the work of restorative and SEL practices in the school setting: continuum of RP; social discipline window; and Morrison’s (2004) hierarchy of restorative responses. To provide more detail and overview of RP, we briefly review these models with the goal in mind to guide and support the implementation of RP. Based on the findings from this discussion and analysis, implications for the design of schools and educational systems will be offered. In our discussion, we highlight school districts that have implemented RP to provide further insight into how practitioners make sense of and apply RP.

Continuum of RP
RP range from informal to formal (McCold and Wachtel, 2001). In the San Francisco Unified School District, for example, RP are based on principles and processes that emphasize the importance of positive relationships as central to building community and repairing relationships when harm has occurred.

According to Morrison (2013), there are a number of different continuums of response; “no doubt, in practice there are many more” (p. 39). Morrison notes that there are various continuum models and approaches available and not one continuum has been shown to be more effective than the other – “school communities mix and match these models developing a continuum of response that fits their needs and concerns” (p. 40). Furthermore, research and development can “establish and test different models, and levels, of responsive regulation through a whole-school approach” (p. 40). Indeed, as Braithwaite (2002) suggested, “a whole-school approach is needed that not just tackles individual incidents but also links incidents to […] the culture of the school” (p. 60).

According to Morrison (2013) one of the first to be documented was McCold and Wachtel’s (2001) continuum of RP (Figure 1). Ted Wachtel founded the IIRP, one of the leading providers of professional development and training in the field of RP. On this continuum, the informal practices include affective statements that help to communicate people’s feelings, and affective questions cause people to reflect on how their behavior has
affected others. Small impromptu conferences, as well as a group or circle, are less
structured and do not require the level of preparation required for formal conferences, as
shown in the model.

Social discipline window
The IIRPs social discipline window (Figure 2) is useful to dispel myths that RP are
permissive and “soft on crime.” The ideal is where the leader and the students are working
with one another to create environments, which are conducive to high expectations, learning
from mistakes, and positive relationships. This is a particularly useful tool in that it allows
professionals to see the balance necessary to sustain a restorative environment. It also
dispels the myth that RP are overly tolerant and “soft on crime.” It is important to note that
the support axis (shown in Figure 2) must include SEL. To support students to do better,
they must be able to access pathways to do better, which often mean new ways of
communicating and getting their needs met. Without meaningful SEL (even if only de facto
SEL instruction after a problem occurs) there is not enough support to sustain positive
behavior change.

In summary, by introducing the notion of a balance of control and support, teachers have
an aspirational vision for their classroom and all staff have common language to understand
what needs to be added or removed when certain environmental factors are not working for
students. It allows us to shape environments so that our students are given the best
combinations of factors that will encourage them to thrive.
**Relationship pyramid: Morrison’s (2004) hierarchy of restorative responses**

To understand what a restorative setting or school might look like, Morrison’s (2004) hierarchy of RP has been used to show how a school and its various stakeholders participate in the school community, from a RP perspective. Reminiscent of the PBIS pyramid, Figure 3, which is adapted from Morrison’s model, demonstrates how important the foundation is of relationship building. The IIRP go so far as to say that 80 percent of RP work should be proactive. By investing in this proactive bottom tier, relationships are fortified so that they can weather challenging conversations and conflicts in circles. All work, in this diagram, is outlined in reference to relationships.

This notion of how central relationships (student to student, teacher to student, teacher to administrator, etc.) are to the health and effectiveness of a school is common sense and widely believed, but rarely discussed in education. Take, for example, a teacher who made you uncomfortable or with whom you had a strained relationship. Likely, that teacher is not one who you recall as a particularly effective teacher or one who taught you a great deal. Contrast that with a teacher who made you feel cared for and supported. Likely, that was a teacher who was able to motivate you to work hard and to learn as much as possible. That is the core underlying philosophy of RP and of SEL: relationships matter. The more work we invest at the bottom two tiers, the less there will be to do at the top tier and the more effective the top tier work will be when it is necessary.

**Implications for practice and policy**

Several challenges and opportunities lie ahead. Based on our firsthand work with schools and districts implementing restorative and SEL practices, as well as the knowledge and insights gained from this analysis of research, we conclude with a discussion of implications for practice and policy.

One important need to consider is the need to integrate school disciplinary practices, including RP, into the school context and existing structures. One of the most commonly cited reasons when there is difficulty to implement (perhaps any school-wide initiative) is time. Although initially training, planning, and implementation do take a great deal of time, the tradeoff is that less time is then spent in dealing with conflict and behavior problems; instead, more time is spent on task and learning, and because teacher retention improves, less time is spent hiring and onboarding new staff. In addition, there still remains limited comfort, familiarity, and knowledge of both RP and SEL, in general. It would be easy to offer
a “binder” of how to do this, but if the protocols are not inclusive of the school community and its strengths, weaknesses, and needs, it would not work.

There are also several other factors related to implementation that are important to consider. For example, how do school administrators create the needed processes, supports, and provide information required to encourage buy-in from teachers and staff? Professional development and resources for staffing are very likely to be needed. For example, a full-time RP coordinator with the responsibility “to sustain all the other essential strategies for success” may benefit a school greatly and would require funding for a person who could play an important role in developing relationships, monitoring student agreements, providing coaching and training to other staff members (Anyon, 2015, p. 8). The need to balance staff buy-in while simultaneously implementing can be challenging for schools. Staff led protocols and processes are ideal, but can be challenging to implement in real time – especially when they are unlike procedures the staff has experienced. In this regard, these procedures can often require trial and error to be readily accepted by the staff and functional for the whole school community.

In addition, educational leaders and practitioners are realizing, as Carter et al. (2017) explained, the need to create safe spaces for school personnel to talk openly about race, to better understand why racial disparities occur, and to support student-teacher relationships, in general. They further noted that addressing the race aspect of racial discipline disparities may require specific strategies for improving relationships and preventing and handling conflict. For example, efforts to improve the cultural responsiveness of instruction has been shown to be beneficial for the classroom and student outcomes (Brown et al., 2010; Carter et al., 2017).

Conflicts are defined as the oppositions among interests, ideas, or demands and can arise in any community, which include schools (Bickmore, 2011). Bickmore explains that how educators handle these conflicts can directly and indirectly shape the learning experiences of students. She further notes a difference between “negative peace” and “positive peace.” Whereas negative peace focuses on controlling problems through exclusion and force, positive peace creates options and supports relationships to address conflicts constructively. Public schools offer “logical places to facilitate learning and practice of thoughtful, inclusive conflict dialogue, as a key element of creating positive, sustainable peace;” however, implementing peacebuilding strategies is especially difficult in schools where “poor and racialized students are clustered in under-resourced schools, and constrained by standardized curriculum and testing” (p. 2). Restorative justice leverages the social needs and impulses by teaching kids proactively first (learning about their peers in circles (e.g. morning meeting or community circle) then graduates into circles that are strong enough to withstand conflict and harm.

At the same time, Smith et al. (2015) also suggest that adults avoid escalating situations and to keep in mind that “all too often, adults become too confrontational and assert their power too forcefully” (p. 78). They suggest Wolfgang’s (2008) continuum, which guides teachers on how to respond to or prevent problem behaviors along a continuum based on the intensity of the issue. This continuum ranges from looking (making eye contact or using a simple gesture) to directing (such as separating students to prevent a problem from happening).

Educators’ role in preventing problems and conflict was a constant theme emerging from the research reviewed. In recent years, there has been wide interest across various human service sectors, including education, in the concept of trauma-informed care. Evans and Coccoma (2014) explain that this term refers to an attempt to create a paradigm shift, where trauma-informed approaches in the school setting have expanded. They further elaborate that to make the paradigm shift, there is a need to move from asking the question “What is wrong with you?” to asking “What has happened to you?” (National Center for
Trauma-Informed Care, n.d.). Future research into neuroscience related to trauma and best practices appropriate for the K-12 school setting, as well as in higher education, can provide more understanding into how trauma impacts the brain and influences behavior.

The trauma-informed schools approach encourages educators and other human service providers to approach individuals’ social and personal challenges with an informed understanding of the impact trauma can have on the entire human experience. Evans and Coccoma (2014) note that advances in neuroscience research support a trauma-informed approach. Specifically, new insights on the neurobiological changes that can occur in the human brain because of traumatic events provide important evidence and support for why schools should consider implementing trauma-informed practices.

Conclusion

As we prepared to synthesize the evidence learned from articles, models, and reports on RP pertaining to school discipline policies, we agreed that a paradigm shift is needed within many schools. Hansberry (2016) in the guide, *Restorative Practice in Schools: Theory, Skills, and Guidance*, optimistically encourages the reader to think restoratively:

> A restorative mindset holds that the best way to deal with a problem or incident is to bring those involved, and affected, together (if possible) to discuss what has happened and how people have been affected. The next task is to help people to take responsibility for their misdeeds and bad decisions, and decide on a way that the harm might be repaired. This is a far more sophisticated approach than simply punishing those we judge to have wronged others [...]. The ability to do this face-to-face restorative work is something that we can teach young people to do, beginning the moment they enter formal education settings. It is useful to think of restorative practice as a pedagogy rather than a bag of tricks that we pull out to use with some students in some situations (p. 26).

As complex as this may seem, as it is admittedly a profound divergence from most schools’ disciplinary paradigms, we have found that the practitioners who really “get it” and who are natural and successful at implementing this work are characterized by a few remarkably simple traits, all of which are native to us when we consider how we, as humans, most like to be treated:

1. They are willing to see the humanity in every situation: conflicts are less about behavior and rules which were broken and more about the humans and their needs. They are able to see the child who was simply doing the best they could with the tools they had and work to help give that child more tools the next time around. They keep their eye on the big picture: this classroom is a group of humans, much more alike than we are different, trying to grow and learn together.

2. They trust others, especially youth: by expecting that students will rise to the occasion of solving their own problems they teach students that they are wise and capable. They know when they need to let go of control and let the experts get to work! They let it go when a solution is not one that they would have chosen because they know that making and living with your own solutions is an invaluable learning experience.

3. They are willing to be wrong: many situations we see in restorative circles involved some inadvertent escalation by school staff. Modeling what it looks like to own our own mistakes is one of the greatest ways to teach accountability and to sustain relationships.

4. They are creative: they come up with ways to make time for circles, to have the restorative chats their groups need, and to model restorative language, even when it seems like they do not have enough time or tools. They view the obstacles to implementation as challenges to solve.
For further reading

The Peace Learning Center (Indianapolis, Indiana) has collected stories on restorative justice conferences from the past two years. Please visit: https://peacelearningcenter.org/restorative-justice/

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National Center for Mental Health Promotion and Youth Violence Prevention (2009), Restorative Justice: Implementation Guidelines, Education Development Center, Inc., Newton, MA.


Further reading


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